



## UNIVERSITY OF WASHINGTON BOTHELL

### GENERAL CATALOG

#### ACADEMIC YEAR 2025-2026

The University of Washington Bothell provides access to an excellent UW education with an emphasis on experiential learning, hands-on research and community engagement. UW Bothell is known for providing student experience grounded in close relationships with faculty as researchers, teachers and mentors — and the personalized support of staff who are dedicated to student success. Both our faculty and staff have been recognized nationally for innovations in academic programming and support services designed to help students graduate on time and debt-free.

### ABOUT THE CATALOG

The University of Washington Bothell offers many academic programs and certificates at the undergraduate, post-baccalaureate, and graduate levels. The programs are designed to serve a diverse population of students who have just completed high school, who have completed some college study and are seeking to complete their baccalaureate degrees, initiate postbaccalaureate studies, or pursue courses for personal development. In accordance with the traditions of the University of Washington, we are dedicated to providing responsive, accessible programs that proudly uphold traditional University of Washington standards of quality.

## STUDENT OBLIGATION

It is the student's obligation to be informed about the policies and standards contained in this catalog. The material in this catalog has been compiled by the UW Bothell Office of the Registrar and organized to provide the reader with a comprehensive view of the programs and courses. It includes academic requirements and procedures necessary for admission and graduation. Because UW Bothell's programs and policies are rapidly evolving, changes will occur during the period this catalog is in circulation. Students should assume the responsibility to contact their advisors for the most current information. The Office of the Registrar website gives information on courses offered, class hours and classroom locations and has the latest calendar dates, fees and details on registration. The content of this catalog is subject to change without notice and does not constitute an agreement between the University of Washington Bothell and the student.

Disclaimer: The University and its colleges and schools reserve the right to change the fees, the rules, and the calendar regulating admission and registration; the instruction in and the graduation from the University and its various divisions; and any other regulations affecting the student. The University also reserves the right to withdraw courses and programs at any time. It is the University's expectation that all students follow University regulations and procedures as they are stated in the General Catalog. Appeals may be filed with the student's dean or with the Vice Chancellor for Student Affairs in non-academic matters. Students are expected to observe the standards of conduct contained in the Student Conduct Code (WAC 478-121).

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## ABOUT UW BOTHELL

The creation of UW Bothell, along with UW Tacoma, was approved by the Washington state legislature in 1989. As part of the University of Washington, the two new campuses were founded to expand access to an excellent UW education for community college transfer students who wanted a four-year degree and for college graduates who wanted a master's degree.

With an initial founding faculty of just 12, UW Bothell held its first classes in fall 1990 in a local business park and graduated its first class of three students in 1991.

In 2000, the University moved its campus to its present location along with Cascadia Community College (now Cascadia College). UW Bothell then expanded its undergraduate program in 2005 to begin accepting high school graduates interested in getting a four-year degree.

As a regional public university, UW Bothell has a diverse student body that comes primarily from Washington's King and Snohomish counties, although it also serves students from all around the state, the nation and the world.

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## MISSION STATEMENT

UW Bothell holds the student-faculty relationship to be paramount. We provide access to excellence in higher education through innovative and creative curricula, interdisciplinary teaching and research, and a dynamic community of multicultural learning.

- Serve college-age and established adult students, as well as the community at large, by providing access to a premier institution of higher education.
- Emphasize and develop critical thinking, writing, and information literacy, in order to graduate students with life-long learning skills.
- Actively recruit and support outstanding faculty scholars with a passion for communication.
- Build an inclusive and supportive community of learning and incorporate multicultural content and diverse perspectives on ethnic and racial groups, gender, sexual orientation, social class, and special needs.
- Encourage and support collaborative, interdisciplinary, and cross-program initiatives.
- Provide quality curricula by making use of the best educational technology in support of teaching and learning.

- Attract and support an internationally diverse student body and a nationally recognized faculty and staff.
- Create and support excellence in student services, academic services such as library, writing center, computing services, and physical facilities.
- Foster productive relationships with the employment community and promote a strong public service commitment.

The University of Washington Bothell is committed to achieving this mission and promotes the on-going review of our outcomes, organizational structures, and processes that support this mission and these goals.

## VISION STATEMENT

The University of Washington Bothell will be a transformational learning community. We will serve as a catalyst to enhance the quality of life throughout our region.

Our culture of learning, committed to disciplined inquiry and responsible service, will be woven into our organizational and operational life. We will be noted for discipline-bridging scholarship, valued in the community, and respected in the academy. Our success will attract a highly motivated and diverse student population and a faculty and staff of exceptional ability and dedication.

## ACCREDITATION

The three-campus University of Washington is accredited by the Northwest Association of Schools and Colleges and is a member of the Association of American Universities. Individual schools and colleges are members of the various accrediting associations in their respective fields.

## NON-DISCRIMINATION POLICY

The University of Washington prohibits discrimination in all programs and activities, including education, employment, and patient care, based on an individual's actual or perceived protected characteristics. Protected characteristics include but are not limited to race, color, creed, religion, national origin, citizenship, sex, pregnancy, age, marital status, sexual orientation, gender identity or expression, genetic information, disability, or veteran status. Upon learning of conduct that may constitute discrimination, the University will take prompt and effective action to address it, remedy its effects, and prevent recurrence. Executive Order No. 81, its companion procedures, and the Student Conduct Code prohibit discrimination, harassment, and sexual misconduct and provide procedures for addressing reports and complaints. Inquiries about Title VI, VII, IX, ADA and Section 504 may be referred to the University's Civil Rights Compliance Office, the U.S. Department of Education's Office for Civil Rights, or both.

To report information or make a complaint about conduct that may constitute discrimination, harassment, or sexual misconduct, make a Civil Rights & Title IX Report, or email or call the Civil Rights Compliance Office:

## ADMISSION POLICY

The University of Washington Bothell seeks students who can benefit from its wealth of academic and cultural opportunities and will contribute to the campus environment. Choosing students from an academically talented group of applicants requires a selection process that looks beyond grades and standardized tests.

While grades are important, they tell only part of a student's story. UW Bothell uses a holistic application review process to identify well-rounded and highly qualified students by learning more about each applicant's story and taking into account many aspects of a student's achievements and personal history. Factors considered include rigor of curriculum, grades and test scores, activities or accomplishments, educational goals, life experiences, special talents, and cultural awareness. The list is not exhaustive, and the factors are not of equal weight; moreover, no single factor is sufficient to confer admission.

It is the student's responsibility to ensure the application is complete and true, and to be aware of all pertinent admission and application requirements. Failure to disclose complete and accurate information (e.g. all colleges/universities attended) and/or failure to submit all required application materials may result in the denial of admission or subsequent dismissal from the University.

The following minimum requirements must be met in order for your application to receive a holistic admissions review:

- Completion of College Academic Distribution Requirements (CADRs)
- Minimum cumulative GPA of 2.0
- Submission of high school courses and grades from most recent high school attended
- Proof of English language proficiency is required for all students who completed more than half (at least 7 years) of their primary and secondary education in schools a) where English was not the language of instruction and b) in countries outside the United States, Australia, Canada, Ireland, New Zealand or the United Kingdom. Learn more on our English language proficiency webpage.
- The University of Washington Bothell no longer requires SAT or ACT scores. (Read the January 27, 2021, announcement for more information.)

## COLLEGE ACADEMIC DISTRIBUTION REQUIREMENTS (CADRS)

In accordance with Washington Student Achievement Council (WSAC) requirements and to ensure that students entering UW Bothell are adequately prepared to succeed in college, all first-year student applicants are required to complete a minimum level of preparation in the below subject areas through high school or college course work prior to entering the university.



- English Composition: 4 years
- Mathematics: 3 years
- Social Studies: 3 years
- Science: 3 years
- World Language: 2 years
- Senior Year Math-Based Quantitative Course: 1 year
- Fine, Visual, or Performing Arts: ½ year
- Elective in CADR Subjects: ½ year

## COMPLETING YOUR CADRS

Almost all applicants will have satisfied these subject requirements through high school course work, which is generally defined as that completed in grades 9-12. Homeschool applicants may require additional information.

If CADRs are not entirely satisfied through high school course work, college level course work may also be used. In general, five quarter credits (or three semester credits) at the college level equals one year of high-school study. For example, if you completed three years of English in high school, you can use one college English composition or literature course to bring your total to four years. A college course may be used to satisfy both an admission CADRs and a UW Bothell graduation requirement.

A passing grade must be received in all core subject requirements; this includes a Pass in a course taken on a Pass/Not Pass basis. However, if you are completing CADRs through college course work you are strongly encouraged to choose a letter or numerical grade, because you may later want to apply the course(s) towards requirements for your major and/or University graduation requirements, for which grading restrictions pertain.

## FIRST-YEAR STUDENT ADMISSION

A first-year student is one who has not earned college-level credit following the summer of high school graduation (including students with Running Start, College in the High School, Advanced Placement, and International Baccalaureate credit).

### Admission requirements

- Minimum cumulative GPA of 2.0
- Successful completion of the College Academic Distribution Requirements [CADRs]
- Proof of English language proficiency (if required; see the section *English Language Proficiency Requirement* for more information)

### Application checklist

- Completed application, including required writing sections, and the courses and grades section
- Non-refundable application fee (\$60 domestic students, \$75 international students)

- If you completed any high school coursework outside the United States, unofficial high school transcript(s) from all schools attended may be required.

## GRADUATE STUDENT ADMISSION

The University of Washington Graduate School is responsible for determining the requirements for admission to graduate study. Within the limit imposed on overall enrollment in the Bothell campus, admission to a specific graduate program is limited to the number of students for whom faculty, staff, and facilities can provide graduate instruction and research guidance of high quality. Each graduate student must be admitted into a specific graduate program. The Graduate School does not permit general graduate enrollment.

Prospective graduate students must meet the following minimum requirements:

- Hold the minimum equivalent of a four-year baccalaureate degree from a regionally accredited college or university in the U.S. or its equivalent from a foreign institution or a Bologna bachelor's degree with a minimum of 180 European Credit Transfer System (ECTS) credits.
- Also acceptable: hold a Master's degree, a doctoral degree (Ph.D., D.Phil.), or a professional degree (M.D., J.D., D.V.M., etc.) from a regionally accredited college or university in the U.S. or its equivalent from a foreign institution.
- All students confirming enrollment must provide a transcript and degree statement for verification.
- Have earned at least a 3.0 grade-point-average (on a 4 point scale) from a regionally accredited college or university in the U.S. or its equivalent from a foreign institution for the last 90 graded quarter credits or 60 graded semester credits.
- Graduate programs may consider an applicant with a GPA below a 3.0. Graduate programs must submit an admission petition to the Dean of the Graduate School before an offer is made.
- Some graduate programs will have additional admission requirements and may require a higher grade-point-average.

### English proficiency

- Applicants whose native language is not English must demonstrate English language proficiency. The most competitive applicants will demonstrate a higher level of English proficiency and will have attained the recommended score to satisfy the Graduate School's English Language Proficiency (ELP) requirement.
- An applicant who does not meet the minimum required score will not be considered admissible by the Graduate School. The Graduate School does not offer conditional admissions to students who have not yet met the minimum English Language Proficiency requirement.

| ELP                                         | TOEFL<br>iBT    | IELTS <sup>ii</sup><br>Only IELTS test dates prior to June 1,<br>2017, will be accepted | TOEFL<br>pBT     |
|---------------------------------------------|-----------------|-----------------------------------------------------------------------------------------|------------------|
| Minimum<br>Required Score<br>(ELP Required) | 80              | 6.5                                                                                     | 500              |
| Recommended<br>Score<br>(ELP Satisfied)     | 92 or<br>higher | 7.0 or higher                                                                           | 580 or<br>higher |

- Please note: some graduate programs may require a higher score than the Graduate School's minimum or recommended scores.
- An applicant who does not meet the minimum required score will not be considered admissible by the Graduate School. The Graduate School does not offer conditional admissions to students who have not yet met the minimum English Language Proficiency (ELP) requirement.
- An applicant who has attained the recommended score has satisfied the Graduate School's ELP requirement.
- An admitted applicant below the recommended score will be required to satisfactorily complete 1 to 3 UW Academic English Program (AEP) courses to fulfill the ELP requirement. Students enrolled in AEP courses will pay additional fees.

#### Additional proficiency requirements:

- Students are expected to register for any required AEP classes beginning their first quarter.
- Test scores are valid for two years and must be valid on the date the application is submitted.
- Graduate students whose native language is not English and who wish to be appointed as teaching assistants (TAs) must meet the conditions for appointment specified in Graduate School Memorandum 15: Conditions of appointment for TAs who are not native speakers of English.
- Questions should be directed to the Office of Graduate Enrollment Management Services.
- Additional information about English Proficiency tests

## CITIZENSHIP & VISA STATUS

The Graduate School accepts applications from U.S. citizens, permanent residents (green card holders), immigrants and international applicants. Undocumented individuals are eligible for admission to any graduate program at the University of Washington. Graduate School admission requirements and application procedures are the same for all applicants regardless of citizenship and visa status.

## INTERNATIONAL STUDENTS

Once an international student planning to study on an F-1 or J-1 student visa has been admitted and has accepted their offer, they must provide documentation to show proof of

adequate financial support. International students must have a visa status that allows academic study at the UW. This status includes temporary U.S. visas such as F-1 student visas, J-1 exchange visitors, H-1 temporary worker, dependent visas or any other non-immigrant classifications. Students who will study on an F-1 or J-1 visa will be required to complete additional steps after confirming their intention to enroll before the Graduate School can process their visa paperwork.

## F-2 DEPENDENT VISA HOLDERS

Regarding F-2 dependent visa holders, a June 2015 US immigration rule permits dependents (F-2) of international students to engage in study at SEVP-certified schools in the U.S., as long as they are enrolled in part-time study. Although the F-2s can only study part-time, that part-time study can result in the attainment of a degree. However, the F-2 would not be eligible for any employment, including on-campus, CPT, or OPT. At the University of Washington Graduate School, if an F-2 wants to enroll in a full course of academic study (10 credit minimum), they must apply for and obtain approval to change their nonimmigrant classification to F-1 or J-1. For further information on this new rule, refer to the Department of Homeland Security website.

## ADMISSIONS PROCEDURE

Graduate admission procedures vary by institution. At the UW, graduate admissions is decentralized. So although the Graduate School works closely with graduate programs on technical, administrative and policy issues, individual graduate programs have a great deal of autonomy.

The role of the Graduate School in graduate admissions:

- establish minimum admission requirements
- support the online application for graduate study at the UW
- process requests for I-20 and DS-2019 visa applications
- verify degrees of applicants who accept an offer of admission
- evaluate English proficiency requirement for non-native English speakers

The role of a graduate program in graduate admissions:

- establish admission requirements for a degree program
- set application deadlines
- decide what application materials are required
- review applications
- make admission decisions
- notify applicants of admission decisions

## SPECIAL CATEGORIES FOR GRADUATE ADMISSION

### Visiting graduate students

Visiting graduate student status allows students who are actively pursuing a graduate degree at another college or university to take graduate courses at the University of Washington and transfer a limited number of credits back to their home institution.

(Acceptance as a visiting graduate student does not confer priority for later admission to a graduate program at the UW.) The length of enrollment is determined by the number of quarters approved by the home institution and the UW graduate program that admits the visiting graduate applicant. Students may hold visiting graduate status in only one graduate program at a time and may not hold any other student status while enrolled as a visiting graduate student.

International students who do not plan to enroll full-time at the University of Washington during their visit but instead plan to “to participate in full-time supervised research and work-based learning experiences at the University of Washington,” must refer to the Visiting International Student Internship & Training (VISIT) program.

## CITIZENSHIP & VISA STATUS FOR VISITING GRADUATES

U.S. citizens, permanent residents, immigrants, and international applicants are welcome to apply for visiting graduate status. (International applicants requesting an F-1 or J-1 visa must meet the UW’s financial ability requirement to show that they have adequate funding to cover living costs and tuition and campus fees.)

### Information specific to J-1 visiting graduates

The majority of Visiting Graduates at the UW attend in the J-1 Visa Exchange Visitor Category because they are receiving over 50% of their funding from their home country government; home institution; US government organization; international organization; and/or a UW department. J-1 Application Requirements:

Submit a Visiting Graduate application (you must upload college or university transcripts into your application).

After you receive an offer from a UW department:

- Demonstrate sufficient funds for your entire intended period of study, with at least 51% coming from funds other than yourself or your family sponsor (example: funds from a home country government or international organization or UW department).
- Demonstrate English Proficiency as required by the U.S. Department of State. All J-1 exchange visitors — including Visiting Graduates — must demonstrate the sufficient proficiency in the English language, so they can successfully participate in their programs and to function on a day-to-day basis. This includes those who are native speakers of English.
- Complete the DS-2019 request form (for J visa application) and upload it into your application’s Pre-Registration page.
- Maintain appropriate insurance during your entire period of study; follow all instructions on the International Student Service’s webpage.

## ADMISSION REQUIREMENTS FOR VISITING GRADUATE STUDENTS

Prospective visiting graduate students must meet the following minimum requirement:

- Be in good standing and actively pursuing a graduate degree at another regionally accredited college or university in the U.S. or its equivalent from a foreign institution (you must upload transcripts from a college or university into your UW application).

Graduate programs may have additional admission requirements.

#### Application deadlines & procedures

- Review graduate program admissions requirements & deadlines.
- Contact the graduate program with any specific questions.
- Submit a Graduate School Application online

#### Registration procedures

- Visiting graduate students register for classes in MyUW.
- Visiting graduate students must maintain continuous enrollment if they have been admitted for multiple quarters of study or lose their visiting graduate student status.
- Visiting graduate students holding an F-1 or J-1 visa must register for a minimum of 10 credits each quarter of attendance.

#### Additional information

- Visiting graduate students can establish a UW NetID and a UW email account.
- Visiting graduate students have access to the UW Libraries.
- Visiting F-1 & J-1 graduate students are required to maintain insurance and are eligible for International Student Health Insurance (iSHIP).
- Visiting U.S. citizens or permanent residents should refer to the Student Affordable Care Act.

## GRADUATE NON-MATRICULATED

Graduate non-matriculated (GNM) status allows post baccalaureate students who are not presently seeking a graduate degree at the University of Washington to take UW graduate courses and apply the credits toward degree requirements should they later be accepted into a graduate program at the UW. (Acceptance as a GNM student does not confer priority for later admission to a graduate program at the UW.) GNM students may take any number of credits, however a maximum of 12 graduate-level credits may be applied toward degree requirements. Students may hold GNM status in only one graduate program at a time and may not hold any other student status while enrolled as a GNM student.

#### Citizenship & visa status for GNM students

Students expecting to be issued F-1 student visa documents are not eligible for GNM status. Current holders of B-1 visitor visas are not eligible for GNM status.

#### Admission requirements for GNM students

Prospective GNM students must meet the following minimum requirements:

- Hold a baccalaureate degree from a regionally accredited college or university in the U.S. or its equivalent from a foreign institution.
- Have earned at least a 3.0 grade-point-average (on a 4 point scale) for the last 90 graded quarter credits or 60 graded semester credits.

Graduate programs may have additional admission requirements.

### Application deadlines

Deadlines are determined by the faculty of each graduate program. Applicants should contact the graduate program advisor (GPA).

### Application procedures

GNM applicants follow the same application procedures as other applicants and apply online to the Graduate School. GNM students are not required to send official transcripts to the Graduate School. To find out if the graduate program requires official transcripts, GNM students should contact the graduate program advisor (GPA).

### Registration procedures

- GNM students on the Bothell and Tacoma campuses register for classes in MyUW and must maintain continuous registration (except summer quarter) or lose their GNM status.
- GNM students participating in the UW or state employee Tuition Exemption Program register for classes in MyUW and must maintain continuous registration (except summer quarter) or lose their GNM status

### Additional information

- GNM students can establish a UW NetID and a UW email account.
- GNM students have access to the UW Libraries.
- GNM students who wish to receive financial aid should contact the UW Office of Student Financial Aid (OSFA) to find out if they are eligible for financial aid.
- GNM students are not eligible for student health insurance because it is restricted to students enrolled in degree programs

## GRADUATE STUDY POLICIES

### GRADUATE PROGRAM COORDINATOR

The graduate student's initial work at the University is guided by the graduate program coordinator in his or her field. The coordinator must be a senior tenured member of the graduate faculty and is the official representative of the academic unit that offers the graduate degree program. The graduate program coordinator maintains familiarity with policies and procedures of the Graduate School and provides overall coordination of graduate activities within the unit.

### GRADUATE COURSES

Graduate courses are intended for, and ordinarily restricted to, either students enrolled in the Graduate School or graduate non-matriculated students, and are given numbers from 500 to 800. Some courses at the 300 and 400 levels are open to both graduates and upper-division undergraduates. Such courses, when acceptable to the supervisory committee and the Graduate School, may be part of the graduate program. The Graduate School accepts credit in approved 300-level courses for the minor or supporting fields only. Courses at the 300 level are not included in the calculation of grade-point average (GPA)



and will not apply toward the minimum Graduate School requirement of 18 graded credits for the master's or doctoral degree. Approved 400-level courses are accepted as part of the major as well as minor or supporting fields. Courses numbered 498, and entitled Special Topics and Special Projects, normally are not applicable to a graduate degree program if addressed primarily to introductory content and undergraduate students. Undergraduate research (499) is not accepted as part of the graduate program. Graduate School Memorandum No. 36 offers additional information on graduate courses. With the exception of Summer, students are limited to a maximum ten credits per quarter of any combination of courses numbered 600, 700, or 800.

## RESIDENCE

The residence requirement for a master's degree is one year (three full quarters). Students registered for fewer than ten credits per quarter may add part-time quarters together to achieve the equivalent of one full-time quarter (ten or more credits) to be applied toward fulfilling residence requirements. However, excess credits beyond ten may not be subtracted from one quarter and added to another. Once a student is admitted to a graduate degree program, a full quarter of residence is granted for any quarter in which at least ten credits in graduate course, research, thesis, internship, or dissertation work are satisfactorily completed.

Only courses numbered 400, 500, 600, 700, and 800 can be applied to residence or course credit in the major field for advanced degrees (please see Graduate Courses earlier in this section regarding courses numbered 498 and 499). Courses numbered 300 are not applicable to residence or course credit toward advanced degrees, except when applied by permission of the graduate program coordinator or supervisory committee toward the graduate minor or supporting courses. Courses numbered below 300 are not applicable to residence or course credit for advanced degrees.

## ENROLLMENT STATUS

Final quarter registration

A student must maintain registration as a full- or part-time graduate student at the University for the quarter in which the master's degree is conferred. A student who does not complete all degree requirements by the last day of the quarter must be registered for the following quarter.

## CONTINUOUS ENROLLMENT & OFFICIAL ON-LEAVE REQUIREMENT

To maintain graduate status, a student must be enrolled at least on a part-time or on-leave basis from the time of first enrollment in the Graduate School until completion of all requirements for the graduate degree. This includes applying for the master's degree, the passing of the master's final examination, or final examinations, the filing of the thesis or dissertation, and the receiving of the degree. Summer Quarter on-leave enrollment is automatic for all graduate students who were either registered or on-leave the prior Spring



Quarter. Failure to maintain continuous enrollment constitutes evidence that the student has resigned from the Graduate School.

A student's petition for on-leave status must be approved by the department graduate program coordinator or alternate no later than the fifth day of the quarter. To be eligible for on-leave status, the student must have registered for and completed at least one quarter in the UW Graduate School and have been registered or on-leave for the immediate previous quarter (excepting Summer). An on-leave student is entitled to use the University Libraries and to sit for foreign language competence examinations, but is not entitled to any other University privileges of a regularly enrolled and registered full- or part-time student. The student pays a non-refundable fee to obtain on-leave student status and can only go on leave for one quarter at a time. Please note: Periods spent on-leave are included as part of the maximum time periods allowed for completion of a graduate degree.

## READMISSION

A student previously registered in the Graduate School who has failed to maintain graduate student status, but who wishes to resume studies, must file an application online by the published closing dates, for admission to the Graduate School. If the student is readmitted, registration will occur during the registration period II. If the student has attended any other institution during the period when not registered at the University of Washington, official transcripts of the student's work (in duplicate) must be submitted. An application for readmission carries no preference and is treated in the same manner as an application for initial admission. Payment of the application fee is also required.

## ACADEMIC STANDARDS

- Academic standing
- Quarterly Dean's List
- Annual Dean's List
- Academic standing – graduate

Students are expected to meet the traditional standards of honesty and truthfulness in all aspects of their academic work at UW Bothell. In particular, all work submitted to an instructor in fulfillment of course assignments, including papers and projects, written and oral examinations, and oral presentations and reports, must be free of plagiarism. Plagiarism is using the creations, ideas, or words of someone else without formally acknowledging the author or source, through appropriate use of quotation marks, references, and the like. Student work in which plagiarism occurs will not ordinarily be accepted as satisfactory by the instructor and may lead to disciplinary action against the student submitting it. Any student who is uncertain whether his or her use of the work of others constitutes plagiarism should consult the course instructor for guidance before formally submitting the course work involved.

## ACADEMIC STANDING- UNDERGRADUATES

### Academic Alert

An undergraduate student whose GPA falls below 2.00 in his or her first quarter at the University receives an academic alert. If a cumulative GPA of at least 2.00 for courses earned in residence at the University is not achieved by the end of the next quarter, he or she is placed on academic warning.

### Academic Warning and Academic Drop

An undergraduate student is placed on academic warning at the end of any quarter (except for the first quarter at the University, when an academic alert is issued) in which their cumulative GPA falls below 2.00. The student remains on academic warning until the cumulative GPA is raised to at least 2.00. If this requires more than one quarter's work, the student must maintain a quarterly GPA of at least 2.00 each succeeding quarter or the student is put on academic drop.

## REINSTATEMENT

A student who has been dropped under academic drop rules is readmitted to the University only at the discretion of the dean of the school to which readmission is sought. A student readmitted after being dropped under these rules re-enters on academic warning. The student's GPA is the same as when dropped from the University, and the student may not use grades from other colleges or universities to raise their UW GPA. A readmitted student is dropped if he or she fails to attain either a 2.00 GPA for the following quarter's work or a cumulative UW GPA of 2.00 at the end of that quarter. The student is removed from academic warning at the end of the quarter in which a cumulative GPA of 2.00 or better is reached.

### Senior in Final Quarter

A senior who has completed the required number of credits for graduation, but whose work in what would normally be his or her final quarter places him or her on academic warning, does not receive a degree until removed from academic warning. A senior who has completed the required number of credits for graduation, but whose work during the last quarter results in his or her being dropped with the academic drop, does not receive a degree until readmitted and removed from academic warning.

## QUARTERLY DEAN'S LIST- UNDERGRADUATES

The Quarterly Dean's list includes the names of matriculated undergraduate students who are pursuing their first undergraduate degree and have attained a quarterly GPA of 3.50 in the final grades for at least 12 numerically graded credits. S/NS and CR/NC courses do not count as graded credits. Students are notified of their Quarterly Dean's List standing via email and appropriate entries are made on the student's permanent academic record.

The Quarterly Dean's List web page is updated quarterly and lists those students included on the previous quarter's Dean's List. Only students who have authorized the release of Student Directory Information appear on the Quarterly Dean's List web page.

## ANNUAL DEAN'S LIST – UNDERGRADUATES

The Annual Dean's List award is received on the academic transcript of students who have achieved the following:

- A cumulative grade-point average of 3.50 in at least three quarters of the academic year (Summer, Autumn, Winter, Spring)
- 12 graded credits or more for each of the three quarters, exclusive of Satisfactory/Not Satisfactory (S/ NS) and Credit/No Credit-only (C/NC) courses.
- Students who have attended the UW four quarters of the school year (Summer through Spring) must have a grade-point average of 3.50 for each of any three quarters, a minimum of 12 graded credits (exclusive of S/NS and C/NC courses) for each of the three quarters, and a cumulative GPA of 3.50 for the four quarters.

## ACADEMIC STANDING – GRADUATES

Performance and progress in the fulfillment of degree program requirements as outlined in the graduate program's documentation distributed to students upon enrollment. A minimum cumulative grade point average (GPA) of 3.00 is required to earn a graduate degree, and a minimum of 2.7 is required in each course that is counted toward graduate degree requirements. The GPA for graduate students is calculated entirely on the basis of numeric grades in 400- and 500-level courses, see Scholastic Regulations 110.

## REGISTRATION POLICIES

### ACADEMIC SATISFACTORY PROGRESS

Students pursuing a baccalaureate degree are expected to make satisfactory progress toward the attainment of that degree and are expected to enter a major and graduate after completion of a reasonable number of credits and quarters. The satisfactory progress policy looks at a student's total credits, but when counting quarters, only regular academic-year quarters – autumn, winter, and spring – are considered. The courses and credits taken during summer quarters count towards degree requirements and are included in the credit total. Summer quarters are not included toward satisfactory progress quarter total and, thus, do not count against the number of quarters students may complete before the satisfactory progress credit limit is enforced.

### THE 105-CREDIT RULE

Undergraduates must declare a major by the time they have completed five (5) academic-year quarters and earned 105 credits or a hold will be placed on their registration until they either declare a major or meet with an adviser and receive a pre-major extension. The hold is placed on the student record when five (5) or more academic-year quarters and 105 or more credits have been completed. Transfer students who are admitted to the University

with 105 or more credits are expected to declare a major before their second quarter at the UW, or obtain an extension from an adviser.

Students will be granted a pre-major extension if their adviser decides the student is pursuing a reasonable goal, and has a good chance of gaining admission to their intended major.

If an adviser feels that a student's choice of major is unrealistic, they will deny the request for an extension. The student will not be allowed to register for subsequent quarters until a reasonable degree plan is presented. The intent of the rule is not to drop a student from the University but to encourage them to meet with an adviser and plan for an attainable goal. Students will receive a warning letter from the University as they approach five (5) academic-year quarters and 105 credits, without a declared a major. Students who complete five (5) academic-year quarters and 105 credits and are still a pre-major, will not be able to register for the next quarter. To avoid registration delays, the student should meet with the appropriate adviser at least one quarter before completing five (5) academic-year quarters and 105 credits.

## THE 210-CREDIT RULE

The University's satisfactory progress policy requires students to complete their undergraduate degree programs within 30 credits beyond the minimum required for the degree. Because most degrees require 180 credits, students generally must complete their programs by the time they earn 210 credits. The timing for enforcement of this policy is as follows:

- First-Year: For a student who first matriculates at the University on a first-year application the satisfactory progress policy is enforced after a student has completed 12 academic-year quarters, not including summer quarters, at the University.
- Transfer: For a student who first matriculates at UW on a transfer application, the satisfactory progress policy is enforced after the student has completed
  - Twelve (12) quarters at the University if the student enters with less than one year of college work (less than 45 credits transferred from another institution).
  - Nine (9) quarters at the University if the student enters the University with more than one year of college work and less than two years (more than 44 and less than 90 credits transferred from another institution).
  - Six (6) quarters at the University if the student enters UWS with two or more years of college work (90 or more credits transferred from another institution).

Undergraduates who have completed over 210 credits will be notified by email the third week of the quarter that a block is being placed on their registration due to lack of satisfactory progress. Students ineligible to graduate will be permitted to register for succeeding quarters only if they receive approval from their department and college after filing a graduation plan.

Students receiving satisfactory progress registration blocks should immediately contact their academic adviser to file a graduation application or to initiate a satisfactory progress appeal.

## POSTBACCALAUREATE STUDENTS

Postbaccalaureate students are expected to be either preparing for admission into a degree program, seeking an additional baccalaureate degree, or working toward a certificate. Students admitted as “postbaccalaureate undeclared” must declare a major by the time they have earned 30 credits beyond the last degree. Once a degree objective has been declared, students must make progress toward that degree as evidenced by courses satisfactorily completed. Advisers may grant extensions beyond the 30-credit limit.

## CLASS ATTENDANCE

If a student doesn’t attend regularly scheduled class meetings during the first week of the quarter, they are subject to being dropped at the discretion of the school to allow enrollment space for other students. Students should not assume that they will be automatically dropped from the course if they do not attend. Students not planning to attend a course should drop the course on Register.UW. Students who are registered for a course but do not attend will be assigned a failing grade by the instructor. Students may not attend a university course in which they have not been officially registered after the first two weeks of the quarter.

## RESTRICTIONS ON ATTENDING CLASSES

No person, other than a faculty member attending informally with the approval of the instructor, may attend a university course in which that person has not been registered. An instructor may allow a student to attend his or her class only if the student’s name is on the official class list from the Office of the Registrar. An unregistered student may attend through the fourteenth calendar day of the quarter, if the student is on an official waitlist for the course.

## COMPOSITION AND MATH DIRECTED SELF-PLACEMENT

The first-year composition and math experiences can be fulfilled by completing a UW Bothell composition or math course which is chosen by students in a directed self-placement (DSP) step-by-step process.

## CROSS-CAMPUS REGISTRATION

All students enrolled at one UW campus may register for courses at another UW campus on a space-available basis, starting on the first day of Registration Period II for Autumn, Winter and Spring quarters. In Summer quarter, cross-campus enrollment is allowed in Period I as well.

First Year students must earn a minimum of 25 credits at UW campuses before cross campus registration is permitted. All other students must earn a minimum of 15 credits at

UW campuses before cross campus registration is permitted. Non-matriculated students are also not allowed to enroll cross-campus. This includes non-matriculated students taking courses under the UW staff or Washington State tuition exemption. Students may not be admitted and enrolled at separate campuses simultaneously. Double degrees or majors will not be permitted to cross campus lines, and majors will be restricted to a single campus. However, students who earn a minor at the alternate campus may have that minor recorded with the degree on the transcript at graduation.

A maximum of 45 credits earned through cross-enrollment may count toward a bachelor's degree. (Graduate students are limited to 12 credits.) This restriction is not monitored, so there is no restriction to the number of credits a student may complete by cross-enrollment; only to the number that may count toward a degree. If there are excess cross-enrollment credits, the program or school adviser should note this on the application for graduation. DARS is not programmed to know at which campus courses are completed, so a DARS audit will not point out excess cross-enrollment credits.

Note that this 45-credit limit applies only to credits taken at one UW campus while enrolled at another. A student who attends one UW campus and then is admitted to another UW campus may count toward a bachelor's degree any number of credits transferred from the first UW campus to the second (see below).

## CROSS-CAMPUS ENROLLMENT ADMINISTRATIVE DETAILS

The home campus is responsible for administrative and disciplinary issues. Hardship withdrawal petitions for all courses will be reviewed by the student's home campus. Student activity fees are credited to the student's home campus. Students are eligible for student activity fee-supported services only at their home campus. Only Seattle-campus students are eligible to participate in intercollegiate athletics.

## FULL-TIME REQUIREMENTS

To be considered a full-time undergraduate student, they must register for 12 credits or more. To be considered a full-time graduate student, they must register for 10 or more credits. Consult the Financial Aid Office for its requirements on satisfactory student progress. To be classified as a half-time student by the University, an undergraduate must register for and complete at least 6 credits per quarter. A graduate student must register for and complete 5 credits per quarter.

## QUARTER OFF POLICY

Undergraduate students who have completed a quarter at the UW Bothell may take the following quarter off, and remain eligible to register in Registration Period I for the subsequent quarter, without a returning student form. Any quarter from which a student has completely withdrawn, or from which he or she is cancelled, does not constitute a completed quarter. Summer Quarter enrollment is not required to maintain continuous registration eligibility. The quarter-off policy is not available for graduate students.

## SYSTEM ABUSE

Because use of scripts, robots, or other automated queries can adversely impact University network and computing resources and interferes with equal access to registration, such automated querying of registration-related resources is expressly forbidden. Violators may have their access to University network and computing resources terminated and may be subject to action by the University under applicable law, regulation, or policy, including but not limited to, discipline under any applicable University conduct code.

## REGISTRATION ABUSE

The registration system is provided for the sole express purpose for students to register themselves into sections. Any use of the registration system other than for this purpose is considered abuse of the system. Such abuse includes, but is not limited to, buying or selling one's seat in a class, holding seats for another student, or otherwise registering for a section that one has no intention of taking. To help conserve University resources and ensure the registration system is available to all, students are locked out of Web Registration after a specific number of excessive submission attempts and/or transactions are made per day. This threshold is sufficient for students' regular use and should not interfere with typical use. The use of robots and other automated tools to submit registration requests is expressly forbidden. A student whose account is locked out for excessive use must wait until the registration system removes the lockout – within 24 hours.

## REGISTRATION TAMPERING

A student who tampers or attempts to tamper with the registration records of another student, including but not limited to dropping and adding courses, may be subject to disciplinary sanctions as defined in the [Student Conduct Code](#) (WAC 478-121).

## REGISTRATION ELIGIBILITY

Newly admitted students and students readmitted to the same or a new classification (e.g., undergraduate, post-baccalaureate, graduate), or admitted to a different University campus, are eligible to register after their enrollment confirmation deposit has been received. New students must wait until Registration Period II to register for classes. Returning students can register in Period I. Continuing UW Bothell students who remain in good academic standing are guaranteed the opportunity to register each quarter at the same University campus as long as they maintain continuous enrollment (excluding Summer Quarter) or fall within the guidelines of the quarter-off policy. Continuation must be in the same classification (e.g., undergraduate, post-baccalaureate, graduate) and at the same campus. After a student has earned a baccalaureate degree, he or she must apply for readmission as a post-baccalaureate, non-matriculated, or graduate student. Any student wishing to enroll at a different University of Washington campus must apply for admission to that campus. Exceptions to the guarantee of registration eligibility include students under disciplinary action, students with a financial hold on their records, and students not meeting their departmental or University satisfactory progress policies. Additionally, continuing students who withdraw during the first week of two consecutive



quarters (Summer Quarter not included) will not be eligible to register as continuing students for the third quarter and must reapply as former students returning to the University. If an undergraduate does not enroll for two or more quarters, he or she must file a Returning Student Form with the Bothell Office of the Registrar.

## DROPPING COURSES

Students dropping a course during the first two weeks of a quarter shall have no entry on their permanent academic transcript. If all courses are dropped, then a “Withdrawn” designation is recorded on the transcript. Students may drop one course each quarter (autumn through summer quarters) on Register.UW from the third through the last day of instruction. This is referred to as the “current quarter drop.” The process differs depending on the time of the quarter.

A student who does not drop a course officially through Register.UW is given a grade of 0.0. Check in with:

- Office of Financial Aid, if student is applying or receiving financial aid funding
- Office of Veteran & Military Educational Benefits Office, if student is receiving VA Benefits or veteran-related tuition waivers
- International Student Services, if student is an international student

Students should be aware that dropping a course might impact their student account. Please see the Tuition and Fees section of this catalog. During summer quarter, the timeline for dropping a course is abbreviated due to the shortened session. Please consult the Academic Calendar on the Registration website for specific dates.

### Unrestricted drop period

The Unrestricted Drop Period continues through the second week of the quarter. Courses dropped during this period do not appear on the academic transcript. A \$20 fee is charged for each additional day drop transactions are processed starting the second week of the quarter. This fee is in addition to any tuition decrease or forfeiture as a result of the change.

## LATE COURSE DROP PERIOD/CURRENT QUARTER DROP

Between Week 3 and the last day of instruction, there are two options for dropping classes: Quarterly drop on Register.UW. Students may drop one course per quarter using the self-serve Quarterly Drop via Register.UW.

### Adviser-assisted drop request process

If a student has already used their self-serve Quarterly Drop, if they want to drop more than one course, or they want to completely withdraw, students use the Adviser-Assisted Drop process.

With the Adviser-Assisted Drop Request Process, a form is submitted to the academic adviser to help facilitate the drop.



## DROPPING ALL COURSES FOR THE QUARTER

It is the student's responsibility to withdraw completely if he or she is unable to attend. Beginning in the 3rd week of the quarter students must withdraw using the Adviser-Assisted Drop process.

Tuition owed will be based on the date the complete withdrawal is received. No withdrawals are accepted after the last day of instruction for the quarter. Students withdrawing on or before the seventh calendar day of the quarter do not pay tuition. New and returning students forfeit their \$250 enrollment confirmation deposit. Students who drop classes between the 8th & 30th calendar days of the quarter receive a refund of one-half of the tuition reduction associated with the drop. This is in addition to the \$20 Late Change of Registration Fee. Students who drop classes after the 30th calendar day of the quarter receive no reduction in tuition and will also be charged a \$20 Late Change of Registration Fee.

The following principles apply to complete withdrawal from the University:

- Courses dropped as part of a complete withdrawal from the University during the first two weeks of a quarter are not recorded on the student's UW transcript; however, the date of the complete withdrawal is recorded.
- Students are required to turn in their student identification cards when they withdraw from the University and are not eligible to continue using University services or facilities after their withdrawal.
- A recipient of veteran's benefits should immediately notify the Veterans Benefits Coordinator of withdrawal.
- A student with a scholarship or loan awarded through the University should notify the Financial Aid Counselor of withdrawal.

## FORMER QUARTER DROP

This process provides students with a method to petition for a grade earned in a former quarter to be changed to a Registrar Drop (RD). A Former Quarter Drop (FQD) may be granted if a student was unable to complete or withdraw from their course(s) because of extenuating circumstances beyond their control and these circumstances can be documented with supporting materials.

## UNIVERSITY GRADING SYSTEM

### UNDERGRADUATE GRADING SYSTEM

UW Bothell uses a numerical grading system. Instructors may report grades from 4.0 to 0.7 in 0.1 increments and the grade 0.0. The number 0.0 is assigned for failing work or unofficial withdrawal. Grades in the range 0.6 to 0.1 may not be assigned. Grades reported in this range are converted by the Office of the Registrar to 0.0.

Numerical grades may be considered equivalent to letter grades as follows:

### UNDERGRADUATE GRADING SCALE

| Letter Grade | Numerical Grade                                          |
|--------------|----------------------------------------------------------|
| A            | 4.0 – 3.9                                                |
| A-           | 3.8 – 3.5                                                |
| B+           | 3.4 – 3.2                                                |
| B            | 3.1 – 2.9                                                |
| B-           | 2.8 – 2.5                                                |
| C+           | 2.4 – 2.2                                                |
| C            | 2.1 – 1.9                                                |
| C-           | 1.8-1.5                                                  |
| D+           | 1.4 – 1.2                                                |
| D            | 1.1 – 0.9                                                |
| D-           | 0.8 – 0.7 (Lowest passing grade)                         |
| E            | 0.0 (Failure or unofficial withdrawal; no credit earned) |

**TABLE 1 UNDERGRADUATE GRADING SCALE**

### GRADUATE GRADING SYSTEM

#### GRADUATE GRADING SCALE

| Letter Grade | Numerical Grade |
|--------------|-----------------|
| A            | 4.0 – 3.9       |
| A-           | 3.8 – 3.5       |
| B+           | 3.4 – 3.2       |
| B            | 3.1 – 2.9       |
| B-           | 2.8 – 2.5       |
| C+           | 2.4 – 2.2       |
| C            | 2.1 – 1.9       |
| C-           | 1.8-1.5         |
| D+           | 1.4-1.2         |
| D            | 1.1-0.9         |
| D-           | 0.8-0.7         |
| E            | 1.6 – 0.0       |

**TABLE 2 GRADUATE GRADING SCALE**

For information regarding grades and grading practices for Graduate Students, see Scholastic Regulation, Chapter 110.1.B.

### OTHER LETTER GRADES

Definitions for the following letter grades that may also be used:

| Letter Grade                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CR: Credit Awarded</b>     | Credit in a course offered on a credit/no-credit (C/NC) basis only or in courses numbered 600, 601, 700, 750 and 800. The minimum performance level required for a CR grade is determined, and the grade is awarded directly by the instructor. CR is not computed in GPA calculations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>NC: Credit Not Awarded</b> | Credit not awarded in a course offered on a credit/no-credit (C/NC) basis only or in courses numbered 600, 601, 700, 750 and 800. The grade is awarded directly by the instructor and is not included in GPA calculations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>S: Satisfactory</b>        | Satisfactory grade for courses taken on a satisfactory/not-satisfactory (S/NS) basis. An S grade is automatically converted from a numerical grade of 2.0 or above for undergraduate classes and 2.7 or above for graduate classes. The grade S may not be assigned directly by the instructor, but is a grade conversion by the Office of the Registrar. Undergraduate students may elect this option only for electives and not for courses used to satisfy a core requirement. With the approval of their program advisor, graduate students may elect to be graded S/NS in any numerically graded course for which they are eligible. A maximum of 25 credits of S/NS grades may be applied to an undergraduate degree. S is not computed in GPA calculations. For graduate students, see an academic advisor. |
| <b>NS: Not Satisfactory</b>   | Not Satisfactory grade for courses taken on a satisfactory/not-satisfactory (S/NS) basis. A grade less than 2.0 for undergraduate classes and 2.7 for graduate classes is converted to NS. NS is not included in GPA calculations. No credit is awarded for courses in which an NS grade is received.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>X: No Grade</b>            | A faculty member should only assign a grade of "X" when a student is undergoing student conduct proceedings for the course at the time grades are due. The GPA is not affected and no credit is granted. The "X" will remain on the transcript and the student does not receive credit for the course until a passing grade is turned in. The GPA is not affected and no credit is granted.                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| Letter Grade                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>I: Incomplete</b>        | <p>Instructors may grant an incomplete grade if the student has done satisfactory work to within three weeks of the last day of the quarter and if circumstances prevent the student from completing the remaining work for the course by the end of the quarter. Instructors are never obligated to grant a student's request for an Incomplete. Instructors will use the designated process for students to request and for instructors to approve the awarding of an Incomplete grade.</p> <p>To obtain credit for a course a grade must be submitted by the instructor of the course by the grading deadline per the Academic Calendar for the next subsequent quarter. For Spring quarter, the subsequent quarter is considered to be the Fall Quarter. This submission is done through the established late grade submission process. The submitted grade will replace the "I" on the transcript. If no grade is submitted the Incomplete will convert to a grade of 0.0 and the "I" will be removed from the official transcript. If a default grade was submitted by the instructor this grade will replace the "I" on the transcript. Courses taken CR/NC will change to a NC. The grade I shall count neither for registered hours nor in computation of grade-point averages.</p> <p>Instructors, on behalf of the student, may request an extension for one additional quarter beyond the original grading quarter utilizing the established extension request process.</p> <p>In no case shall an Incomplete on the record at the time a degree is granted be subsequently changed to any other grade.</p> <p>An Incomplete grade does not count for registered hours nor in computation of grade-point averages.</p> |
| <b>RD: Registrar Drop</b>   | <p>"RD" is assigned when a student is allowed to drop a course(s) after the 14th calendar day of the quarter. It does not impact cumulative GPA or academic standing.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>N: Hyphenated Course</b> | <p>N: Indicates that the student is making satisfactory progress and a final grade will be given at the end of the quarter the work is completed. Used only for hyphenated courses (courses not completed in one quarter) and courses numbered 600, 601, 700, 750 or 800. An N grade carries with it no credit or grade until a regular grade is assigned.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

**TABLE 3 OTHER LETTER GRADES**

## GRADE-POINT AVERAGE

The cumulative grade-point average is based solely on courses taken in residence at the University of Washington.

### COMPUTATION OF GRADE-POINT AVERAGE

The grade-point average for graduation is computed by dividing the total cumulative grade points by the total credits attempted for courses taken in residence at the University.

Grade points are calculated by multiplying the number of credits by the numeric value of the grade for each course. The sum of the grade points is then divided by the total credits attempted. Courses elected on an S/NS basis are counted as follows: Satisfactory grades are printed on the permanent record as an S and do not count in the quarterly or cumulative grade-point average, but they do count as credits earned toward graduation. Not-satisfactory grades, NS, do not count in the quarterly and cumulative grade-point averages and do not count as credits earned toward graduation.

| Course         | Credits | Grade | Grade Points |
|----------------|---------|-------|--------------|
| <b>BIS 498</b> | 3       | 0.0   | 0.0          |
| <b>BIS 300</b> | 5       | 2.9   | 14.5         |
| <b>BIS 343</b> | 5       | 3.2   | 16.0         |

**TABLE 4 EXAMPLE 1 GPA COMPUTATION**

- Total credits earned toward graduation is 10
- Total graded credits attempted is 13
- Grade-point average (GPA):  $30.5 / 13 = 2.35$
- The total graded credits attempted, not the credits earned toward graduation, are used in computing the grade-point average.

| Course         | Credits | Grade | Grade points |
|----------------|---------|-------|--------------|
| <b>BIS 325</b> | 5       | 2.3   | 11.5         |
| <b>BIS 463</b> | 5       | 2.9   | 14.5         |
| <b>BIS 313</b> | 5       | I     | 0.0          |

**TABLE 5 EXAMPLE 2 GPA COMPUTATION**

- Total credits earned toward graduation is 10
- Total graded credits attempted is 15
- Grade-point average(GPA):  $26.0 / 10 = 2.60$
- The student attempted 15 credits, but only 10 are graded, because the I (Incomplete) is not computed in the grade-point average. If the work in BIS 313 is not made up by the end of the quarter, the "I" will convert to a numeric grade of 0.0, and the grade-point average will be recomputed. When the grade of 0.0 is received, it is computed in the grade-point average, but no credit is awarded toward graduation.

## REPEATING COURSES

## UNDERGRADUATES

With the approval of the academic department offering the course, a undergraduate may repeat a course once. Both the original grade and the second grade will be computed in the GPA, but credit will be allowed only once. Veterans receiving benefits must receive approval from the Office of Veterans & Military Educational Benefits before a course is repeated.

## GRADUATES

Graduate students may repeat any course. Both the original grade and the second grade are computed in the GPA. Subsequent grades will not be included but will appear on the permanent record. The number of credits earned in the course will apply toward degree requirements only once. Veterans receiving benefits must receive approval from the Office of Veterans & Military Educational Benefits before a course is repeated.

Departments may restrict undergraduates from repeat registration into courses. A second repeat (taking a class for a third time [or more]) cannot be done using Register.UW. A second repeat requires the department to register you into the course. Grades in the third or subsequent takings will not be included in the grade-point average (GPA). A second repeat requires the department to register you into the course. Grades in the third or subsequent takings will not be included in the grade-point average (GPA).

## GRADING PROCEDURES

### CHANGE OF GRADE

Except in case of error, no instructor may change a grade that he or she has turned in to the Registrar. Grades cannot be changed after the degree has been granted.

### GRADE APPEAL PROCEDURE

A student who believes he or she has been improperly graded first discusses the matter with the instructor. If the student is not satisfied with the instructor's explanation, the student may submit a written appeal to the dean or director of the student's academic program (or their designee) with a copy of the appeal also to the instructor. The dean or director consults with the instructor to ensure that the evaluation of the student's performance has not been arbitrary or capricious. Should the director believe the instructor's conduct to be arbitrary or capricious, and the instructor declines to revise the grade, the dean or director, with the approval of the voting members of his or her faculty, shall appoint an appropriate member, or members, of the faculty of that department, to evaluate the performance of the student and assign a grade. The Vice Chancellor of Academic Affairs should be informed of this action.

### GRADE REPORTS

Grades are available through MyUW at the end of each quarter.

## UNIVERSITY POLICY ON STUDENT EDUCATION RECORDS

A copy of the University's policy on a student's right to inspect his or her education records and the University's responsibility to maintain the confidentiality of such records are available at reference stations on campus (e.g., Office of the Chancellor and the Library).

## GRADUATION REQUIREMENTS – BACCALAUREATE

### FILING AN APPLICATION

A UW Bothell student must make an appointment with their advisor to complete an application for graduation. The student should file three quarters before the expected date of graduation. The absolute deadline for filing an application is Friday of the third week of the quarter in which the student intends to graduate. Because degrees are not automatically awarded when requirements have been satisfied, it is the student's responsibility to apply for a degree. The application will be submitted by the program advisor, confirmed by the student, and reviewed by the UW Bothell Registrar's Office. If a problem arises, the UW Bothell Registrar's Office, or the advisor, will notify the student.

### GRADUATING SENIOR PRIORITY

Graduating seniors or post-baccalaureate students may qualify for early registration for the upcoming quarter(s). To qualify, the student must file a graduation application no later than the third Friday of the quarter before they plan to graduate. Students who qualify will receive Graduating Senior Priority status for no more than three quarters prior to graduation if graduating in autumn, winter, or summer quarters and no more than two quarters prior to graduation if graduating in spring. If graduation is postponed, the student may postpone their priority quarter. When Graduating Senior Priority has been used for two quarters, the student will revert to regular senior priority.

### REQUIREMENTS FOR A BACCALAUREATE DEGREE

To graduate, a student must meet university requirements: university and campus requirements; and department or program requirements. This section contains only University requirements. The graduation requirements for particular programs at the UW Bothell campus are explained in the catalog sections devoted to the academic programs.

### SCHOLASTIC STANDARDS REQUIRED

To be eligible for the baccalaureate degree, a student must earn a cumulative grade-point average of at least 2.00 for all work done in residence at the University. The graduation grade-point average is computed when the student has completed all work for the degree and includes only credits earned while in residence at the University.

## CREDITS REQUIRED

To be eligible for graduation from the University, with the baccalaureate degree, a student must offer a minimum of 180 academic credits and satisfy all other specific requirements. The University of Washington Bothell has established minimum general education requirements for baccalaureate degrees. These minimum requirements are:

- English Composition – 5 credits (A grade of 2.0 is required)
- Additional Writing – 10 credits
- Reasoning (RSN) – 5 credits
- Natural Sciences (NSc) – 15 credits
- Arts and Humanities (A&H) – 15 credits
- Social Sciences (SSc) – 15 credits
- Diversity – 5 credits (can overlap with General Education requirements above)\*
  - \*For students admitted to the University prior to autumn quarter 2023, the Diversity requirement is 3 credits.

Each University of Washington Bothell degree program has established requirements that meet or exceed these minimum requirements.

## LIMITATION ON ROTC CREDITS

Credits earned in first- and second-year military training courses cannot be counted in the basic 180 credits required for graduation.

## LIMITATIONS ON PHYSICAL EDUCATION ACTIVITY CREDITS

No more than three physical education activity credits can apply toward a degree.

## FINAL-YEAR RESIDENCE REQUIREMENT

To be recommended for a first, or subsequent, baccalaureate degree, a student must complete 45 of his or her final 60 credits as a matriculated student in residence at the campus of the University where the degree is being earned. Exceptions are rare, but the granting of exceptions to this rule is the responsibility of the Bothell Office of the Registrar. If an exception is granted, the student still must present a minimum of 45 credits taken in residence as a matriculated student to be awarded a UW degree.

## CATALOG FOR GRADUATION REQUIREMENTS

In general, a student graduates under the requirements of the current catalog. However, a student may fulfill graduation requirements noted in the catalog in effect at the time he or she entered the school or college from which he or she is to graduate, provided that (1) not more than ten years have elapsed since the student's entry, and (2) the school, college or campus, and department or program agree that the student may graduate under the earlier requirements.



If the student graduates more than 10 years after enrolling in the school, college, or campus, the current catalog must be used for graduation purposes. Exceptions to this rule cannot be made without official University and Bothell campus approval.

## WAIVER OF GRADUATION REQUIREMENTS

A request for waiver of Bothell campus or University graduation requirements must be petitioned to the UW Bothell Registrar, who represents the General Faculty Organization at the University of Washington Bothell. Petition forms should be filed with the application for the degree or as soon as possible after the need arises. A student should see his or her academic advisor to initiate a petition.

An exemption from an all-University graduation requirement, that is granted by the Registrar, becomes void at the end of two calendar years from the date such exemption is granted, if all degree requirements have not been completed within that period.

## TWO MAJORS OR TWO DEGREES

### SECOND BACCALAUREATE DEGREE

A second baccalaureate degree may be granted, but a student must earn a minimum of 45 credits beyond the number required for the first degree. These credits usually must be earned in residence, with the granting of exceptions to the residency rule being the responsibility of the college, school, or campus awarding the degree. The student must achieve no less than a 2.00 cumulative grade-point average in the credits required for the second degree.

### DEGREES WITH TWO MAJORS

The student's application for a baccalaureate degree, with two majors at the University of Washington Bothell, must show both majors and be approved by the academic advisors representing those majors. Both majors appear on the student's transcript.

### TWO BACCALAUREATE DEGREES CONCURRENTLY

Two baccalaureate degrees, associated with different majors at the University of Washington Bothell, may be granted at the same time. The total number of academic credits earned must reach a minimum of 45 credits in excess of the number required for the first baccalaureate degree.

### GRADUATION WITH HONORS

Baccalaureate honors are awarded upon graduation to undergraduates earning their first bachelor's degree with at least 90 UW credits, of which at least 60 are numerically graded. Correspondence credits do not count as "UW credits. These honors have nothing to do with whether the students are in either the departmental or college honors program. In addition, students who have earned quarterly and/or annual Dean's List recognition do not

necessarily qualify for baccalaureate honors. All graduates earning baccalaureate honors are given a gold honor cord to wear in the Commencement ceremony. For students graduating in spring, the honors listed in the commencement program, as well as honor cord distribution, are based upon a student's cumulative GPA as of the winter quarter, since spring grades are not available for this determination. Spring classes are ultimately included in the credit totals and GPA calculations for honors posted to the student's final record. The GPA's for baccalaureate honors are set each year for the following year (autumn through summer) by a subcommittee of the Faculty Council on Academic Standards, based on statistics for the current year provided by the Graduation and Academic Records Office. The GPA cutoffs have been different for each of the degree programs. Faculty honor is awarded upon graduation to undergraduates earning their first bachelor's degree and ranked in the top 10% of their respective program. Undergraduates must earn a minimum of 70 graded credits at UW Bothell with the exception of BSN students, who must earn a minimum of 43 graded credits. Undergraduates qualified for baccalaureate honors are not eligible to receive faculty honors. The GPAs for faculty honors are determined each year for the following year (autumn through summer) by the UW Bothell Registrar's Office, based on statistics for the current year. The GPA cutoffs may be different for each of the degree programs. All graduates earning faculty honors are given a purple honor cord to wear in the Commencement ceremony and the honor is listed in the commencement program. Honor cord distribution is based upon a student's cumulative GPA as of the winter quarter, since spring and summer quarter grades are not available for this determination. However, spring and summer courses are ultimately included in the credit totals and GPA calculations for honors and posted to the student's final record.

## COMMENCEMENT

Formal commencement exercises are conducted at the close of Spring Quarter.

## DIPLOMA DISTRIBUTION

Diplomas are available 8-10 weeks after the end of the quarter in which they are earned.

## GRADUATION REQUIREMENTS – GRADUATE

### REQUIREMENTS APPLYING TO ALL GRADUATE DEGREE PROGRAMS

Credits applied towards graduate degree requirements must include University of Washington coursework of (1) at least 18 credits at the 500 level and above; and (2) at least 18 numerically graded credits of 400- and 500-level coursework, excluding 499 and transfer credit. For CR/NC courses, submission of a CR grade indicates that the student has met course expectations at a level such that the course may be applied towards graduate degree requirements. For S/NS courses, an S grade indicates that the student has met course expectations at a level such that the course may be applied towards graduate degree requirements. A graduate program may restrict S courses from counting towards program requirements. Graduate degree requirements consist primarily of graduate-level

coursework at the 500 level and above. Courses at the 300 level and 400 level may be part of a student's course of study and applied toward graduate degree requirements when acceptable to the Graduate School and the Graduate Faculty of the student's graduate program (Faculty Code Section 23-44). Any 300- or 400-level course applied towards graduate degree requirements must be confirmed by the Graduate Faculty of the unit to have a level of rigor and depth appropriate to the graduate program and to have a subject matter closely aligned with the degree program's outcomes. Coursework at the 300 level may not be applied towards the minimum 18 graded credits and may not be applied towards more than one-third of total degree requirements, except as previously approved by the Graduate School. A student must be registered for credit the quarter in which any required exam or presentation occurs. A student must maintain registration as a full-time or part-time graduate student for the quarter the degree or certificate is conferred. A minimum cumulative grade point average (GPA) of 3.00 is required to earn a graduate degree, and a minimum of 2.7 is required in each course that is counted toward graduate degree requirements. The GPA for graduate students is calculated entirely on the basis of numeric grades in 400- and 500-level courses, see Scholastic Regulations 110. With the approval of a student's graduate program and the Graduate School, up to 6 credits of 400-level or 500-level coursework, taken as a senior while an undergraduate at the University of Washington, may be applied towards graduate degree requirements. With the approval of a student's graduate program, a restricted amount of Graduate Non-Matriculated (GNM) credit may be applied towards degree requirements, as described in Policy 3.3. Credit taken while enrolled as a non-matriculated (NM) student or while matriculated as a postbaccalaureate student at the University of Washington may not be applied towards graduate degree requirements. Credit by independent study or advanced credit examination is not transferable.

## THE MASTER'S DEGREE

In addition to the requirements listed under Policy 1.1.1 that apply to all graduate degree programs: Master's degree requirements must include a minimum of 36 credits. A master's program may require more than this minimum. A student must complete all work for the master's degree within six years from the time of first enrollment. Periods spent on leave or out of status are included in these limits. Exceptions to time to degree will be made at the program level. A master's program generally should require a final culminating or integrated experience, with the exception of applied professional programs where a coursework-only program can be thoroughly justified in the program proposal (e.g., a coursework-only program is the standard in the field).

## COURSEWORK THAT MAY BE APPLIED TOWARDS MASTER'S DEGREE REQUIREMENTS

A maximum of 6 quarter credits of graduate-level coursework taken at another recognized academic institution may be transferred and apply to UW master's degree requirements, when acceptable to the graduate program and the Graduate School. No more than 12 credits derived from any combination of GNM credits and transfer credits may be applied

towards the total degree requirements. Transfer credits may not be applied towards the thesis or culminating experience requirement.

## THESIS PROGRAMS

The master's thesis provides evidence of the graduate student's ability to carry out independent investigation and to present the results in clear and systemic form. The thesis must be written in the English language. If there are circumstances that warrant a dissertation in another language, the program may petition the Graduate School. A thesis program must include a minimum of 9 thesis credits (700). Thesis credits (700) will not apply to requirements for a non-thesis master's degree. See Policy 4.2.1 for any thesis that will include human or animal subjects.

## FINAL EXAMINATION

If a master's program requires a final examination, it may be either oral or written. A majority of the supervisory committee must approve for satisfactory completion, and all members of the supervisory committee must certify examination results. If the examination is not satisfactory, the committee may recommend to the Dean of the Graduate School that the student be allowed to take another examination after a period of further study.

## TUITION, FEES & FINANCIAL AID

### COST OF EDUCATION

The cost of a student's education at the University varies with individual circumstances. The amount charged for tuition and fees is set by the state and is indexed to the cost of instruction. Since inflation increases costs generally, the tuition and fee rates also increase each year. Consequently, accurate tuition charges for future quarters cannot be provided here. Since University costs are supported by state taxes, the rates charged to students who are not residents of Washington State are higher than the rates for residents. The Office of Student Financial Aid estimates the amount of money that students in different family situations need to meet living expenses and to pay for school. They are based on surveys of students' costs, comparisons with other schools, input from housing and transportation agencies, and they reflect cost-of-living changes. They cover modest but adequate costs for most students attending this University. The figures listed below are the costs of attending the University of Washington for one academic year (a nine-month period: autumn, winter, and spring quarters).

## ANNUAL STUDENT BUDGETS 2025-2026

| Budget Item        | Lives away from home | Lives with parents | Non-Traditional Undergraduate | Graduate Students (Commuter) | Graduate Students (Traditional) |
|--------------------|----------------------|--------------------|-------------------------------|------------------------------|---------------------------------|
| Resident Tuition   | \$13,476             | \$13,476           | \$13,476                      | \$22,563^^                   | \$22,563^^                      |
| Books and Supplies | \$900                | \$900              | \$900                         | \$825                        | \$825                           |
| Room and Board     | \$17,538             | \$5,280            | \$21,861                      | \$5,280                      | \$21,861                        |
| Personal Expenses  | \$2,574*             | \$2,574*           | \$2,574*                      | \$3,129**                    | \$3,129**                       |
| Transportation     | \$1,467              | \$1,467            | \$1,467                       | \$1,467                      | \$1,467                         |
| New Student Fee**  | \$425***             | \$425***           | \$425***                      | N/A                          | N/A                             |
| Resident Total     | \$36,380             | \$24,122           | \$40,703                      | \$33,264                     | \$49,845                        |

**TABLE 6 ANNUAL STUDENT BUDGETS FOR 2025 TO 2026**

\*Figure includes \$66 annual loan fee \*\*Figure includes \$621 annual loan fee \*\*\*First quarter only for newly admitted undergraduate students. ^^Figure shown is Graduate Tier II programs. Tuition and rates table.

- Traditional: All single, undergraduate students without dependents (spouse or children) who are living away from parent's home; undergraduate married students without children whose spouses are also students.
- Non-Traditional: All graduate/professional students; undergraduates who have children; married undergraduates whose spouses are not also enrolled. Registered same-sex domestic partners may request consideration for additional living costs and will need to provide information about their partners' financial resources when they make the request.

## TUITION & FEES

Figures presented here are for annual full-time enrollment, i.e., 10-18 credits per quarter for undergraduate students, 7-18 credits for graduate students; however, for purposes of financial aid eligibility, full-time is defined as 12 or more credits for undergraduate students and 10 credits for graduate students.

These are just some of the tuition rates charged at the University of Washington Bothell. Please review the tuition and fees webpages for more information about tuition rates. Students enrolled in Fee Based Programs should check with their program office for details about course fees or program fees.

| 2025-2026 Tuition Rates (Annual)      | Resident | Non-Resident |
|---------------------------------------|----------|--------------|
| Undergraduate                         | \$13,472 | \$44,706     |
| Graduate Tier II*                     | \$20,319 | \$35,325     |
| Graduate Nursing Incoming             | \$20,319 | \$35,325     |
| Graduate Nursing Continuing           | \$19,383 | \$33,651     |
| Business Masters' Programs Incoming   | \$28,410 | \$35,310     |
| Business Masters' Programs Continuing | \$27,540 | \$34,221     |
| Graduate Post-Bacc/Non-Matric         | \$22,563 | \$39,270     |

**TABLE 7 RESIDENT AND NON-RESIDENT VALUES FOR 2025-2026 TUITION**

\* Refers to Graduate Tier II Programs: Community Health & Social Justice, Education, and Policy Studies

## TUITION QUARTERLY DUE DATE

Tuition is due quarterly by Friday of the third week of the quarter.

## FEE-BASED PROGRAMS

For fee-based degree programs offered through UW Bothell, the tuition rate is charged per credit at a different rate than listed in the Catalog and registration is administered through a partnership with UW Professional & Continuing Education. Prospective and current students should contact the program advisor for details.

## ENROLLMENT CONFIRMATION DEPOSIT

All new students, as well as those continuing in a new classification, must confirm their intention to enroll by paying a non-refundable Enrollment Confirmation Deposit. This deposit is \$250 for undergraduate students. For graduate students, the fee varies by program but is at least \$250. Students admitted for the Summer Quarter are not required to pay this deposit. The fee is applied toward tuition and fees for the quarter in which the student is admitted and enrolls. If a student pays the fee but does not register for that quarter, the fee is non-refundable.

## NEW STUDENT ENROLLMENT & ORIENTATION FEE

The NSEOF is a mandatory, one-time fee for \$425 that all entering undergraduates pay to fund services received as a new student at the UW Bothell. Several transition programs are funded entirely or in part by the NSEOF including the Freshman Advising & Orientation program.

## FEE PAYMENT

An obligation to pay tuition and fees in United States dollars is incurred when a student registers. Student's official University of Washington tuition statement is online, no bills will be mailed. An email is sent to the student's UW email address each quarter when the statement is ready. The tuition due date is always the third Friday of the quarter. Payments

must be received by the Bothell Cashier's Office no later than 5:00pm on the tuition due date or by 4:00pm in the drop boxes. If you do not pay your tuition by the due date, you will be assessed a late payment charge based on the amount of your outstanding balance. For past due balances of \$250 and above, the late fee is \$120. For balances between \$50 – \$249.99, the late fee is \$50. There is no late payment charge for balances under \$50. If you have not paid your outstanding balance by the end of the late payment period, a hold will be placed on your academic records. Unpaid balances will be forwarded to collections after the conclusion of the quarter.

## TECHNOLOGY FEE

The Student Technology Fee is designed to provide funds for the improvement of technology used by students at UW Bothell. The UW Bothell Student Technology Fee Committee (STFC) determines the expenditures of the fee. Students of UW Bothell lead the committee and the committee allocates money for technology resources for general student use, pursuant to RCW 28B.15.051 and the agreement between the Associated Students of the University of Washington Bothell (ASUWB), and the Board of Regents.

## PARKING

Quarterly parking permits for faculty/staff/students are available online at through the Bothell Campus Parking portal. For more information, consult the Parking website.

## U-PASS

The U-PASS is your ticket to ride Metro, Community Transit, and Sound Transit service anytime, anywhere. Most UW Bothell students will automatically receive the U-PASS benefit at a cost of \$45 per quarter.

## SPECIAL COURSE & LABORATORY FEES

Some courses have extraordinary expenses associated with them, and, in such cases, the University may charge additional fees in amounts that approximate the added instructional or laboratory costs.

## LATE REGISTRATION

A late registration service charge of \$25 is assessed to first time registration students of Period III registration and through the 10th day. First time registration students registering after the 10th day pay a \$75 late registration fee.

## CHANGE OF REGISTRATION FEE

A charge of \$20 is made for any number of add and/or drop transactions processed during a given day beginning the second week of the quarter.



## TRANSCRIPT FEE

A charge of \$11, payable online through our transcript vendor Parchment. For additional information, please visit the website.

## CANCELLATION OF TUITION

Registered students must pay full tuition and fees. Tuition may be canceled or reduced if a student makes an official withdrawal or drops a course during the period specified by state statute. Refunds are given when a cancellation or reduction results in overpayment.

## FEE FORFEITURE

A student who does not completely withdraw, but who is dropping one or more courses, may be eligible for lower tuition, depending on the total number of credits remaining, after the course drop, and on the time period when the drop was made. Tuition for students making a course drop on or before the seventh class day is determined by the total credits remaining. Tuition for students making a course drop after the seventh class day, through the 30th calendar day of the quarter, is computed on the total credits remaining, plus one-half the difference between the old tuition and the new tuition. There is no cancellation or reduction in tuition for courses dropped after the 30th calendar day of the quarter.

## FEE REFUND

When a fee payment is made by check, a waiting period is required before a refund can be authorized. An application for refund may be refused, unless it is made during the quarter in which the fees apply. A student who withdraws for disciplinary reasons forfeits all rights to refund or cancellation of any portion of his or her fees.

## RESIDENCE CLASSIFICATION REQUIREMENT

Residence classification information is available on the Office of the Registrar's Residency for Tuition webpage. Veterans & children of totally disabled or deceased Veterans Information on educational benefits and special exemption programs for veterans and their dependents is available in the Office of Veteran & Military Educational Benefits. Veterans and members of the armed forces who apply for admission to any campus of the University are subject to the same minimum requirements, as are regular students, and are expected to enroll in accordance with University requirements. The University complies with the standards of progress as required by the Department of Veterans Affairs and the State Approving Agency.

## FINANCIAL OBLIGATIONS

The comptroller is authorized to place a hold (administrative) on the records of any student who fails to pay amounts due to the University. Until this hold is cleared, the University (1) does not release the student's record or any information based on the record, (2) does not prepare transcripts or certified statements, and (3) denies registration as well as



graduation from the University. In cases of serious financial delinquency, the comptroller, with the consent of the Registrar, may order that a student's registration be canceled and that privileges of attendance be withdrawn. Tuition and fees not paid by the end of the academic quarter are subject to an interest charge of 1 percent per month or a fraction thereof (12 percent APR), beginning the month following the end of the quarter. An administrative hold or cancellation also may occur when a student has not complied with other University rules, procedures, or obligations. The hold may be placed on the student's record by the authorized University office responsible for enforcement of the rule, procedure, or obligation involved. The student is not permitted to register for any subsequent quarter, or to obtain a transcript of his or her record, or a certified statement, except on the written release of the office that placed the hold.

## TUITION EXEMPTIONS

The University of Washington Tuition Exemption Program, established under the authority of RCW 28B.15.558, enables University of Washington employees and State of Washington employees who have been admitted to the University of Washington, to have tuition waived for up to six credits each quarter provided that they register on a "space-available" basis. The Tuition Exemption Program is available at the University of Washington Seattle, Bothell, and Tacoma campuses. Those who enroll at the UW on a "space-available" basis for more than six credits will receive the tuition waiver for the first six credits and will pay a per credit charge for the credits taken over six.

## FINANCIAL AID

The UW administers many federal, state, and institutional financial aid programs to help students pay for their education. There are four basic types of aid: grants, scholarships, loans, and work study. Grants and scholarships do not have to be repaid. Loans must be repaid after graduation or withdrawal from school. The work study program gives students a chance to work part-time, either on or off campus. A Financial Aid Counselor is available on site at the UW Bothell campus to assist with a students' financial aid needs.

## WHAT IS FINANCIAL NEED?

For most aid programs, financial need is defined as the difference between what it costs to attend school and what the student can afford to pay.  $\text{Cost (Student's Budget)} - \text{Student resources} = \text{Financial need}$

The amount a student should be able to pay is determined by a standard, federally mandated need-analysis methodology. The methodology establishes whether a student is financially dependent on his or her parents and, if so, what the family should be able to contribute. It also takes into account the family size, number in college, total income from the prior calendar year, a percentage of net assets, and all other resources. There is no income cutoff or other simple method of determining whether a student will qualify for need-based financial aid. Any student who thinks he or she needs help should apply. Our

office will review and may recalculate your expected family contribution. If a student/parent has a change in their financial situation while in school, the student should notify the Financial Aid office to request a re-evaluation of their eligibility.

## APPLICATIONS & DEADLINES

To receive financial aid you must meet all eligibility criteria as defined by federal, state and institutional rules. The Free Application for Federal Student Aid (FAFSA) or the Washington Application for State Financial Aid (WASFA) are the basic applications for financial aid. The applications are available online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov) or [readysatgrad.wa.gov/wasfa](http://readysatgrad.wa.gov/wasfa) beginning October 1. The annual deadline for priority consideration is January 15 and applies to all quarters of the upcoming academic year. This date refers to the receipt date of the FAFSA or WASFA whether mailed or electronically transmitted. It does not refer to the date the student mails or transmits the FAFSA or WASFA. The Financial Aid Office recommends that students complete the FAFSA or WASFA by January 1st to ensure delivery to the federal processor by the priority deadline. You must list the University of Washington (federal code #003798, same for all three campuses) as one of the colleges to receive the results of your FAFSA/WASFA. If your FAFSA/WASFA is received after January 15<sup>th</sup> then you will be considered a late applicant and are only considered for limited types of aid. Students must reapply every academic year.

Students who apply for financial aid should stay in touch with the financial aid counselor, and should notify the Financial Aid Office of any changes which may impact their award. The Financial Aid Office at University of Washington Bothell can be reached by phone: 425.352.5240 or e-mail [uwbfaid@uw.edu](mailto:uwbfaid@uw.edu).

## ELIGIBILITY FOR FINANCIAL AID

To qualify for aid an applicant must:

- Be a U.S. citizen, permanent resident or other eligible non-citizen (If you are not a U.S. citizen or an eligible non-citizen, you may qualify for state aid if you are a Washington resident)
- Be admitted to the University in a degree program (correspondence and non-matriculated students are not eligible for student aid)
- Not be delinquent or in default on a previous student loan or owe a repayment on a federal grant
- Provide financial information
- Maintain satisfactory progress in a course of study

## SCHOLARSHIPS

Students enrolled, or planning to enroll, at the UW Bothell may be eligible to apply for scholarships. There are many sources of information for scholarships and other funding opportunities. Many of these resources are designed to help students identify which scholarships best match their qualifications. Each student must research the scholarships available and find those that best match their skills, experience, interests, and goals. Visit

our scholarship website, to find out more information about researching and applying for UW Bothell and external scholarship opportunities. We encourage all currently enrolled students to University of Washington Bothell students are expected to maintain the highest standards of academic integrity and behavioral conduct. These standards, which are detailed in the Student Conduct Code for the University of Washington (WAC 478-121) safeguard university functions, and protect the rights and freedoms of all members of the academic community.

## ACADEMIC INTEGRITY

Most UW Bothell students are honest and conduct themselves with integrity; they are concerned when they observe others cheating. Cheating harms the University community in many ways. The unfairness of undetected and unpunished cheating frustrates honest students. Cheaters may skew a grading curve on an assignment or in a class, lowering grades of students who do their own work. Students who cheat deny themselves a real education. They cheat themselves of general knowledge. More importantly, they pass up the experience of learning how to learn, the very thing that makes a degree so valuable to employers. As a result, the reputation of the University and the value of a UW Bothell degree diminish if employers find graduates lacking the abilities their degrees should guarantee. Finally, most professions have a code of ethics, standards to which you will be expected to adhere to when working. At the University, you practice the integrity you must demonstrate later. For all these reasons, academic dishonesty is a serious offense at the UW Bothell; the University community is committed to reporting suspected occurrences of academic misconduct.

## ACADEMIC MISCONDUCT

Academic misconduct includes but is not limited to the following in connection with any exam, research, course assignment, or other academic exercise that contributes to the satisfaction of requirements for courses or graduation. Academic misconduct includes but is not limited to:

### Cheating

- Giving or receiving unauthorized assistance, or using unauthorized materials or information.
- Copying from another student.
- Using unauthorized resources, study aides or other people's work.
- Altering assignments or exams and submitting them as original work.
- Offering false excuses to gain an advantage through additional time or some other advantage on class assignments.
- Submitting someone else's work as your own.
- Getting someone to take an exam for you or taking an exam for someone else.
- Receiving unauthorized help on an exam or prohibited help on an assignment.
- The acquisition, use, or dissemination of a test or other academic material without permission.

- Engaging in behavior specifically prohibited by an instructor as outlined in the course syllabus or stated in class discussions.

## UNAUTHORIZED COLLABORATION

Educators recognize the value of collaborative learning; students are often encouraged to form study groups and assigned group projects. Group study often results in accelerated learning, but only when each student takes responsibility for individually mastering all the material.

When a professor says, “Go ahead and work together,” do not assume that anything goes. Professors often do not state the limits of collaboration explicitly. It is your responsibility to confirm the expectations for working together on each assignment or academic task.

## FALSIFICATION

- Creating false information or data and presenting it as fact.
- Making up false quotes, statements, data, or sources.
- Improperly manipulating another’s data or ideas to support your own theories.
- Citing sources that were not used.
- Misrepresenting your academic accomplishments to instructors or employers.
- Making up false quotes, statements, data, or sources.
- Counterfeiting or falsifying records, including but not limited to a record of internship, or attendance at a required event.

## FACILITATION

- Helping or attempting to help another student engage in academic misconduct.
- Giving unauthorized help on any exam or assignment when not authorized.
- Giving test or assignment answers to students after such answers or information have been made available to you, but before they have been provided to other students.
- Completing an assignment or exam on behalf of another student.

## PLAGIARISM

Plagiarism is the most common form of cheating. It involves using another person’s original words, ideas, or research, including Internet material, without proper credit.

Plagiarism can also include, but is not limited to:

- Failing to cite all used sources.
- Using another author’s sentence or phrase structure without proper citation.
- Paraphrasing another’s work without crediting the author or creator.
- Using another’s original work or ideas (writing, art, music, mathematics, computer code, or scientific work) in whole or in part without crediting that person or using proper citation (e.g. footnotes, endnotes, etc.).
- Stating facts that are not common knowledge without citing the source.

## MULTIPLE SUBMISSIONS

A professor may not permit you to submit a duplicate submission of a paper or assignment that you already submitted for credit in another class. If you want to make a multiple submission, you must obtain permission of both professors involved prior to submission of the work.

## SABOTAGE

Sabotage or otherwise taking deliberate action to destroy or damage another's work.

## AVOIDING MISCONDUCT

Common patterns in student behavior that increase stress and the temptation to cheat include: falling behind in coursework or leaving large projects until the last minute; working too many hours leaving little time to keep up with courses; taking too many difficult courses at one time; and emotional or health problems that distract from studies and interfere with concentration. University resources are available to help students proactively learn ways to avoid misconduct (e.g. The Writing and Communication Center or the Quantitative Skills Center).

## BEHAVIORAL CONDUCT

Admission to the University of Washington Bothell carries the responsibility to respect the rights, privileges, and property of other members of the University community and refrain from any conduct that interferes with University functions or endanger the health, welfare, or safety of other persons.

## WHAT IS BEHAVIORAL MISCONDUCT?

Behavioral misconduct includes but is not limited to:

- Disruption or obstruction of University teaching or administrative functions.
- Damaging or misusing university or personal property on university premises.
- Physical, verbal, or emotional abuse.
- Threats intended to create bodily harm or endanger the health or safety of others.
- Possession of firearms, explosives, or weapons.
- Sexual offenses such as rape, sexual assault, or sexual harassment.
- Stalking.
- Hazing or conspiracy to engage in hazing.
- Unlawful possession, use, or distribution of alcohol or controlled substances, or paraphernalia.
- Engaging in any behavior for the purposes of gaining an unfair advantage specifically prohibited by an instructor.
- Domestic violence or relationship violence.

## THE UW BOTHELL CONDUCT PROCESS

The UW Bothell Conduct Process fosters student learning and development by promoting high standards of integrity and accountability. All members of the University community share responsibility for reporting all suspected incidents of student misconduct. Incidents may be reported online on the Student Conduct page.

Instructors who suspect a student enrolled in their class of academic misconduct may arrange a meeting with the student to discuss their suspicions. This pre-meeting is not required. During this meeting, the instructor may:

- Share evidence with the student, and explain how their conduct appears to violate the Student Conduct Code
- Offer the student an opportunity to dispute the allegation, and
- Provide the student with multiple options, which may include accepting a zero grade for the assignment or the course.

There are some concerns that can be resolved by the instructor in a conversation with the student but in many cases, the concern is submitted as an incident report to the Division of Student Affairs. After receiving the report a Student Conduct staff member will:

- Inform the student in writing that an incident report has been filed
- Invite the student to attend an investigative interview with them

## INVESTIGATIVE INTERVIEW

Students asked to participate in the conduct process will meet with a Student Conduct staff member to offer testimony. Students found responsible for violating the Student Conduct Code could be required to provide restitution, and/or may receive a disciplinary reprimand, disciplinary probation, suspension, or dismissal. They may also appeal any sanction according to procedures established in the Code. Records of all disciplinary actions and appeals are retained in the Division of Student Affairs for a period of seven years.

## DISCIPLINARY SANCTIONS

The following disciplinary sanctions prescribed by the Student Conduct Code are typically supplemented by learning opportunities unique to each student and their developmental state:

- Disciplinary reprimand: written notification that the student has not met the University's standards of conduct, and that a repeated offense will result in more severe disciplinary action. First offenses do not automatically receive a warning; most first offenses receive a stricter response, with warnings reserved for cases with unusual mitigating circumstances.
- Restitution: requirement that the student compensate the University or other persons for damages, injuries, or losses. Failure to comply results in canceled registration and a hold on future registration.

- **Disciplinary probation:** an action that places conditions on the student's continued attendance at the University, including the statement that further violation of University policies will likely result in suspension or dismissal. The Conduct Officer or Hearing Board determines the term and conditions of academic probation. First offenses often result in probation.
- **Suspension:** a written statement from the Full Hearing's Hearing Officer notifying the student that their attendance has been suspended for a specified period of time (e.g., one quarter). The statement includes the term of the suspension and conditions for re-admittance, if any. Any additional offenses of the student conduct code will likely result in dismissal.
- **Dismissal:** a written statement from the president's delegate notifying a student that their attendance at the University has been permanently terminated for violating University policy.

Although the prospect of dismissal may seem the most serious consequence of dishonesty, there are others. If you apply to a medical, law, or other professional school, you may be required to provide a statement from the Dean of Student Affairs attesting to your good conduct.

## THE STUDENT CONDUCT CODE

Pursuant to chapter 34.05 RCW and the authority granted by RCW 28B.20.130, the board of regents of the University of Washington has established rules regarding student conduct and student discipline (code) that are set forth in chapter 478-121 WAC. The university has also developed agency-level policies and procedures regarding the code pursuant to chapter 34.05 RCW. See Student Governance and Policies, chapters 209 and 210. A complete copy of these regulations, WAC 478-121, Standards of Conduct is available online and from the UW Bothell Division of Student Affairs. Selected sections follow.

WAC 478-121-100 Prohibited Conduct Prohibited conduct under this code includes, but is not limited to, the prohibited conduct described in WAC 478-121-100 through 478-121-173 and relevant university policies. For additional interpretation of prohibited conduct, see Student Governance and Policies, chapter 210, student conduct policy for discriminatory and sexual harassment, intimate partner violence, sexual misconduct, stalking, and retaliation and chapter 209, student conduct policy for academic misconduct and behavioral misconduct. 478-121-040 Jurisdiction of the University

- 1) The scope of the university's jurisdiction includes reports that prohibited conduct occurred:
  - a) On any university premises or in connection with any university-sponsored program or activity, regardless of the location of the program or activity; or
  - a) Off campus (i.e., conduct that does not occur on university premises or in the context of a university-sponsored program or activity) where: The university reasonably determines that the conduct adversely affects a university interest or,



has continuing adverse effects or may create a hostile environment on university premises or in the context of a university-sponsored program or activity.

- 2) Nothing in this conduct code shall be construed to limit academic action that may be taken by schools, colleges, or programs against a respondent based on an established violation of this conduct code that demonstrates a failure to meet the academic and/or professional standards of the school, college, or program.
- 3) If a respondent withdraws from the university (or fails to reenroll) while a conduct proceeding is pending, the university may move forward with the conduct proceeding and, if so, the respondent will be provided with a continued opportunity to participate.

For updates on the student conduct code, please visit the Student Conduct page.

## SEXUAL HARASSMENT COMPLAINT PROCEDURE

The University of Washington does not discriminate on the basis of sex and prohibits sex discrimination and sex-based harassment in its education programs and activities, including in admission and employment. Refer to the UW policies page on the Title IX website to review (1) the University's policies prohibiting sex- and gender-based violence, harassment, and discrimination and (2) the related procedures for addressing complaints. Inquiries about Title IX may be referred to the University's Title IX Coordinator, the U.S. Department of Education's Office for Civil Rights, or both. To report information or make a complaint about conduct that may constitute sex discrimination or sex-based harassment, submit an online Title IX report or email or call the Office of the Title IX Coordinator.

## COMPUTER USE AND SOFTWARE COPYRIGHT POLICY

All faculty, staff and students are responsible for using university computer resources in an ethical and legal manner. For example, it is not appropriate to share computer accounts or use them for commercial purposes, to send unwanted email, or to distribute copyrighted software, music or images. Those who do not follow the rules could lose their UW computing privileges. For detailed information, see the UW Information Technology website.

## STUDENT PRIVACY RIGHTS & FERPA

### RELEASE OF STUDENT DIRECTORY INFORMATION

The Family Educational Rights and Privacy Act of 1974 (FERPA) protects the privacy of student educational records. However, the following information is considered public or directory information and may be released to anyone unless the student requests otherwise: name, street address, email address, telephone number, date of birth, dates of attendance, degrees and awards received, major and minor field(s) of studies, class, most recent previous educational agency or institution attended by the student. If a student chooses not to authorize release of directory information, they can restrict this information using MyUW. Except under provisions of the USA Patriot Act of 2001 or a lawfully-issued



subpoena, no information will be released on students who have restricted release of directory information, including degrees awarded and dates of attendance. Complete details regarding FERPA and students' rights concerning educational records are available from the Office of the Registrar.

## STUDENT EDUCATION RECORDS

As a general rule, the University will not release a student's education records to a third party without the written consent of the student. This includes tuition account information. The complete university policy on student education records and the location of such records may be found in the Washington Administrative Code under WAC 478-140-024.

## FIRST YEAR & PRE-MAJOR PROGRAM (FYPP)

UW1-160, Bothell Campus

425-352-3427

[uwbadvis@uw.edu](mailto:uwbadvis@uw.edu)

## THE UW BOTHELL LOWER DIVISION EXPERIENCE

First-Year and Pre-major Program (FYPP) courses are 100- and 200-level courses geared mainly to students who have not yet entered a major, although some electives are open to all students. FYPP courses include many required writing courses, academic support courses, and some prerequisite and introductory level courses that span the interests of all programs on campus. The FYPP first-year curriculum is centered around the Discovery Core.

## DISCOVERY CORE

Discovery Core is a signature program of UW Bothell to help students orient to the University, develop community with other new students and explore the interdisciplinarity of studies offered at UW Bothell. All students entering UWB as a pre-major student are required to take BCORE in their first quarter. This includes first-time first-year students as well as any student entering with pre-major status regardless of credits completed. First year students in any major entering with less than 45 credits must also take a BCORE in their first quarter. Transfer students with 45+ credits may petition to opt out of Discovery Core provided that all other general education requirements have been met. Students who do not complete a Discovery Core in their first quarter may have a hold placed on their registration for the following quarter and must meet with a pre-major advisor to enroll in an BCORE course.

## DEGREE PROGRAMS

The following are the official program descriptions for the University of Washington Bothell's degree programs. Academic schools maintain their own websites with additional information.

All announcements in the General Catalog are subject to change without notice and do not constitute an agreement between the University of Washington Bothell and the student. Students should assume the responsibility of consulting the appropriate academic unit or advisor for more current or specific information.

For UW Bothell course descriptions, visit the course catalog.

## UNDERGRADUATE DEGREES

(BA) = Bachelor of Arts, (BS) = Bachelor of Science

## SCHOOL OF BUSINESS

Business Administration

213 UW Bothell Beardslee Building

425-352-5113

[uwbbhelp@uw.edu](mailto:uwbbhelp@uw.edu)

The UW Bothell School of Business is committed to enhancing the well-being of individuals, organizations, and society through leadership in business education and research. As part of a public research university, we create, disseminate, and apply business knowledge to develop principled leaders and organizations in Washington and beyond. We provide access to excellence in higher education through academic programs that promote a spirit of discovery, critical and analytical thinking, ethical reasoning, and respect for cultural and intellectual diversity. We collaboratively engage with local, national, and global academic and business communities to discover, advance, and apply knowledge for the common good.

## UNDERGRADUATE PROGRAMS

### PROGRAM OF STUDY: MAJOR: BUSINESS ADMINISTRATION

#### Program Overview

The Business Administration degree is designed to prepare students for the challenges and opportunities facing organizations in the Puget Sound region and beyond. The program provides a foundation in business theory, as well as critical thinking, ethics and communications skills needed to succeed in an economically and culturally diverse global environment. In addition to the core course requirements, students select an option or concentration to develop depth in a particular area of business practice, or they select a variety of upper division electives to design a self-directed study plan. Opportunities for project courses, internships, independent research, and leadership development activities allow students to put into practice the knowledge and skills that they are acquiring in the classroom.

This program of study leads to the following credentials:

- Bachelor of Arts in Business Administration degree

- Bachelor of Arts in Business Administration degree: Accounting
- Bachelor of Arts in Business Administration degree: Finance
- Bachelor of Arts in Business Administration degree: Leadership & Strategic Innovation
- Bachelor of Arts in Business Administration degree: Marketing
- Bachelor of Arts in Business Administration degree: Supply Chain Management
- Program of Study: Major: Economics
- Bachelor of Science degree with a major in Economics
- Program of Study: Minor: Business Administration
- Minor in Business Administration
- Program of Study: Minor: Economics
- Minor in Economics
- Program of Study: Minor: Retail Management
- Minor in Retail Management

### ADMISSION REQUIREMENTS

- A minimum of 60 quarter credits (80 preferred).
- A cumulative grade point average (GPA) of 2.5 or higher.
- Two years of a single foreign language in high school or two quarters of a single foreign language in college.
- Courses in advanced composition, statistics; calculus; introduction and fundamentals of financial accounting; managerial accounting; microeconomics; macroeconomics; introduction to law or business law; 10 credits of English Composition; 15 credits of Natural Science (NSc); Diversity 3 credits, 15 credits of Arts & Humanities (A&H); 20 credits of Social Science (SSc).

Admission to Bachelor of Arts in Business Administration (BA) may also be through Direct First-Year Admit (DFA). The DFA program supports an academically competitive, diverse student population with early access to business school advising, student-faculty engagements, scholarships and program activities. The department enrolls up to 20% of its incoming class directly from high school, prior to completion of University-level prerequisites. First-Year applicants who have been accepted to UW Bothell and have specified Business Administration as their preferred major are automatically considered. Admission is offered to students based on a holistic review of their application. Admission is for Autumn Quarter only.

### DFA ADMISSION REQUIREMENTS

- A cumulative high school grade point average (GPA) of 3.3 or higher.
- First-Year applicants selected for Direct First-Year Admit (DFA) admission will enter UWB with “Business Undeclared” status. Business Undeclared students will be eligible to request placement into an Option or Concentration within the Business major after the completion of course work specified below.

- The School of Business will maintain an admission pathway for transfer students and current UWB students who were not admitted as DFA to the Business Undeclared cohort. This pathway will be very similar to the current admission process.

## RECOMMEND COURSES

### Curriculum-Year One

- B WRIT 134 Composition or BWRIT 132/133 Comp. Stretch (C)
- B MATH 144 or STMATH 124 Calculus I (NSc, RSN)
- B WRIT 135 Research Writing (C)
- B BUS 220/BIS 200 Microeconomics (SSc, RSN)
- Discovery Core Course BCORE (Counts for A&H credit) (5 credits)

### Curriculum-Year Two

- B BUS 215 Statistics or STMATH 341 Statistical Interference (RSN)
- B BUS 210 Financial Accounting
- B BUS 221/BIS 201 Macroeconomics (SSc, RSN)
- B BUS 211 Managerial Accounting
- B BUS 230 Introduction to Business Law (SSc)

An example 4-year schedule can be found on the UW Bothell School of Business website. Also see specific Business Degree Maps (<https://www.uwb.edu/degrees#business>) for academic scheduling guidance.

## CREDENTIAL OVERVIEW

The Business Administration degree is designed to prepare students for the challenges and opportunities facing organizations in the Puget Sound region and beyond. The program provides a foundation in business theory, as well as critical thinking, ethics and communications skills needed to succeed in an economically and culturally diverse global environment. In addition to the core course requirements, students select an option or concentration to develop depth in a particular area of business practice, or they select a variety of upper division electives to design a self-directed study plan. Our concentrations are listed on the School of Business website and are constantly evolving with innovations in the field of Business. Opportunities for project courses, internships, independent research, and leadership development activities allow students to put into practice the knowledge and skills that they are acquiring in the classroom.

## COMPLETION REQUIREMENTS

Completion of 90 credits or more at the upper-division level (300-400)

Completion of at least 60 credits in business, with a minimum of 45 at UWB

Transfer courses must be upper-division and approved by the program.

45 of the final 60 credits must be completed in residence at UW Bothell

Achieve a minimum grade of 1.7 in every business course applied to the major

Required Business Core (30 Credits)

- B BUS 300 - Organizational Behavior, Ethics, and Inclusivity
- B BUS 307 - Business Writing
- B BUS 310 - Managerial Economics
- B BUS 320 - Marketing Management
- B BUS 340 - Operations and Project Management
- B BUS 350 - Business Finance

Capstone (10 Credits)

- B BUS 470 - Business Policy and Strategic Management
- B BUS 480 - Global Environment of Business

General Electives (30 Credits)

Any 300-400 level classes from Business, Computer Software Systems, Interdisciplinary Arts & Sciences, Education and Science & Technology Programs at UWB or approved comparable upper-division transfer courses, excluding any 300-400 level courses used for the Reasoning Requirement. A second business concentration or a minor may be completed.

Concentrations (20-25 Credits):

See department website for a list of active concentrations and their approved courses

Bachelor of Arts in Business Administration degree (ELC)

## BACHELOR OF ARTS IN BUSINESS ADMINISTRATION DEGREE (ELC)-

**(This program has temporarily paused admission)**

### CREDENTIAL OVERVIEW

The Business program at the Eastside Leadership Center (ELC) in Bellevue provides the same foundation in business theory, critical thinking, ethics and communications skills as that offered at the Bothell campus. It differs primarily in the method of delivery, using a peer cohort model where students take courses as a group on a fixed schedule. Students also have the ability to participate in a 1:1 mentor program, which pairs them with local business professionals. Students who choose to earn their Business degree at the ELC can select from available concentrations. Opportunities for project courses, internships, independent research, and leadership development activities allow students to put into practice the knowledge and skills that they are acquiring in the classroom.

### COMPLETION REQUIREMENTS

Core courses- 45 credits

- ELCBUS 300 - Organizational Behavior, Ethics, and Inclusivity
- ELCBUS 301 - Business Statistics
- ELCBUS 310 - Managerial Economics
- ELCBUS 320 - Marketing Management
- ELCBUS 330 (5 credits) - Information Management and Analysis
- ELCBUS 340 - Operations and Project Management
- ELCBUS 350 - Business Finance

- ELCBUS 380 - Introduction to Organizational Behavior
- ELCBUS 382 - Business, Government, and Society

Concentration: 20 credits, see <https://www.uwb.edu/babusiness/elcbabusiness> for list of approved courses and concentrations

Business Electives: 20 credits

Capstone: 5 credits

- ELCBUS 470 - Business Policy and Strategic Management

Other UWB and/or transfer credits: 90 credits

## BACHELOR OF ARTS IN BUSINESS ADMINISTRATION DEGREE: ACCOUNTING CREDENTIAL OVERVIEW

The Accounting option is designed to prepare students for a career in private, government, nonprofit or public accounting. The curriculum includes preparing and presenting financial statements consistent with generally accepted accounting principles, using accounting and operational data for planning and control purposes, auditing of financial records and development of systems to verify financial activity, understanding accounting information systems, and determining taxes and tax planning. Electives allow for study of advanced accounting areas and finance. Students wanting to become a Certified Public Accountant (CPA) are required to have a minimum of 225 quarter hours, which is an additional 45 quarter credits beyond the undergraduate degree requirement. The School of Business offers the opportunity to take additional undergraduate coursework or pursue a Master of Science in Accounting.

## COMPLETION REQUIREMENTS

Completion of 90 credits or more at the upper-division level (300-400)

Completion of at least 60 credits in business, with a minimum of 45 at UWB

Transfer courses must be upper-division and approved by the program.

45 of the final 60 credits must be completed in residence at UW Bothell

Achieve a minimum grade of 1.7 in every business course applied to the major

Required Business Core (30 Credits)

- B BUS 300 - Organizational Behavior, Ethics, and Inclusivity
- B BUS 307 - Business Writing
- B BUS 310 - Managerial Economics
- B BUS 320 - Marketing Management
- B BUS 340 - Operations and Project Management
- B BUS 350 - Business Finance

Capstone (10 Credits)

- B BUS 470 - Business Policy and Strategic Management
- B BUS 480 - Global Environment of Business

Accounting Core Courses (35 credits)

- B BUS 361 - Intermediate Accounting I
- B BUS 362 - Intermediate Accounting II
- B BUS 363 - Intermediate Accounting III

- B BUS 373 - Cost Accounting
- B BUS 411 - Auditing Theory & Practice
- B BUS 435 - Accounting Information Systems
- B BUS 450 - Federal Income Taxation

Accounting Electives (10 credits)

See department website for a list of accepted courses

General Electives (5 Credits)

Any 300-400 level classes from Business, Computer Software Systems, Interdisciplinary Arts & Sciences, Education and Science & Technology Programs at UWB or approved comparable upper-division transfer courses, excluding any 300-400 level courses used for the Reasoning Requirement.

## BACHELOR OF ARTS IN BUSINESS ADMINISTRATION DEGREE: FINANCE

### CREDENTIAL OVERVIEW

The Finance Option allows students acquire knowledge about how firms make financial decisions and how these decisions affect individual organizations and society as a whole. Students also learn how firms acquire and allocate funds, how financial markets operate and the role these markets play in economic welfare. The study of finance includes the use of models to develop analytical approaches to problems. Students are trained to take positions in financial institutions such as commercial and investment banks, in finance departments of major corporations or with consulting firms.

### COMPLETION REQUIREMENTS

Completion of 90 credits or more at the upper-division level (300-400)

Completion of at least 60 credits in business, with a minimum of 45 at UWB

Transfer courses must be upper-division and approved by the program.

45 of the final 60 credits must be completed in residence at UW Bothell

Achieve a minimum grade of 1.7 in every business course applied to the major

Required Business Core (30 Credits)

- B BUS 300 - Organizational Behavior, Ethics, and Inclusivity
- B BUS 307 - Business Writing
- B BUS 310 - Managerial Economics
- B BUS 320 - Marketing Management
- B BUS 340 - Operations and Project Management
- B BUS 350 - Business Finance

Finance Option Core (20 Credits)

- B BUS 451 - Financial Policy and Practice
- B BUS 452 - Financial Modeling
- B BUS 453 - Financial Institutions and Markets
- B BUS 454 - Investments

Finance Option Enrichment Elective (5 Credits)



Choose one course for 5 credits total. See department website for a list of accepted courses

Finance Option Elective (10 Credits)

Choose two courses for 10 credits total. See department website for a list of accepted courses

Capstone (10 Credits)

- B BUS 470 - Business Policy and Strategic Management
- B BUS 480 - Global Environment of Business

General Electives (15 Credits)

Any 300-400 level classes from Business, Computer Software Systems, Interdisciplinary Arts & Sciences, Education and Science & Technology Programs at UWB or approved comparable upper-division transfer courses, excluding any 300-400 level courses used for the Reasoning Requirement.

## BACHELOR OF ARTS IN BUSINESS ADMINISTRATION DEGREE: LEADERSHIP & STRATEGIC INNOVATION

### CREDENTIAL OVERVIEW

Students who enroll in the Leadership and Strategic Innovation (LSI) option will engage in a rigorous study of leadership, strategy, and innovation. They will graduate ready to lead teams, manage innovation, and inspire employees. LSI graduates can go on to become project leads, managers, consultants, business development leads, HR analysts, market analysts, sales managers, entrepreneurs, and much, much more.

### COMPLETION REQUIREMENTS

Completion of 90 credits or more at the upper-division level (300-400)

Completion of at least 60 credits in business, with a minimum of 45 at UWB

Transfer courses must be upper-division and approved by the program.

45 of the final 60 credits must be completed in residence at UW Bothell

Achieve a minimum grade of 1.7 in every business course applied to the major

Required Business Core (30 Credits)

- B BUS 300 - Organizational Behavior, Ethics, and Inclusivity
- B BUS 307 - Business Writing
- B BUS 310 - Managerial Economics
- B BUS 320 - Marketing Management
- B BUS 340 - Operations and Project Management
- B BUS 350 - Business Finance

Capstone (10 Credits)

- B BUS 470 - Business Policy and Strategic Management
- B BUS 480 - Global Environment of Business

Leadership and Strategic Innovation Core Courses (20 credits)

- B BUS 402: Management of Work Teams
- B BUS 461 or ELCBUS 382: Business, Government, and Society
- B BUS 473 or ELCBUS 402: Leadership and Decision Making



- B BUS 475: Management of Innovation
- Plus, one from the following (5 credits):
- B BUS 476: Future Market and Technology Management
  - B BUS 477: Human Resources Management

Leadership and Strategic Innovation Electives (10 credits)

See department website for a list of accepted courses

General Electives (15 Credits)

Any 300-400 level classes from Business, Computer Software Systems, Interdisciplinary Arts & Sciences, Education and Science & Technology Programs at UWB or approved comparable upper-division transfer courses, excluding any 300-400 level courses used for the Reasoning Requirement.

## BACHELOR OF ARTS IN BUSINESS ADMINISTRATION DEGREE: MARKETING CREDENTIAL OVERVIEW

The Marketing Option prepares students to thrive in a customer-centric organization with a blend of analytical thinking, experiential learning, and professional experiences. This versatile degree prepares students for understanding how organizations manage their relationship with customers and markets and provides them with a variety of valuable and adaptable skills. Marketing graduates can go on to work in brand management, sales, marketing research and consulting, digital marketing, and can apply their skills to entrepreneurial ventures, and much more. Our course offerings are designed to cover the basic principles of marketing, applicable in large and small organizations, for-profit or non-profit, local or international.

## COMPLETION REQUIREMENTS

Completion of 90 credits or more at the upper-division level (300-400)

Completion of at least 60 credits in business, with a minimum of 45 at UWB

Transfer courses must be upper-division and approved by the program.

45 of the final 60 credits must be completed in residence at UW Bothell

Achieve a minimum grade of 1.7 in every business course applied to the major

Required Business Core (30 Credits)

- B BUS 300 - Organizational Behavior, Ethics, and Inclusivity
- B BUS 307 - Business Writing
- B BUS 310 - Managerial Economics -
- B BUS 320 - Marketing Management
- B BUS 340 - Operations and Project Management
- B BUS 350 - Business Finance

Capstone (10 Credits)

- B BUS 470 - Business Policy and Strategic Management
- B BUS 480 - Global Environment of Business

Marketing Core Courses (15 credits)

- B BUS 421: Consumer Marketing
- B BUS 423: Market Intelligence

- B BUS 438: Marketing Management

Marketing Electives (15 credits)

See department website for a list of accepted courses

General Electives (20 Credits)

Any 300-400 level classes from Business, Computer Software Systems, Interdisciplinary Arts & Sciences, Education and Science & Technology Programs at UWB or approved comparable upper-division transfer courses, excluding any 300-400 level courses used for the Reasoning Requirement.

## BACHELOR OF ARTS IN BUSINESS ADMINISTRATION DEGREE: SUPPLY CHAIN MANAGEMENT

### CREDENTIAL OVERVIEW

The Supply Chain Management Option provides students the ability to manage suppliers across globally distributed locations, to procure the right materials at the right time to meet company objectives. This Option operates in the middle of all other major functional areas in a firm which creates numerous opportunities to expand horizons and face new challenges in the rapidly evolving global landscape. Supply Chain Management graduates can go on to work as buyers, operations managers, forecasting analysts, logistics managers, and much more.

### COMPLETION REQUIREMENTS

Completion of 90 credits or more at the upper-division level (300-400)

Completion of at least 60 credits in business, with a minimum of 45 at UWB

Transfer courses must be upper-division and approved by the program.

45 of the final 60 credits must be completed in residence at UW Bothell

Achieve a minimum grade of 1.7 in every business course applied to the major

Required Business Core (30 Credits)

- B BUS 300 - Organizational Behavior, Ethics, and Inclusivity
- B BUS 307 - Business Writing
- B BUS 310 - Managerial Economics
- B BUS 320 - Marketing Management
- B BUS 340 - Operations and Project Management
- B BUS 350 - Business Finance

Capstone (10 Credits)

- B BUS 470 - Business Policy and Strategic Management
- B BUS 480 - Global Environment of Business

Supply Chain Management Core Courses (30 credits)

- B BUS 441 or ELCBUS 400 - Project Management
- B BUS 482 or ELCBUS 482 - Introduction to Supply Chain Management
- B BUS 483 or ELCBUS 483 - Global Strategic Sourcing
- B BUS 486 or ELCBUS 486 - Supply Chain Management Resource Planning
- B BUS 487 or ELCBUS 487 - Supply Chain Process Management
- B BUS 497 or ELCBUS 497 - Guided Internship or B BUS 499 or ELCBUS 499

Undergraduate Research or B BUS 492 Supply Chain Field Study Practicum (5 credits)

Supply Chain Management Electives (10 credits)

See department website for a list of accepted courses

General Electives (10 Credits)

Any 300-400 level classes from Business, Computer Software Systems, Interdisciplinary Arts & Sciences, Education and Science & Technology Programs at UWB or approved comparable upper-division transfer courses, excluding any 300-400 level courses used for the Reasoning Requirement.

## **BACHELOR OF ARTS IN BUSINESS ADMINISTRATION DEGREE: SUPPLY CHAIN MANAGEMENT (ELC) (This program has temporarily paused Admission)**

### **COMPLETION REQUIREMENTS**

Core courses- 45 credits

- ELCBUS 300 - Organizational Behavior, Ethics, and Inclusivity
- ELCBUS 301 - Business Statistics
- ELCBUS 310 - Managerial Economics
- ELCBUS 320 - Marketing Management
- ELCBUS 330 (5 credits) - Information Management and Analysis
- ELCBUS 340 - Operations and Project Management
- ELCBUS 350 - Business Finance
- ELCBUS 380 - Introduction to Organizational Behavior
- ELCBUS 382 - Business, Government, and Society

Concentration: 20 credits, see <https://www.uwb.edu/babusiness/elcbabusiness> for list of approved courses and concentrations

Capstone: 5 credits

- ELCBUS 470 - Business Policy and Strategic Management

Other UWB and/or transfer credits: 90 credits

Additional Completion Requirements

Supply Chain Management Option (40 credits)

- B BUS/ELCBUS 482 - Introduction to Supply Chain Management
- B BUS/ELCBUS 483 - Global Sourcing
- B BUS 441/ELCBUS 400 - Project Management
- B BUS/ELCBUS 487 - Supply Chain Process Management (Capstone)
- B BUS/ELCBUS 497 - Guided Internship or B BUS/ELCBUS 499 - Undergraduate Research

Plus, one from the following (5 credits):

- B BUS/ELCBUS 485 - Distribution and Logistics Management
- B BUS/ELCBUS 486 - Supply Chain Management Resource Planning

Plus, two from the following (10 credits):

- B BUS 373 - Cost Accounting
- B BUS 402 - Managing Teams
- B BUS 447 - Retail Operations and Supply Chain Management
- B BUS 460 - Sustainable Business

- B BUS 462/ELCBUS 403 - Negotiations and Conflict Management
- B BUS 463 - Advanced Financial Accounting
- B BUS 464 - New Product Marketing
- B BUS 473/ELCBUS 402 - Leadership and Decision Making
- B BUS 475 - Managing Innovation

### ADDITIONAL INFORMATION

The School of Business emphasizes effective oral and written communication, teamwork in a diverse workforce, entrepreneurial management in high-tech companies, and skills for working in the global business environment. For students already employed in business, the program strengthens and refines critical skills and increases knowledge of the principles and techniques of sound business practice. For those seeking employment, the program offers a foundation for new careers in the rapidly changing regional and international economy. As part of a public research university, the mission of the School of Business is to create, disseminate, and apply business knowledge to develop principled leaders and organizations in Washington and beyond.

The Bachelor of Arts in Business Administration degree is fully accredited by The Association to Advance Collegiate Schools of Business (AACSB).

## PROGRAM OF STUDY: MAJOR: ECONOMICS

### PROGRAM OVERVIEW

The B.S. in Economics equips students with essential quantitative, complex problem-solving, and critical reasoning skills that are highly valued in today's data-driven and artificial intelligence (AI)-enhanced industry, socioeconomic research, and policy making. The core courses establish a solid foundation in economic theory and data analytics, while a diverse selection of electives allows for specialization aligned with students' career goals.

This program of study leads to the following credential:

- Bachelor of Science degree with a major in Economics

### ADMISSION REQUIREMENTS

Our program is a minimum-requirement major, with the required classes being the necessary prerequisites for some of the core classes.

Transfer students. To be admitted into the program, transfer students must simply have a minimum cumulative GPA of at least 2.0 in across all college coursework, as well as cumulative GPA of at least 2.5 in the following requirements—with a minimum grade of 2.0 in each:

- Statistics (5 credits): BIS 215, or B BUS 215, or B MATH 215, or STMATH 341 or STAT 220
- Calculus (5 credits): STMATH 124 or STMATH 125, or STMATH 126, or B MATH 144 or STMATH 114

- Microeconomics (5 credits): B BUS 220/BIS 200
- Macroeconomics (5 credits): B BUS 221/BIS 201
- Advanced Composition (5 credits): B WRIT 135 (C)

**Internal matriculation.** For internal matriculation, the process for our minimum-requirements B.S. in Economics works as follows. Students who apply to UWB upon graduating high school and who list Economics as their first-choice major are admitted into the program if they have a minimum 3.3 GPA. They are coded as Pre-Business, but are under the School of Business and declare the Economics Major as soon as they meet the minimal requirements listed above. For students admitted into UWB from high school but who either did not meet the 3.3 GPA bar for direct admission or who did not list the Economics Major as first choice at the time of applying to UWB, as well as for students who do not declare the major until their second or third year, admission into the program works similarly as that for transfer students. Provided they meet the minimum requirements, they simply need to declare the major.

## BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN ECONOMICS

### CREDENTIAL OVERVIEW

The B.S. in Economics equips students with essential quantitative, complex problem-solving, and critical reasoning skills that are highly valued in today's data-driven and artificial intelligence (AI)-enhanced industry, socioeconomic research, and policy making. The core courses establish a solid foundation in economic theory and data analytics, while a diverse selection of electives allows for specialization aligned with students' career goals.

### COMPLETION REQUIREMENTS

A business student needs to earn 55 credits to be awarded the Economics Major: 30 credits for core classes: B BUS 220/BIS 200 (Intro to Microeconomics), B BUS 221/BIS 201 (Intro to Macroeconomics), B BUS 210 (Financial Accounting), B BECN 302 (Intermediate Microeconomics), B BECN 303 (Intermediate Macroeconomics), B BECN 382 (Introduction to Econometrics); 25 credits from a list of approved electives.

The 25 elective credits are as follows: 20 credits must be earned from a primary list of approved electives on the department website maintained by the Economics Area.

The remaining 5 elective credits can be earned either by taking an additional class from the primary list or by taking a class from a secondary list of approved electives on the department website maintained by the Economics Area. The general education requirements for the B.S. in Economics are based on the Business Administration Major and the university graduation requirements:

- English Composition (C) – 5 credits (A grade of 2.0 is required)
- Additional Writing (W) – 10 credits
- Reasoning (RSN) – 5 credits
- Natural Sciences (NSc) – 15 credits
- Arts and Humanities (A&H) – 15 credits

- Social Sciences (SSc) – 15 credits
- Diversity (DIV) – 5 credits (3 credits for students admitted to UWB prior to Fall 2023)
  - Note: The DIV credits can overlap with General Education requirements above.

## PROGRAM OF STUDY: MINOR: BUSINESS ADMINISTRATION

### PROGRAM OVERVIEW

The Business minor is designed for undergraduate students in any non-business major to increase their understanding of business theory, practices and applications. The Business minor has much of the same rigor and content as the core courses taken by Business majors. Many of the courses also have a team component, encouraging the development of skills in team interaction, consensus building, and organizational leadership. Students who complete the Business minor will bring a much valued perspective to their future employment.

This program of study leads to the following credential:

- Minor in Business Administration

### ADMISSION REQUIREMENTS

Students must earn a 2.7 cumulative GPA and a 2.7 prerequisite GPA with a minimum grade of 2.0 in each of the following prerequisite courses:

- Microeconomics
- Macroeconomics
- Statistics
- College Algebra (or higher)
- One quarter 200-level Accounting

Minor in Business Administration

### COMPLETION REQUIREMENTS

- BBUS 300 Organizational Behavior, Ethics, and Inclusivity
- BBUS 310 Managerial Economics
- BBUS 320 Marketing Management
- BBUS 340 Operations & Project Management
- Elective - Business Elective at the 300-400 level

Three of the five courses in the Business minor must be completed at UW Bothell.

Acceptance of transfer courses must be approved via petition to the School of Business.

## PROGRAM OF STUDY: MINOR: ECONOMICS

### PROGRAM OVERVIEW

Economics explores how individuals, corporations and societies manage their scarce resources. The study of economics emphasizes conceptual and analytical thinking, providing students an excellent way to acquire strong problem-solving skills and a logical, ordered way of looking at problems. Because economic analysis can be applied to a variety of problems and issues, an economics minor provides students with versatility for dealing with unexpected challenges.

This program of study leads to the following credential:

- Minor in Economics

### ADMISSION REQUIREMENTS

A minimum grade of 2.5 in each of the following prerequisite courses: B MATH 144 or STMATH 124 Calculus I and B BUS 215 Statistics or STMATH 341 Statistical Interference

- A minimum cumulative GPA of 2.70 in college coursework
- A minimum cumulative GPA of 2.70 in economics minor prerequisites

### MINOR IN ECONOMICS

#### COMPLETION REQUIREMENTS

25 credits

- B BUS 220/BIS 200 Principles of Microeconomics
- B BUS 221/BIS 201 Principles of Macroeconomics
- B BECN 302 Intermediate Microeconomics

Electives - two (2) Economics electives at the 300-400 level

Students may not enroll in upper-division Economics courses until the Statistics and Calculus prerequisite requirements have been met.

Three of the five courses in the Economics minor must be completed at UW Bothell.

Acceptance of transfer courses must be approved via petition to the School of Business.

Minimum 2.00 cumulative GPA for courses applied to the minor

### PROGRAM OF STUDY: MINOR: RETAIL MANAGEMENT

#### PROGRAM OVERVIEW

The Retail Management minor provides students with the skills, competencies and experiences needed to pursue careers in the Retail industry. The curriculum facilitates the development of in-depth knowledge of retail analytics, merchandise acquisition, retail marketing, supply chain management, retail operations, and retail technology and leadership. Students also have the opportunity to work on actual problems with local retailers and present their ideas to top leadership. Graduates tend to work in the areas of buying, planning, marketing, product development, operations, and supply chain management.

This program of study leads to the following credential:

- Minor in Retail Management

Students must earn a 2.7 cumulative GPA and a 2.7 minimum grade in: B BUS 201 -

Introduction to Business

Minor in Retail Management

#### COMPLETION REQUIREMENTS

- B BUS 300 - Organizational Behavior, Ethics, and Inclusivity
- B BUS 320 - Marketing Management
- B BUS 445 - Merchandising Acquisition



- B BUS 446 - Strategic Retail Promotion
- B BUS 447 - Retail Operations & Supply Chain
- B BUS 448 - Retail Technology and Leadership

Students may take MGMT 300: Leadership and Organizational Behavior and/or MKTG 301: Marketing Concepts, at the UW Seattle campus to satisfy the requirements of B BUS 300 and B BUS 320, respectively. The UW Seattle campus courses are four credits each.

Students who take one of these courses at Seattle will complete the Retail Management minor with 29 credits; students who take both of these courses at UW Seattle will complete the minor with 28 credits.

## GRADUATE PROGRAMS

### PROGRAM OF STUDY: MASTER OF BUSINESS ADMINISTRATION

#### PROGRAM OVERVIEW

The University of Washington Bothell offers three MBA programs, the Technology MBA (TMBA) Program, the Leadership MBA (LMBA) Program, and the General MBA (MBA). The programs offer classes in two locations: UW Bothell and the Eastside Leadership Center. The programs are AACSB accredited, evening degree programs. The University of Washington Bothell also offers a concurrent degree program. The PharmD-MBA concurrent degree program is a unique collaboration between UW School of Pharmacy and UW Bothell School of Business that brings together the top of executive education value with the top pharmacist training program in the region. The MBA programs are built on a cohort model that emphasizes small class sizes and interactive learning to provide an exceptional and rigorous learning environment. Courses taught by distinguished faculty are built on a core of traditional business courses such as strategy, finance, economics, accounting, statistics, marketing, operations, management and organizational behavior. A hallmark of the UWB MBA programs is interaction with successful managers who share their winning strategies and practicum where students work with mentors and leadership coaches in integrating the theory and practice of business. Students are challenged and supported as they strive to develop their leadership and management expertise. With the right degree of commitment, program participants can look forward to graduating with the skills, knowledge, and confidence needed to effectively lead in the global marketplace.

This program of study leads to the following credentials:

- Master Of Business Administration
- Master Of Business Administration (B MBA/PHARMD)
- Master Of Business Administration (Leadership)
- Master Of Business Administration (Technology)

The General MBA allows students to curate their list of electives to maximize their own educational goals.

#### ADMISSION REQUIREMENTS

Please see this program's Graduate Admissions Page for current requirements.



## COMPLETION REQUIREMENTS

64 credits

- Core Requirements (44 credits): BBUS 501, BBUS 502, BBUS 512, BBUS 503, BBUS 504, BBUS 505, BBUS 506, BBUS 531, BBUS 507, BBUS 509, BBUS 510
- Electives and Option-Specific Courses (20 credits): These courses vary by option, see additional requirements below.

Additional Completion Requirements

Option-specific requirements:

- Electives (20 credits): Course list maintained internally by the program.

## MASTER OF BUSINESS ADMINISTRATION (B MBA/PHARMD)

### CREDENTIAL OVERVIEW

The program is available to first-year students who are already in the PharmD program and weave MBA courses in with their pharmacy degree coursework. PharmD-MBA students can select courses within the Technology and Leadership MBA curriculum to fulfill the concurrent degree requirements.

## ADMISSION REQUIREMENTS

This option is only available to students currently enrolled in the Doctor of Pharmacy program. Please see this program's Graduate Admissions Page for current requirements.

## COMPLETION REQUIREMENTS

64 credits

- Core Requirements (44 credits): BBUS 501, BBUS 502, BBUS 512, BBUS 503, BBUS 504, BBUS 505, BBUS 506, BBUS 531, BBUS 507, BBUS 509, BBUS 510

Electives and Option-Specific Courses (20 credits): These courses vary by option, see additional requirements below.

### ADDITIONAL COMPLETION REQUIREMENTS

Option-specific requirements (20 credits)

- Electives (20 credits): Up to 12 credits of PharmD courses may apply. Course list maintained internally by the program.

## MASTER OF BUSINESS ADMINISTRATION (LEADERSHIP)

### CREDENTIAL OVERVIEW

The Leadership MBA enables students from a wide range of industries to develop the analysis, problem-solving, communication and team work skills necessary to maximize their leadership potential.

## ADMISSION REQUIREMENTS

Graduate degree program admission requirements are subject to change and may vary. Please see this program's Graduate Admissions Page for current requirements.

## COMPLETION REQUIREMENTS

64 credits

- Core Requirements (44 credits): BBUS 501, BBUS 502, BBUS 512, BBUS 503, BBUS 504, BBUS 505, BBUS 506, BBUS 531, BBUS 507, BBUS 509, BBUS 510
- Electives and Option-Specific Courses (20 credits): These courses vary by option, see additional requirements below.

## ADDITIONAL COMPLETION REQUIREMENTS

Option-Specific Requirements (20 credits)

- Leadership Courses (8 credits): Course list maintained internally by the program.
- Electives (12 credits): Course list maintained internally by the program.

## MASTER OF BUSINESS ADMINISTRATION (TECHNOLOGY)

### CREDENTIAL OVERVIEW

The Technology MBA Program enables students in technology-centered enterprises to develop their intrapreneurship and entrepreneurship skills and prepares them to create innovative high-growth businesses within established organizations or startup businesses.

## ADMISSION REQUIREMENTS

Graduate degree program admission requirements are subject to change and may vary. Please see this program's Graduate Admissions Page for current requirements.

## COMPLETION REQUIREMENTS

64 credits

- Core Requirements (44 credits): BBUS 501, BBUS 502, BBUS 512, BBUS 503, BBUS 504, BBUS 505, BBUS 506, BBUS 531, BBUS 507, BBUS 509, BBUS 510
- Electives and Option-Specific Courses (20 credits): These courses vary by option, see additional requirements below.

## ADDITIONAL COMPLETION REQUIREMENTS

Option-specific requirements (20 credits)

- Technology Courses (8 credits): Course list maintained internally by the program.
- Electives (12 credits): Course list maintained internally by the program.

## PROGRAM OF STUDY: MASTER OF SCIENCE IN ACCOUNTING

### PROGRAM OVERVIEW

The University of Washington Bothell offers a Master of Science in Accounting. Evening and afternoon classes are held at the Eastside Leadership Center in Bellevue and the Bothell

campus. Students study fundamental accounting principles and develop advanced knowledge and critical thinking skills. The program helps students gain critical insights into advanced financial reporting, auditing and managerial accounting and provides credits needed to satisfy the fifth year educational requirement necessary for CPA examination eligibility. Drawing from contemporary research, UW Bothell MS Accounting students will graduate with an awareness of the current intellectual debates surrounding accounting rules. World-class faculty will provide strong analytical, research and business communication skills that will get students noticed by industry and public accounting firms.

This program of study leads to the following credential:

- Master Of Science In Accounting (fee-based)

### ADMISSION REQUIREMENTS

Please see this program's Graduate Admissions Page for more information.

### MASTER OF SCIENCE IN ACCOUNTING (FEE-BASED)

#### COMPLETION REQUIREMENTS

45 credits

- Core Requirements (25 credits): B ACCT 503, B ACCT 504, B ACCT 502, B ACCT 501, B ACCT 505, B ACCT 506, B ACCT 510
- Electives (20 credits): Graduate-level B BUS and B ACCT courses. Course list maintained internally by the program.

## SCHOOL OF EDUCATIONAL STUDIES

Education

311 Bothell Campus Building UW1

425-352-5411

[uwbses@uw.edu](mailto:uwbses@uw.edu)

We engage students from all backgrounds in the study of Education through undergraduate minors, post-baccalaureate K-8 teacher certification, graduate teacher certification for teaching in middle and high school, and graduate degree programs for professional educators. As a collaborative, scholarly and professional community, the University of Washington Bothell School of Educational Studies exists to develop and support educators who have the commitments and capabilities to promote the learning of all students in diverse contexts. We support interdisciplinary scholarship that explores the multifaceted dimensions of learning and schooling. We give particular focus to (a) the purposes of education in a social and political democracy, (b) the responsibility of universities to collaborate with community partners, and (c) the critical role of professional educators in supporting equity in learning.

Undergraduate Programs

- Program of Study: Major: Developmental and Youth Studies
  - Bachelor of Arts degree in Developmental and Youth Studies
- Program of Study: Major: Educational Studies
  - Bachelor of Arts degree with a major in Educational Studies: Elementary Education
- Program of Study: Minor: Child and Youth Development
  - Minor in Child and Youth Development
- Program of Study: Minor: Educational Advocacy and Community Engagement
  - Minor in Educational Advocacy and Community Engagement
- Program of Study: Minor: Teaching and Learning
  - Minor in Teaching and Learning
- Graduate Programs
  - Program of Study: Master Of Education
    - Master Of Education
    - Master Of Education (Educational Leadership)

## UNDERGRADUATE PROGRAMS

### PROGRAM OF STUDY: MAJOR: DEVELOPMENTAL AND YOUTH STUDIES

#### PROGRAM OVERVIEW

The Bachelor of Arts in Developmental and Youth Studies spans early childhood into adolescence and emerging adulthood in a range of social contexts including family, peer, school, and community, with a focus on diversity and equity.

This program of study leads to the following credential:

- Bachelor of Arts degree in Developmental and Youth Studies

#### ADMISSION REQUIREMENTS

Minimum of 30 quarter credits

- Credits may be in progress
- Credits may be completed at UW Bothell or transferred from other accredited institutions
- B WRIT 134 Composition or other English Composition course with grade of 2.0 (C letter grade) or higher

### BACHELOR OF ARTS DEGREE IN DEVELOPMENTAL AND YOUTH STUDIES

#### CREDENTIAL OVERVIEW

The Bachelor of Arts in Developmental and Youth Studies spans early childhood into adolescence and emerging adulthood in a range of social contexts including family, peer, school, and community, with a focus on diversity and equity.

## COMPLETION REQUIREMENTS

The credit requirements for the major are 85 credits in total.

Educational Studies Core Courses - 25 credits (Grade of 2.00 or higher required in each course)

- B EDUC 205 Education & Equity in the United States
- B EDUC 210 Teaching & Learning in a Multicultural Society
- B EDUC 295 Gathering, Analyzing, and Using Data in Education
- B EDUC 300 Research & Educational Knowledge
- B EDUC 310 Theories of Learning, Culture & Identity

Developmental and Youth Studies Learning Sequence - 35 credits (Grade of 2.00 or higher required in each course)

- B EDUC 402 Human Growth and Learning
- B EDUC 456 Adolescents in School and Society\*
- B EDUC 461 Educational Implications of Gender Inequality\*
- B EDUC 481 Adolescent Development
- B EDUC 453 Children in Schools and Society\*
- B EDUC 458 Emerging Adulthood
- B EDUC 451 Early Childhood Development

\*B EDUC 456 / B EDUC 461 / B EDUC 453 prerequisite:

- B EDUC 210

Approved Developmental and Youth Studies Electives - 15 credits

Capstone Sequence 10 credits

- B EDUC 399 Capstone Seminar\*
- B EDUC 495 Applied Experience\*\*
- B EDUC 499 Capstone Project\*\*\*

\*B EDUC 399 Prerequisites: B EDUC 205, B EDUC 210, B EDUC 300, B EDUC 310

\*\*B EDUC 495 Prerequisite: B EDUC 399 (can be concurrently enrolled)

\*\*\*B EDUC 499 Prerequisite: B EDUC 399; B EDUC 495 (can be concurrently enrolled)

B EDUC 495 Applied Experience requires 100 hours in a Community-Engaged Learning off-site placement and is a repeatable, variable credit course. Many students complete B EDUC 495 credits/hours across two quarters (3 credits for 60 hours and 2 credits for 40 hours; for a total of 5 credits) to more easily manage the hours workload. Additionally, we require that students register for a minimum of 2 credits of B EDUC 495 (requiring 40 hours in a placement). In the exceedingly rare instance that a student is only able to complete 2 credits/40 hours a quarter, we permit students to complete up to 6 credits of B EDUC 495.

## PROGRAM OF STUDY: MAJOR: EDUCATIONAL STUDIES

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Educational Studies: Elementary Education

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN EDUCATIONAL STUDIES: ELEMENTARY EDUCATION

## CREDENTIAL OVERVIEW

Elementary Education is an option within the Bachelor of Arts in Educational Studies that prepares students to become certified as teachers in K-8 schools in the Washington State. Upon completion of this highly structured, cohorted course of study, students meet all the requirements to be recommended for Washington State Residency teacher certification and earn the B.A. in Educational Studies. As teacher certification candidates, students will participate in two quarters of student teaching, arranged by the School of Educational Studies. Regular seminars and individual meetings with field instructors will support student teaching both quarters. A highlight of the program is that students will also become dual endorsed in either English to Speakers of Other Languages (ESOL) or Special Education (SPED) along with their K-8 certification.

## ADMISSION REQUIREMENTS

- Minimum 2.00 cumulative GPA
- 30 quarter credits completed at UW Bothell or transferred from an accredited institution (credits can be in progress)
- Minimum 2.0 in B WRIT 134 Composition or equivalent
- Submission of SAT, ACT, or WEST-B scores - Reading, Writing & Math test scores

## COMPLETION REQUIREMENTS

- 20 credits – Educational Studies Core Courses  
All courses completed with a minimum 2.0 grade in each course
  - B EDUC 205 Education & Equity in the United States (5 credits)
  - B EDUC 210 Teaching & Learning in a Multicultural Society (5 credits)
  - B EDUC 300 Research & Educational Knowledge (5 credits)
  - B EDUC 310 Theories of Learning, Culture & Identity (5 credits)
- 38 credits - Elementary Education Endorsement Academic Breadth Courses  
All courses completed with a minimum 2.0 grade in each course
  - B WRIT 134 Composition or B WRIT 133 Composition Stretch II (5 credits)
  - B EDUC 170 Math for Elementary Teachers (5 credits)
  - B EDUC 240 Science & Engineering for an Ethical and Just Society (5 credits)
  - B EDUC 241 Time in Socio-Ecological Systems: Sun, Moon, Clocks, and Contaminants (5 credits)
  - B EDUC 242 U.S. History and the Enduring War For Control of K-12 Curriculum: From Invasion to Insurrection (5 credits)
  - B EDUC 340 STEAM Education (3 credits)
  - Literature Course (5 credits) | School of Educational Studies approved courses
  - United States Government or Civics, Geography, or Economics Course (5 credits) | School of Educational Studies approved courses
- 18 credits – Teaching Foundations Courses  
All courses completed with a minimum 2.0 grade in each course
  - B EDUC 402 Human Growth & Learning (5 credits)

- B EDUC 403 Introduction to Special Education (5 credits)
- B EDUC 423 Knowing, Teaching, and Assessing in Health, Fitness & Issues of Abuse (3 credits)
- B EDUC 441 Second Language Acquisition, Bilingual Education, and the Structure of English (5 credits)
- 28 credits – Cohorted Teaching Methods Courses  
All courses completed with a minimum 2.0 grade in each course
  - B EDUC 408 Knowing, Teaching, and Assessing in Multicultural Education & Social Studies (5 credits)
  - B EDUC 409 Knowing, Teaching, and Assessing in Reading, Writing, & Communication I (3 credits)
  - B EDUC 410 Knowing, Teaching, and Assessing in Reading, Writing, & Communication II (4 credits)
  - B EDUC 418 Knowing, Teaching, and Assessing in Intermediate Level Mathematics II (4 credits)
  - B EDUC 419 Knowing, Teaching, and Assessing in Mathematics I (3 credits)
  - B EDUC 421 Knowing, Teaching, and Assessing in Earth, Physical, and Life Sciences (4 credits)
  - B EDUC 438 Teaching & Learning Tribal Sovereignty (5 credits)
- 16 credits - Cohorted Student Teaching Courses  
All courses completed with a minimum 2.0 grade in each course
  - B EDUC 406 Introduction to Field Placement (2 credits)
  - B EDUC 425 Professional Educator Seminar (2 credits)
  - B EDUC 435 Student Teaching (2 credits -- Autumn Quarter)
  - B EDUC 435 Student Teaching (10 credits -- Winter Quarter)
- 15 credits - Endorsement Coursework in ESOL or SPED  
All courses completed with a minimum 2.0 grade in each course
  - English to Speakers of Other Languages (ESOL)
    - B EDUC 442 Curriculum, Instruction & Assessment in ESOL (5 credits)
    - B EDUC 443 Practicum in ESOL (5 credits)
    - B EDUC 444 Leadership, Advocacy, & Assessment in ESOL (5 credits)
  - Special Education (SPED)
    - B EDUC 482 Assessment in Special & Inclusive Education (5 credits)
    - B EDUC 483 Planning for Student Success in an Inclusive Classroom (5 credits)
    - B EDUC 484 Special Education & Transition (5 credits)

## PROGRAM OF STUDY: MINOR: CHILD AND YOUTH DEVELOPMENT

### PROGRAM OVERVIEW

The Child and Youth Development minor spans early childhood into adolescence and emerging adulthood in a range of social contexts including family, peer, school, and community, with a focus on diversity and equity.

This program of study leads to the following credential:

- Minor in Child and Youth Development

## MINOR IN CHILD AND YOUTH DEVELOPMENT

### CREDENTIAL OVERVIEW

The Child and Youth Development minor spans early childhood into adolescence and emerging adulthood in a range of social contexts including family, peer, school, and community, with a focus on diversity and equity.

### COMPLETION REQUIREMENTS

#### MINOR REQUIREMENTS (25 CREDITS TOTAL)

##### Core Courses (20)

- B EDUC 402 Human Growth and Learning
- B EDUC 451 Early Childhood Development
- B EDUC 481 Adolescent Development
- B EDUC 458 Emerging Adulthood

##### Elective (5)

- B EDUC 230 Culture, Knowledge & Education
- B EDUC 250 Topics in Education & Popular Culture
- B EDUC 255/BIS 255 Critical Diversity Studies
- B EDUC 310 Theories of Learning, Culture & Identity
- BIS 328/B EDUC 328 Diversity, Leadership, and Engagement
- B EDUC 391 Special Topics in Education
- B EDUC 403 Introduction to Special Education
- B EDUC 441 Second Language Acquisition, Bilingual Education & the Structure of English
- B EDUC 453 Children in Schools and Society
- B EDUC 456 Adolescents in School and Society
- B EDUC 461 Educational Implications of Gender Inequality
- B EDUC 491 Special Topics in Education
- BIS 222 Introduction to Human Sexuality
- BIS 366 The Family in U.S. Society

Maximum 10 credits from the Child and Youth Development minor may overlap with the Bachelor of Arts Degree in Developmental and Youth Studies, Bachelor of Arts Degree in Educational Studies, or Bachelor of Arts Degree in Educational Studies: Elementary Education Option.

## PROGRAM OF STUDY: MINOR: EDUCATIONAL ADVOCACY AND COMMUNITY ENGAGEMENT

### PROGRAM OVERVIEW

The Educational Advocacy and Community Engagement minor focuses on critical perspectives on the history, sociology and philosophy of education and schooling. This minor equips students with the skills and knowledge necessary to begin careers in educational advocacy, leadership, and community engagement.



This program of study leads to the following credential:

- Minor in Educational Advocacy and Community Engagement

## MINOR IN EDUCATIONAL ADVOCACY AND COMMUNITY ENGAGEMENT

### COMPLETION REQUIREMENTS

Minor Requirements (25 credits total)

Core Courses (20)

- B EDUC 220 Education and Society
- B EDUC 230 Culture, Knowledge, and Education
- BIS 328/B EDUC 328 (5 credits) Diversity, Leadership, and Engagement
- B EDUC 438 Teaching & Learning Tribal Sovereignty

Elective (5)

- B EDUC 205 Education and Equity in the United States
- B EDUC 250 Topics in Education & Popular Culture
- BIS 255/B EDUC 255 Critical Diversity Studies
- B EDUC 391 Special Topics in Education
- B EDUC 441 Second Language Acquisition, Bilingual Education & the Structure of English
- B EDUC 453 Children in Schools & Society
- B EDUC 456 Adolescents in School and Society
- B EDUC 461 Educational Implications of Gender Inequality
- B EDUC 470 Disability Culture in Schools & Society
- B EDUC 491 Special Topics in Education
- BIS 219 The Politics of Sex Education
- BIS 483 Community Organizing

Maximum 10 credits from the Educational Advocacy and Community Engagement minor may overlap with the Bachelor of Arts Degree in Developmental and Youth Studies, Bachelor of Arts Degree in Educational Studies, or Bachelor of Arts Degree in Educational Studies: Elementary Education Option.

## PROGRAM OF STUDY: MINOR: TEACHING AND LEARNING

### PROGRAM OVERVIEW

The Teaching and Learning Minor is for students in any major who want to strengthen their knowledge of teaching and student learning in schools or other community settings. Coursework will allow students to develop a deeper understanding of topics that impact teachers and educators at all levels such as human development and learning, pedagogy, and diversity in the classroom. Several classes in this Minor provide opportunities to observe and volunteer in formal and informal educational settings. The Teaching and Learning Minor is comprised of 6 courses (30 credits) that, when taken together, lay a strong foundation for future educators in a wide variety of settings.

This program of study leads to the following credential:

- Minor in Teaching and Learning

## MINOR IN TEACHING AND LEARNING

### CREDENTIAL OVERVIEW

The Teaching and Learning Minor provides a strong foundation for future educators in formal school and informal community settings. Coursework develops a deeper understanding of topics that impact teachers and educators at all levels, such as human development and learning, pedagogy, and diversity in the classroom. The Teaching and Learning Minor goes beyond the purpose of education to focus on classroom interactions, teachers as change agents, and opportunities to interact with youth in a classroom setting. Students from any major may choose the Teaching and Learning Minor in order to strengthen their knowledge of teaching. • K-12 Schools • Recreation Centers • Museums • Health Clinics • Professional Training

### COMPLETION REQUIREMENTS

- B EDUC 220 (5cr) – Education and Society
- B EDUC 402 (5cr) – Human Growth & Learning or B EDUC 456 (5cr) – Adolescents in Schools and Society
- B EDUC 403 (5cr) – Intro to Special Education
- B EDUC 441 (5cr) – Second Language Acquisition

Plus ten additional credits of electives from a list of approved courses maintained by the department.

Maximum 10 credits from the Teaching and Learning minor may overlap with the Bachelor of Arts Degree in Developmental and Youth Studies, Bachelor of Arts Degree in Educational Studies, or Bachelor of Arts Degree in Educational Studies: Elementary Education Option.

## GRADUATE PROGRAM

### PROGRAM OF STUDY: MASTER OF EDUCATION

This program of study leads to the following credentials:

- Master Of Education
- Master Of Education (Educational Leadership)

### MASTER OF EDUCATION

#### CREDENTIAL OVERVIEW

A Master of Education (M.Ed.) degree at UW Bothell will prepare students to expand their professional practice by deeply exploring the complex nature of education. By providing an academic foundation rooted in relevant concepts of learning theory, social justice, equity, and leadership, students gain expertise to enhance all learning environments in addition to growing skills in writing, critical thinking, and collaborative learning. Students will choose one concentration to focus on during the course of their study: Critical Educational Change and Leadership, English to Speakers of Other Languages, or Leadership Development for Educators (LEDE). Critical Educational Change and Leadership This concentration will prepare students to engage in theories of equity, learning, assessment

and leadership within broadly defined educational contexts. Students will develop the knowledge and skills needed to create social justice and change in a variety of educational settings. This pathway serves educators working in many settings, such as nonprofits, higher education, youth and family organizations, and K-12 classrooms.

**English to Speakers of Other Language (ESOL) Endorsement** This concentration is designed for currently-certificated teachers who wish to add the ELL (English Language Learner) Endorsement. In these courses, students will engage in critical inquiry into second language acquisition and bilingual education. Topics include curriculum, instruction and assessment for teaching English to speakers of other languages.

**Leadership Development for Educators (LEDE)** This concentration is designed for educators seeking the Residency Principal or Program Administrator certificate from the state of Washington. This program's purpose is to develop leaders committed to advancing educational justice and providing them the tools to support educators in dismantling oppressive educational structures.

### ADMISSION REQUIREMENTS

Please see this program's Graduate Admissions page for current requirements:  
[uwb.edu/education/apply#graduate](http://uwb.edu/education/apply#graduate)

### COMPLETION REQUIREMENTS

37 credits

Critical Education Change and Leadership & English to Speakers of Other Languages concentrations:

- Core (10 credits): B EDUC 501, 502
- Concentration Coursework (20 credits): Choose one of the following:
  - Critical Educational Change and Leadership: B EDUC 512, 550, 580, 504
  - English to Speakers of Other Languages (ESOL): B EDUC 541, 542, 543, 544
- Electives (5 credits): 400- or 500-level coursework, course list maintained internally by the program.
- Completion Dossier (2 credits): B EDUC 594

Leadership Development for Educators (LEDE) concentration:

- Core (10 credits): B EDUC 502, B EDUC 504
- Concentration Coursework (25 credits): LEDE 510, 520, 530, 550
- Community-Based Fieldwork (2 credits): B EDUC 529

### MASTER OF EDUCATION (EDUCATIONAL LEADERSHIP)

#### CREDENTIAL OVERVIEW

The Leadership Development for Educators (LEDE) program is designed to build on an existing foundation of instructional leadership while supporting current teachers as they transition to administrative positions in schools and districts. LEDE focuses on performance tasks completed by participants on-the-job in their school or district, a mentored internship, and intensive seminars on Saturdays and during a 3-day summer workshop. The LEDE program culminates with a Master of Education degree and Washington State Residency Principal Certification. LEDE Program Philosophy Many of the

instructional leadership skills that are central to principal success are developed over time as teachers take on challenging responsibilities in their schools. This understanding is the foundation for the principal preparation program that UW Bothell offers in partnership with several school districts, the Center for Strengthening the Teaching Profession, and the Center for Educational Leadership. With new thinking about how to coordinate teachers' on-the-job learning and university classes, the program supports teacher instructional leaders and helps them document their learning so that it contributes to requirements for a Master of Education degree and Washington State Residency Principal Certification. A Two-Part Program Structured for Working Teachers Coursework, performance tasks, and on-campus classes are built around e-learning and commuter-friendly Saturday Seminars. Part 1 launches with two seminars on instructional and personal leadership. Teachers then join a network of teacher instructional leaders and work at their own pace with a set of performance tasks that relate directly to the work of instructional and personal leadership in schools. Part 1 includes the first of two 400-hour internships. Saturday seminars and quarterly progress reviews provide feedback and assistance. Part 2 continues the cohort-based program, with an intensive 3-day Summer Institute, followed by yearlong Saturday seminars and a simultaneous 400-hour internship. Like Part 1, Part 2 features a balance of elearning, face-to-face seminars, and clinical practice. A Performance-Based Program A series of structured and practical performance tasks integrate learning from seminars, e-learning, and clinical practice. Through these tasks, candidates document both practical experience and conceptual understandings related to all certification standards and UW Bothell M.Ed. degree requirements.

### ADMISSION REQUIREMENTS

\*By faculty vote and approval of the Graduate School, this program has suspended admission until Autumn

2022 for redesign. For more information, please visit our website at [uwb.edu/education](http://uwb.edu/education). Please see this program's Graduate Admissions Page for current requirements.

### COMPLETION REQUIREMENTS

36 credits

- Core Courses (12 credits): LEDE 510, LEDE 520
- Certification Courses (21 credits): LEDE 530, LEDE 540, LEDE 550
- Electives (to meet required total): LEDE courses from list maintained internally by the program.

## SCHOOL OF INTERDISCIPLINARY ARTS AND SCIENCES

Interdisciplinary Arts and Sciences

360 Bothell Campus Building UW1

425-352-5350

[iasinfo@uw.edu](mailto:iasinfo@uw.edu)

The School of Interdisciplinary Arts & Sciences (IAS) is a dynamic site of innovation at the University of Washington. Our mission statement demands that we develop academically challenging programs of study flexible enough to respond rapidly to changing research questions and regional needs, including those of non-traditional and traditional students. Our organizational structure - as an interdisciplinary, non-departmentalized school - enables us to fulfill this mission. The goal of the IAS faculty and staff is to educate students and conduct research through modes of inquiry that stretch across disciplinary and departmental boundaries inherited from the past. This endeavor requires that we cultivate an understanding of how multiple disciplines create knowledge about the world and a capacity to develop new avenues of exploration. The result is a learning environment where complex problems - not singular disciplines - dictate the directions of student and faculty inquiry.

- Undergraduate Programs
  - Program of Study: Major: Psychology
    - Bachelor of Arts degree with a major in Psychology
  - Program of Study: Major: American and Ethnic Studies
    - Bachelor of Arts degree with a major in American and Ethnic Studies
  - Program of Study: Major: Conservation and Restoration Science
    - Bachelor of Science degree with a major in Conservation and Restoration Science
  - Program of Study: Major: Culture, Literature, and the Arts
    - Bachelor of Arts degree with a major in Culture, Literature, and the Arts
  - Program of Study: Major: Data Visualization
    - Bachelor of Arts degree with a major in Data Visualization
    - Bachelor of Science degree with a major in Data Visualization
  - Program of Study: Major: Earth System Science
    - Bachelor of Science degree with a major in Earth System Science
  - Program of Study: Major: Environmental Studies
    - Bachelor of Arts degree with a major in Environmental Studies
  - Program of Study: Major: Gender, Women, and Sexuality Studies
    - Bachelor of Arts degree with a major in Gender, Women, and Sexuality Studies
  - Program of Study: Major: Global Studies
    - Bachelor of Arts degree with a major in Global Studies
  - Program of Study: Major: Interdisciplinary Arts
    - Bachelor of Arts degree with a major in Interdisciplinary Arts
  - Program of Study: Major: Interdisciplinary Social Sciences
    - Bachelor of Arts degree in Interdisciplinary Social Sciences
  - Program of Study: Major: Law, Economics and Public Policy
    - Bachelor of Arts degree with a major in Law, Economics, and Public Policy
  - Program of Study: Major: Media and Communication Studies

- Bachelor of Arts degree with a major in Media and Communication Studies
- Program of Study: Major: Science, Technology, and Society
  - Bachelor of Arts degree with a major in Science, Technology, and Society
- Program of Study: Minor: Creative Writing
  - Minor in Creative Writing
- Program of Study: Minor: Diversity
  - Minor in Diversity
- Program of Study: Minor: Ecological Restoration
  - Minor in Ecological Restoration
- Program of Study: Minor: Gender, Women, and Sexuality Studies
  - Minor in Gender, Women, and Sexuality Studies
- Program of Study: Minor: Human Rights
  - Minor in Human Rights
- Program of Study: Minor: Performance
  - Minor in Performance
- Program of Study: Minor: Policy Studies
  - Minor in Policy Studies
- Program of Study: Minor: Science, Technology, and Society
  - Minor in Science, Technology, and Society
- Program of Study: Minor: Visual and Media Arts
  - Minor in Visual and Media Arts
- Program of Study: Geographic Information Systems
  - Minor in Geographic Information Systems
- Graduate Programs
  - Program of Study: Master Of Arts In Policy Studies
    - Master Of Arts In Policy Studies
  - Program of Study: Master Of Fine Arts (Creative Writing And Poetics)
    - Master Of Fine Arts (Creative Writing And Poetics) (fee-based)

## UNDERGRADUATE PROGRAMS

### PROGRAM OF STUDY: MAJOR: PSYCHOLOGY

#### PROGRAM OVERVIEW

The major introduces students to a range of domains, perspectives and questions of human experience, along with opportunities for exploring them through independent or collaborative research, social action, and/or critical reflection. Students are encouraged to evaluate how we come to understand human behavior and psychological processes, and to formulate critical questions about the field of psychology itself, including issues of power and human diversity. Students at UWB are encouraged to extend their knowledge of psychology to other fields of study and social contexts. While some students go on to pursue graduate study in clinical/counseling, developmental, social/community

psychology, or social work, others use psychological perspectives to inform their work in community development, health care, policy work, media and communications, business, education, and other fields.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Psychology

### ADMISSION REQUIREMENTS

14-15 credits of Prerequisites, min 2.0 grade if taken at the University of Washington

- Either B WRIT 135 OR ENGL 141
- Intro to Psychology: Either BIS 170, PSYCH 101, OR TPSYCH 101
- Statistics: Either BIS 215, B MATH 215, B BUS 215, STAT 220, STAT 221, STAT 290, OR QMETH 201

### BACHELOR OF ARTS DEGREE WITH A MAJOR IN PSYCHOLOGY

#### CREDENTIAL OVERVIEW

The major introduces students to a range of domains, perspectives and questions of human experience, along with opportunities for exploring them through independent or collaborative research, social action, and/or critical reflection. Students are encouraged to evaluate how we come to understand human behavior and psychological processes, and to formulate critical questions about the field of psychology itself, including issues of power and human diversity. Students at UWB are encouraged to extend their knowledge of psychology to other fields of study and social contexts. While some students go on to pursue graduate study in clinical/counseling, developmental, social/community psychology, or social work, others use psychological perspectives to inform their work in community development, health care, policy work, media and communications, business, education, and other fields.

#### COMPLETION REQUIREMENTS

- One Psychology Core out of the following four courses– min. grade 2.0 (5 credits)
  - BISPSY 343 Community Psychology
  - BISPSY 348 Cultural Psychology
  - BISPSY 337 Risk and Resilience
  - BISPSY 350 Intergroup Relations
- BIS 312 Approaches to Social Research - min. 2.0 grade (5 credits)
- 200 level Psychology Courses (10 credits): Select from an approved list. See the webpage for an approved list.
- Upper Division Psychology Courses (15 credits): Select from an approved list. See the webpage for an approved list.
- Psychology Electives (15 credits) : Select from an approved list. See the webpage for an approved list.
- Additional Coursework in the School of IAS (100-400 level) (20 credits): Can include any School of IAS Prefixes (BIS, BISSKL, BISAES, BISCLA, BISGST, BISGWS, BES, BISIA, BISMCS, BISLEP, BISSTA, BISSTS).

\*Total: 70 Credits

## SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can overlap with 70 credit major coursework or it can be completed through elective credits. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to Psychology major requirements, a minimum of 35 credits must be completed at the Upper Division (300-400) level.

## PROGRAM OF STUDY: MAJOR: AMERICAN AND ETHNIC STUDIES

### PROGRAM OVERVIEW

American and Ethnic Studies (AES) investigates the social forces, political institutions, and cultural productions that have created the United States and shaped what it means to be an "American." AES students develop a critical understanding of the categories that have shaped the emergence and reproduction of systems of power defined in relation to national citizenship. With diverse and intersecting categories of race, place, ethnicity, gender, sexuality, class, nationality, and ability, AES educates students in historical and social inquiry, textual analysis and interpretation, and critical theory and practice.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in American and Ethnic Studies

### RECOMMENDED PREPARATION

- BIS 216 Introduction to Cultural Studies
- BIS 255 Critical Diversity Studies
- BIS 256 Introduction to African American Studies
- BIS 257 Introduction to Asian American Studies
- BIS 258 Introduction to United States Latina/Latino Studies
- BIS 265 Introduction to Comparative Ethnic Studies

### ADMISSION REQUIREMENTS

Students in good academic standing may declare this major at any time.

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN AMERICAN AND ETHNIC STUDIES

### CREDENTIAL OVERVIEW

American and Ethnic Studies (AES) investigates the social forces, political institutions, and cultural productions that have created the United States and shaped what it means to be an "American." AES students develop a critical understanding of the categories that have shaped the emergence and reproduction of systems of power defined in relation to national citizenship. With diverse and intersecting categories of race, place, ethnicity,



gender, sexuality, class, nationality, and ability, AES educates students in historical and social inquiry, textual analysis and interpretation, and critical theory and practice.

### COMPLETION REQUIREMENTS

- 10 credits of Composition Coursework
  - B WRIT 133 OR B WRIT 134 OR ENGL 131 OR equivalent (5 credits)
  - B WRIT 135 OR ENGL 141 OR equivalent (5 credits)
- BIS 290 Interdisciplinary Writing Seminar (5 credits)
- BISAES 305 Power, Dissent, and American Culture (5 credits)
- BIS 312 Approaches to Social Research - min. 2.0 grade OR BIS 340 Approaches to Cultural Research - min. 2.0 grade (5 credits)
- AES Courses (30 credits) to include a minimum of 5 credits from each of the following areas: Select from an approved list. Please check the major webpage for the approved list.
  - Historical and Social Inquiry
  - Textual Analysis and Interpretation
  - Critical Theory and Practice
- Additional IAS Coursework (20 credits): Select from any School of IAS prefix (BIS, BISSKL, BISCLA, BES, BISGWS, BISGST, BISIA, BISLEP, BISMCS, BISPSY, BISSTS, BISSTA)

Total = 75 credits

### SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can overlap with 70 credit major coursework or it can be completed through elective credits. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to the major requirements, a minimum of 35 credits must be completed at the Upper Division (300-400) level.

### PROGRAM OF STUDY: MAJOR: CONSERVATION AND RESTORATION SCIENCE PROGRAM OVERVIEW

Bachelor of Science in Conservation and Restoration Science (CRS) prepares students to address environmental challenges facing the world today. Students develop the depth of scientific understanding, interdisciplinary perspectives, and creative problem-solving skills needed to design and bring about solutions to these problems at local, regional, and global scales. Through Community-Based projects ranging from wetlands restoration and conservation planning to analyses of regional air and water pollution, students gain practical experience and make a positive difference while they are still in school. Graduates are prepared for future research, practical experiences, and graduate education in various environmental fields.

This program of study leads to the following credential:

- Bachelor of Science degree with a major in Conservation and Restoration Science

## ADMISSION REQUIREMENTS

Students in good academic standing may declare this major at any time.

## BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN CONSERVATION AND RESTORATION SCIENCE

### COMPLETION REQUIREMENTS

- Introductory Math and Science Core- 30-31 credits
  - Either B MATH 123 Precalculus II: Transcendental Functions, MATH 120 Precalculus, STMATH 124 Calculus 1, MATH 124 Calculus 1, STMATH 114 Calculus 1: Stretch II, or B MATH 144 Calculus for Life Sciences
  - Either BIS 215, B MATH 215, B BUS 215, STAT 220, or STAT 290
  - Either B BIO 180 or BIOL 180
  - Either B CHEM 143 AND 144, CHEM 120, CHEM 142, CHEM 143 or CHEM 145
  - BIS 242 or BIS 243
  - BIS 245
- Conservation and Restoration Science Core- 45
  - Either BES 301 OR BST 301
  - Either BES 312 OR B BIO 471
  - Either BEARTH 317, BEARTH 318, BEARTH 321, or BES 316
  - BES 362
  - BES 385
  - BIS 342
  - BIS 307 OR BIS 304
  - BIS 356 OR BIS 456
  - BIS 386 OR BEARTH 320
- Conservation and Restoration Science Electives- 20 credits
  - Select from approved list. See major webpage for approved list.

Total = 95-96 Credits for BS in CRS

### BS IN CRS REQUIREMENTS AND POLICES

- Residency Requirement: 60 credits must be completed in residency at UW Bothell
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can overlap with 96 credit major coursework or it can be completed through elective credits. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to the major requirements, a minimum of 55 credits must be completed at the Upper Division (300-400) level.

## PROGRAM OF STUDY: MAJOR: CULTURE, LITERATURE, AND THE ARTS

### PROGRAM OVERVIEW

The Culture, Literature, and the Arts major inquires into the make-up of diverse cultures and societies, and their literatures and arts. Students in the major study written and visual texts, interactive and performative modes of practice, and philosophical and theoretical

accounts of those texts and practices. They gain an understanding of the complex relations among lived, represented, and speculated existence. CLA courses focus on the historical, social, and aesthetic dimensions of literature and arts, with special attention to the intersections among gender, sexuality, race, ethnicity, class, disability, and other vectors of power and privilege.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Culture, Literature, and the Arts

## ADMISSION REQUIREMENTS

Students in good academic standing may declare this major at any time.

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN CULTURE, LITERATURE, AND THE ARTS CREDENTIAL OVERVIEW

The Culture, Literature, and the Arts major inquires into the make-up of diverse cultures and societies, and their literatures and arts. Students in the major study written and visual texts, interactive and performative modes of practice, and philosophical and theoretical accounts of those texts and practices. They gain an understanding of the complex relations among lived, represented, and speculated existence. CLA courses focus on the historical, social, and aesthetic dimensions of literature and arts, with special attention to the intersections among gender, sexuality, race, ethnicity, class, disability, and other vectors of power and privilege.

## COMPLETION REQUIREMENTS

- 10 credits of Composition Coursework
  - B WRIT 133 OR B WRIT 134 OR ENGL 131 OR equivalent (5 credits)
  - B WRIT 135 OR ENGL 141 OR equivalent (5 credits)
- CLA Core Course: BISCLA 201 (5 credits)
- CLA Courses (35 credits): select from an approved list. See the webpage for the approved list.
- Additional IAS Coursework (20 credits at any level): Select from any School of IAS prefix (BIS, BISSKL, BISAES, BISCLA, BES, BISGST, BISGWS, BISIA, BISLEP, BISMCS, BISPSY, BISSTS, BISSTA)

Total: 70 Credits

## SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can overlap with 70 credit major coursework or it can be completed through elective credits. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to the major requirements, a minimum of 35 credits must be completed at the Upper Division (300-400) level.

## ADDITIONAL INFORMATION

CLA majors graduate with an ability to pursue inquiry across a broad range of endeavors and to become engaged, reflective, and productive global citizens. The major is excellent for careers that demand strong written and verbal communication capabilities, such as law, publishing, public relations, journalism, web content production, museum and bookstore management, and teaching. CLA majors may also advance their studies by pursuing graduate degrees in a range of disciplinary and interdisciplinary fields that engage the humanities. More information about career possibilities or pursuing graduate school on our web site.

## PROGRAM OF STUDY: MAJOR: DATA VISUALIZATION

### PROGRAM OVERVIEW

Students in Data Visualization will enter the workforce with the ability to identify trends, provide insights, and illustrate the societal impacts of different forms of data while critically engaging with data visualization software and programming languages. Data Visualization emphasizes fundamental elements of database management, data analysis and visualization, information systems, and quantitative and qualitative analysis.

This program of study leads to the following credentials:

- Bachelor of Arts degree with a major in Data Visualization
- Bachelor of Science degree with a major in Data Visualization

### ADMISSION REQUIREMENTS

A minimum of a 2.0 grade if completed at the University of Washington

- BIS 215, B BUS 215, B MATH 215, STAT 220, STAT 221/CS&SS 221/SOC 221, STAT 290
- B WRIT 134 or B WRIT 133 or ENGL 131

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN DATA VISUALIZATION

### CREDENTIAL OVERVIEW

A student with a Bachelor of Arts in Data Visualization may enter the variety of academic and career fields focused on data analysis and visualization, including statistics, visual analytics, and geographic information systems and sciences. A Bachelor of Arts in Data Visualization emphasizes fundamental elements of database management, data analysis and visualization, information systems, and quantitative and qualitative analysis.

### ADDITIONAL ADMISSION REQUIREMENTS

In Addition to Data Visualization program prerequisites, the following prerequisites require A minimum of a 2.0 grade if completed at the University of Washington

- Either B MATH 123, MATH 120, a minimum score of 400 on the MTHDSP directed self-placement, or a score of 154-163 on the MPT-AS assessment test
- Either B WRIT 135 or ENGL 141

## COMPLETION REQUIREMENTS

- 20 credits of Data Visualization Core Courses
  - B DATA 200 (5 credits)
  - B DATA 232 (5 credits)
  - Either BIS 218 or BIS 342 (5 credits)
  - Either BES 301 or BST 301 (5 credits)
- Advanced Data Visualization and Analysis Methods (15 Credits)
  - Select from approved list. Please check major webpage for the approved list.
- Spatial Data Analysis (15 credits)
  - Select from approved list. Please check major webpage for the approved list.

Total BA Credits=75 Credits

Total BS Credits= 90 Credits

## SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can be completed through elective credits or it can overlap with major coursework. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to Data Visualization major requirements, a minimum of 45 credits must be completed at the Upper Division (300-400) level.

## ADDITIONAL COMPLETION REQUIREMENTS

- Data Visualization Electives (25 credits)
  - Select from approved list. Please check major webpage for the approved list.

Total: 75 credits

## Bachelor of Science degree with a major in Data Visualization

### CREDENTIAL OVERVIEW

A student with a Bachelor of Science in Data Visualization will enter into the wide variety of academic and career fields focused on data analysis and visualization, including statistics, visual analytics, and geographic information systems and sciences. A Bachelor of Science in Data Visualization degree emphasizes fundamental elements of data science, visualization, and analytics, advanced research, advanced graduate programs, or other data programing and geographic information systems and sciences programs and careers.

### Additional Admission Requirements

In Addition to Data Visualization program prerequisites, the following prerequisites require A minimum of a 2.0 grade if completed at the University of Washington

- Either STMATH 124, MATH 124, or STMATH 114
- Either CSS 142, CSE 142, or CSE 122

- Either CSS 143, CSE 143, or CSE 123

## COMPLETION REQUIREMENTS

- 20 credits of Data Visualization Core Courses
  - B DATA 200 (5 credits)
  - B DATA 232 (5 credits)
  - Either BIS 218 or BIS 342 (5 credits)
  - Either BES 301 or BST 301 (5 credits)
- Advanced Data Visualization and Analysis Methods (15 Credits)
  - Select from approved list. Please check major webpage for the approved list.
- Spatial Data Analysis (15 credits)
  - Select from approved list. Please check major webpage for the approved list.

Total BA Credits=75 Credits

Total BS Credits= 90 Credits

## SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can be completed through elective credits or it can overlap with major coursework. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to Data Visualization major requirements, a minimum of 45 credits must be completed at the Upper Division (300-400) level.

## ADDITIONAL COMPLETION REQUIREMENTS

- Additional Core Courses (15 credits)
  - Either STMATH 125 or MATH 125 (5 Credits)
  - Either STMATH 126 or MATH 126 (5 Credits)
  - Either BIS 231 or STMATH 208 (5 Credits)
- Data Visualization Electives (25 credits)
  - Select from approved list. Please check major webpage for the approved list

Total= 90 Credits

## PROGRAM OF STUDY: MAJOR: EARTH SYSTEM SCIENCE

### PROGRAM OVERVIEW

Earth System Science (ESS) applies systems thinking and multiple science disciplines, including the classic fields of Geology, Oceanography, Atmospheric Science, and Environmental Science, to understanding complex phenomena in Earth's physical systems. Educational and research programs that take this unified approach emphasize the processes and interactions within the Earth system and the connections between natural and human systems.

This program of study leads to the following credential:

- Bachelor of Science degree with a major in Earth System Science

### RECOMMENDED PREPARATION

If students are interested in exploring this major, please consider taking one of the courses below. Any of these selections will help familiarize you with the academic program and prepare you for advanced coursework in the major.

- BEARTH 153 Introduction to Geology
- BEARTH154 Introduction to Oceanography
- BEARTH 155 Introduction to Climate Science
- BIS 242 Environmental Geography

### ADMISSION REQUIREMENTS

School of IAS Admission Requirements:

Applicants applying to an Interdisciplinary Arts & Sciences major with 80 or more credits:

- 3 years high school math (2 years algebra) or Intermediate Algebra in college.
- Minimum grade of 2.0 if taken in college
- 2 years (high school) OR 10 quarter credits (college) of a single foreign language or through 102 with a passing grade
- English Composition (10 quarter credits)
- Reasoning (5 quarter credits in Math or Logic). Does not apply to students who enrolled in college for the first time prior to Autumn Quarter, 1985
- 15 quarter credits in Natural Sciences (NSc)
- 15 quarter credits in Arts & Humanities (A&H)
- 15 quarter credits in Social Sciences (SSc)

Applicants applying to an Interdisciplinary Arts & Sciences major with 45-79 credits:

- 3 years high school math (2 years algebra) or Intermediate Algebra in college.  
Minimum grade of 2.0 if taken in college
- 2 years (high school) OR 10 quarter credits (college) of a single foreign language or through 102 with a passing grade
- English Composition (5 credits): BWRIT 134 or equivalent
- Reasoning (5 quarter credits in Math or Logic). Does not apply to students who enrolled in college for the first time prior to Autumn Quarter, 1985
- 10 quarter credits in Natural Sciences (NSc)
- 10 quarter credits in Arst & Humanities
- 10 quarter credits in Social Sciences (SSc)

### DEGREE ADMISSION REQUIREMENTS

- Introductory Earth System Science Courses: take one course (5 credits) from the following:
- BEARTH 153 Introduction to Geology

- BEARTH 154 Introduction to Oceanography
- BEARTH 155 Introduction to Climate Science
- BEARTH 201 Mapping the Earth System
- BEARTH 202 Modeling Global Systems
- BIS 141 Natural History and Environmental Science
- BIS 242 Environmental Geography
- BIS 243 Introduction to Environmental Issues
- B PHYS 101 Introduction to Astronomy
- Or equivalent course
- Take ONE course from the Introductory Math and Science Requirement list (5 credits): the Introductory Math and Science Requirement is listed under the major requirements.

## BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN EARTH SYSTEM SCIENCE COMPLETION REQUIREMENTS

Introductory Math and Science Requirements (30-33 Credits)

NOTE: A total of 35-38 credits in this bin will be taken due to an additional 5 credits in this bin being a prerequisite for entry to the degree program

- Introductory Chemistry (5-6credits)
  - B CHEM 143 General Chemistry I + B CHEM 144 General Chemistry I Lab
  - Or equivalent course
- Introductory Physics (5 credits - Choose one)
  - B PHYS 114 General Physics + B PHYS 117 General Physics Lab
  - B PHYS 121 Mechanics
  - Or equivalent course
- Introductory Statistics (5 credits - Choose one)
  - BIS 215
  - B MATH 215
  - STMATH 341
  - Or equivalent course
- Introductory Calculus (5 credits - Choose one)
  - STMATH 124/MATH 124 Calculus I
  - B MATH 144 Calculus for Life & Social Science
  - STMATH 114 Calculus Stretch: II
- Additional Foundation Science Course (15-17 credits-choose three)\*\*: Please see the ESS major webpage for the course option. IAS maintains the list of courses.

Earth Systems Science Base (ESS:BASE - 25 Credits)

- Scientific Writing (5 credits - Choose one)
  - BES 301 Science Methods & Practices
  - BST 301 Scientific Writing
- Introductory Environmental Studies Course (15 credits - Choose three): Note that selected courses should not overlap with a prerequisite. Please see the ESS major webpage for course option information. IAS maintains the list of courses.



- BIS 342 Geographic Information Systems (5 Credits)

#### Earth Systems Ascent (39-40 Credits)

- *Please note that the list of courses are maintained by School of IAS.*
- Earth System Science Focus Courses (ESS:FOCUS): Complete 4 courses (20 credits) from the list provided on the major webpage. At least 1 course must be a field course as designated on the ESS degree program webpage.
- Computer Methods and Quantitative Analysis (ESS:METHODS): Complete 2 courses (9-10 credits) from the list provided on the major webpage.
- Human Dimensions of the Earth System (ESS:HUMAN): Complete 2 courses (10 credits) from the list provided on the major webpage.

#### Capstone (5 credits)

- Complete at least 5 credits from the list provided on the major webpage. Note that IAS maintains the list of courses.

### UNIVERSITY REQUIREMENT

- Writing “W” Course (minimum 10 credits)
- Diversity “DIV” Course (minimum 5 credits)
- Areas of Inquiry: 15 credits required in each area. Natural Science (NSc) and Social Sciences (SSc) may be completed through major requirements. Please plan to take 15 Credits of Arts & Humanities (A&H) courses.

Total Credits: 99-103 credits (not including 15 credits of Admission Requirements)

### ADDITIONAL INFORMATION

The ESS degree program is jointly administered by the School of Interdisciplinary Arts & Sciences (IAS) and the School of Science, Technology, Engineering & Mathematics (STEM) with teaching and research contributions from faculty members in both schools.

For specific course information for academic planning, please visit the ESS major webpage: <https://www.uwb.edu/ias/undergraduate/majors/earth-system-science#requirements>

## PROGRAM OF STUDY: MAJOR: ENVIRONMENTAL STUDIES

### PROGRAM OVERVIEW

The Environmental Studies (ENST) major is designed for students who want to act critically and creatively in response to the environmental challenges facing the world today. ENST teaches students to integrate environmental knowledge across the natural and social sciences, as well as the arts and humanities. Hands-on learning, field experiences, and problem-based instruction focus on finding answers to complex problems that include scientific, social, political, cultural, and ethical dimensions. ENST BA graduates develop careers in management, planning, advocacy, communications, and policy-making across a wide array of for-profit and not-for-profit organizations. Students are prepared for graduate school in various degree programs including policy studies, environmental law, education, and other environmental areas.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Environmental Studies

## ADMISSION REQUIREMENTS

Students in good academic standing may declare this major at any time.

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN ENVIRONMENTAL STUDIES

### CREDENTIAL OVERVIEW

The Environmental Studies (ENST) major is designed for students who want to act critically and creatively in response to the environmental challenges facing the world today. ENST teaches students to integrate environmental knowledge across the natural and social sciences, as well as the arts and humanities. Hands-on learning, field experiences, and problem-based instruction focus on finding answers to complex problems that include scientific, social, political, cultural, and ethical dimensions. ENST BA graduates develop careers in management, planning, advocacy, communications, and policy-making across a wide array of for-profit and not-for-profit organizations. Students are prepared for graduate school in various degree programs including policy studies, environmental law, education, and other environmental areas.

### COMPLETION REQUIREMENTS

- Composition Coursework
  - B WRIT 133 OR B WRIT 134 OR ENGL 131 OR equivalent (5 credits)
  - B WRIT 135 OR ENGL 141 OR equivalent (5 credits)
- Environmental Studies Core- 30 Credits
  - BIS 242
  - BIS 245
  - BIS 342
  - BES 301 or BST 301
  - BIS 307
  - BIS 356 OR BIS 386
- Environmental Studies Electives- 20 credits
  - Select from approved list. See major webpage for approved list.
- Additional IAS Coursework- 10 credits
  - Complete 10 credits of courses at any level in any School of IAS prefix (BIS, BISSKL, BISAES, BISCLA, BES, BISGWS, BISGST, BISMCS, BISIA, BISLEP, BISPSY, BISSTA, BISSTS)

Total = 70 Credits for BA in ENVST

### SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher

- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can overlap with 70 credit major coursework or it can be completed through elective credits. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to the major requirements, a minimum of 35 credits must be completed at the Upper Division (300-400) level.

### ADDITIONAL INFORMATION

Environmental Studies teaches students to integrate environmental knowledge across the natural and social sciences, as well as the arts and humanities. Hands-on learning, field experiences, and problem-based instruction focus on finding answers to complex problems that include scientific, social, political, cultural, and ethical dimensions.

Graduating Environmental Studies students develop careers in management, planning, advocacy, communications, and policy-making across a wide array of for-profit and not-for-profit organizations. They also pursue disciplinary and interdisciplinary graduate education in environmental fields that range across the arts, humanities, and social and natural sciences.

## PROGRAM OF STUDY: MAJOR: GENDER, WOMEN, AND SEXUALITY STUDIES

### PROGRAM OVERVIEW

Gender, Women & Sexuality Studies (historically referred to as Women's Studies) is a cutting edge interdisciplinary field that examines social and political realities shaped by gender, sexuality, and power. We approach topics from transnational and intersectional perspectives, enabling students to analyze and address issues of gender, sexuality, and social difference at personal, historical, institutional, and structural levels. In our classes we study texts, histories, and experiences from the Global North and South, and examine gender and sexuality as they intersect with race, class, ethnicity, nation, ability, cisgender privilege and other forms of power. GWSS is devoted to generating and bringing visibility to many kinds of feminist knowledge production such as women of color feminism, transfeminism, queer feminism, feminist science and technology studies, and more. GWSS scholars therefore represent a wide range of disciplinary backgrounds, and conduct research in the humanities, social sciences, natural sciences, and arts.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Gender, Women, and Sexuality Studies

### RECOMMENDED PREPARATION

While there are no official prerequisites students choosing this major will find it especially helpful to have completed college coursework in feminist studies, history and culture, sociology, or literature. UW Bothell First-Year and Pre-Major students can take a Discovery Core course with GWSS Faculty to learn more about the GWSS Major.

### ADMISSION REQUIREMENTS

Students in good academic standing may declare this major at any time.

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN GENDER, WOMEN, AND SEXUALITY STUDIES CREDENTIAL OVERVIEW

Gender, Women & Sexuality Studies (GWSS) examines social and political realities shaped by gender, sexuality, and power. GWSS approaches topics from transnational and intersectional perspectives, enabling students to analyze and address issues of gender, sexuality, and social difference at personal, historical, institutional, and structural levels. GWSS is devoted to generating and bringing visibility to many kinds of feminist knowledge production such as women of color feminism, transfeminism, queer feminism, feminist science and technology studies, and more.

### COMPLETION REQUIREMENTS

- 10 credits of Composition Coursework
  - B WRIT 133 OR B WRIT 134 OR equivalent (5 credits)
  - B WRIT 135 OR equivalent (5 credits)
- BIS 290- Seminar in Intermediate Writing (5 credits)\*\*
- BISGWS 301 Critical Gender and Sexuality Studies (5 credits)
- BISGWS 302 Histories and Movements of Gender and Sexuality or BISGWS 303 Approaches to Feminist Inquiry (5 credits)\*\*
- GWSS Coursework (30 credits): Select from an approved list. Please check the major webpage for the approved list.
- Additional IAS Coursework (20 credits): Select from any School of IAS prefix (BIS, BISSKL, BISAES, BISCLA, BES, BISGST, BISIA, BISLEP, BISMCS, BISPSY, BISSTS, BISSTA)

Total= 75 credits

### SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can be completed through elective credits or it can overlap with major coursework. Please see the IPR webpage for course options.
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher for completion
- Upper Division Credit Policy: Of the credits applying to the GWSS major requirements, a minimum of 35 credits must be completed at the Upper Division (300-400) level.

### ADDITIONAL INFORMATION

\*\* BIS 290 is highly recommended to be taken before BISGWS 301. \*\*

\*\* GWSS faculty HIGHLY recommend students take both BISGWS 302 & 303. If a student completes both BISGWS 302 and BISGWS 303, 5 credits from these courses can be applied toward the student's GWSS coursework requirement. \*\*

## PROGRAM OF STUDY: MAJOR: GLOBAL STUDIES

### PROGRAM OVERVIEW

Global Studies (GST) majors explore the cultural, political, and economic systems that bind people across the world. They gain the historical perspective needed to assess claims about “globalization,” and develop the critical and analytical skills necessary to understand the forces that shape our world. Global Studies emphasizes critical research skills, historical depth, and the use of a range of theories and frameworks. Those may include theories of representation, political economy, feminism, nationalism, human rights, social movements, critical development studies, and postcolonialism. Faculty who teach in GST work across a wide range of disciplinary and interdisciplinary fields, including history, anthropology, the arts, feminist studies, sociology, political economy, critical race studies, cultural and media studies, geography, environmental studies, and human rights. GST students learn to think critically about the history and practice of globalization through interpretation, empirical research, digital mapping and other forms of project-based learning.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Global Studies

### RECOMMENDED PREPARATION

- BIS 165 Introduction to Ethnic Studies
- BIS 181 Introduction to Sociology
- BIS 216 Introduction to Cultural Studies
- BIS 227 Rad Women in the Global South
- BIS 282 Globalization
- BIS 284 International Relations

### ADMISSION REQUIREMENTS

Students in good academic standing may declare this major at any time.

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN GLOBAL STUDIES

### CREDENTIAL OVERVIEW

Global Studies (GST) explores the cultural, political, and economic systems that bind people across the world. GST students gain the historical perspective needed to assess claims about “globalization,” and develop the critical and analytical skills necessary to understand the forces that shape our world. GST graduates work in international relations, non-governmental organizations, law, education, journalism, environmental justice, global health, business, policy and advocacy, and philanthropic organizations. GST students are also prepared for advanced study in geography, gender studies, anthropology, history, media and cultural studies, political science, and international studies.

## COMPLETION REQUIREMENTS

- 10 credits of Composition Coursework
  - B WRIT 133 OR B WRIT 134 OR ENGL 131 OR equivalent (5 credits)
  - B WRIT 135 OR ENGL 141 OR equivalent (5 credits)
- BISGST 303 History and Globalization (5 credits)
- Methods course (5 credits) select from an approved list. See the webpage for the approved list.
- GST Courses (30 credits) select from an approved list. See the webpage for the approved list.
- Additional IAS Coursework (20 credits): Select from any School of IAS prefix (BIS, BISSKL, BISAES, BISCLA, BES, BISGWS, BISIA, BISLEP, BISMCS, BISPSY, BISSTS, BISSTA)

Total: 70 Credits

## SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can overlap with 70 credit major coursework or it can be completed through elective credits. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to the major requirements, a minimum of 35 credits must be completed at the Upper Division (300-400) level.

## ADDITIONAL INFORMATION

Graduating GST students are particularly well-equipped to pursue professional careers in areas that are focused on the ways in which we globally interact today. These include international relations, non-governmental organizations, law, education, journalism, environmental justice, global health, business, policy and advocacy, and philanthropic organizations. GST students are also prepared for advanced study in geography, gender studies, anthropology, history, media and cultural studies, political science, and international studies.

## PROGRAM OF STUDY: MAJOR: INTERDISCIPLINARY ARTS

### PROGRAM OVERVIEW

Gives students the opportunity to develop expertise in areas spanning written, visual, performance, sound and video, digital, and publication arts as they respond to the constantly evolving world of contemporary arts practice. The IA major is built on the belief that meaningful contributions to art can be made by anyone from any class, ethnicity, race, nationality, gender, ability, and background. IA faculty implement critical and relevant thinking and practices in art in order to inspire students to push towards new engagements and achievements. The degree focuses on helping students to think in innovative and experimental ways while developing independent and collaborative

projects that cultivate artistic skills. Coursework in the IA major includes a core class on interdisciplinary arts theory and practice, and studio-based workshops. It enables students to develop strategies for artistic and social practice.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Interdisciplinary Arts

### RECOMMENDED PREPARATION

- BIS 121 Introduction to Drawing
- BIS 130 What Is Art
- BIS 131 Introduction to Arts Practice
- BIS 132 Introduction to Photography
- BIS 207 Introduction to Creative Writing

### ADMISSION REQUIREMENTS

Students in good academic standing may declare this major at any time.

### BACHELOR OF ARTS DEGREE WITH A MAJOR IN INTERDISCIPLINARY ARTS

#### CREDENTIAL OVERVIEW

Interdisciplinary Arts (IA) gives students the opportunity to develop expertise in areas spanning written, visual, performance, sound and video, internet, and publication arts as they respond to the constantly evolving world of contemporary arts practice. The IA major is built on the belief that advanced contributions to art can be made by anyone from any class, ethnicity, race, nationality, gender, and background. IA faculty implement the most current and relevant thinking and practices in art in order to inspire students to push towards new advancements and achievements.

#### COMPLETION REQUIREMENTS

- 10 credits of Composition Coursework
  - B WRIT 133 OR B WRIT 134 OR ENGL 131 OR equivalent (5 credits)
  - B WRIT 135 OR ENGL 141 OR equivalent (5 credits)
- BISIA 219 Introduction to Interdisciplinary Arts (5 credits)
- Art Studios and Art Workshops (IA:SW) (15 credits)- from a departmentally maintained list- see major webpage for list.
- IA Courses (20 credits)- from a departmentally maintained list- see major webpage for list.
- Additional IAS Coursework (20 credits): Select from any School of IAS prefix (BIS, BISSKL, BISAES, BISCLA, BES, BISGST, BISIA, BISLEP, BISMCS, BISPSY, BISSTS, BISSTA)

Total = 70 credits

#### SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell



- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can overlap with 70 credit major coursework or it can be completed through elective credits. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to the major requirements, a minimum of 35 credits must be completed at the Upper Division (300-400) level.

### ADDITIONAL INFORMATION

Students in the IA major explore the many ways in which artists and their art publicly address complex cultural, philosophical and political phenomena. The curriculum emphasizes research-based art production, while addressing questions of media and genre as these are being transformed through current art practices. In each of these settings students gain production skills and develop their critical thinking, historical and aesthetic awareness, and cultural and digital literacy. Taught by faculty who are practicing artists with national and international public profiles, the curriculum actively engages in current discourses about embodiment and performance, conceptual and post-studio production, curation and installation, and spoken and material languages.

Students take classes in acting, collage, dance, drawing, experimental writing, improvisation, installation, internet art, painting, performance, photography, poetry, prose, public art, publishing, video, and hybrid and interdisciplinary arts. Interdisciplinary Arts graduates become independent artists, build careers in arts and cultural industries as curators and administrators, and develop arts-based projects in a range of employment sectors, including health, media, and education. They are also prepared for graduate education in the arts and humanities, cultural studies, and are qualified to enter Master of Fine Arts programs.

## PROGRAM OF STUDY: MAJOR: INTERDISCIPLINARY SOCIAL SCIENCES

### PROGRAM OVERVIEW

The Interdisciplinary Social Sciences major allows students to select from a range of social science course options for a degree program that advances their academic career interests within the social sciences. The social sciences are disciplines concerned with social life and relationships among individuals. Because all human behavior is social, the subject matter of interest to social scientists varies widely and ranges from individual social experiences to political structures, policies and cultural systems. Complex modern problems often require us to use a variety of disciplinary lenses in order to enhance understanding and create cutting-edge solutions. The ISS program at UW Bothell provides an interdisciplinary integration of the social sciences and related fields for students who are interested in a broad educational experience. ISS offers a wide choice of courses, and an opportunity to design a quality program geared toward individual needs and interests. Students choose courses that assist their development of social scientific research methods aimed at enhancing their knowledge production and problem-solving abilities. Graduating students are prepared to pursue careers or advanced study in a wide variety of



fields, such as education, sociology, philosophy, social work, public policy, law, and human resources.

This program of study leads to the following credential:

- Bachelor of Arts degree in Interdisciplinary Social Sciences

### RECOMMENDED PREPARATION

- BIS 115 Digital Cultures
- BIS 165 Introduction to Ethnic Studies
- BIS 167 People's History of the United States
- BIS 170 Introduction to Psychology
- BIS 175 Introduction to American Government
- BIS 180 Introduction to Human Geography
- BIS 181 Introduction to Sociology
- BIS 183 Introduction to the Middle East
- BIS 193 Introduction to Philosophy

### ADMISSION REQUIREMENTS

UW Bothell students in good academic standing may declare this major at any time.

Bachelor of Arts degree in Interdisciplinary Social Sciences

### COMPLETION REQUIREMENTS

- 10 credits of Composition Courses
  - Either B WRIT 133, B WRIT 134, ENGL 111, ENGL 121, or ENGL 131 (5 credits)
  - Either B WRIT 135 or ENGL 141 (5 credits)
- 100 Level Social Science Course (5 credits)
  - Any 100 level SSc designated course
- \*Social Science Core Course (5 credits) (ISS:CORE)
  - Choose one of the following: BIS 355, BIS 365, BIS 367, BISAES 305, BISAES 367, BISGST 303, BISGWS 301, BISGWS 302, BISMCS 333, BISLEP 301, or BISSTS 307
- \*Research Course (5 credits) (ISS:RESEARCH)
  - Either BIS 312 OR BIS 340
- \*Additional Methods course (ISS:METHODS)
  - Select from an approved list available on the IAS webpage (5 credits)

Additional ISS Electives- elective courses cannot also count toward the above requirements

- 10 credits of 200 level Social Science Coursework-any 200 level SSc designated courses (10 credits)
- 30 credits of Upper Division Social Science Coursework- any upper division SSc designated courses (30 credits)

Total = 70 credits

## SCHOOL OF IAS REQUIREMENTS & POLICIES

- \*courses must be completed at UW Bothell
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can overlap with 70 credit major coursework or it can be completed through elective credits. Please see the IPR page for course options.
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher for completion
- Upper Division Credit Policy: Of the credits applying to the Interdisciplinary Social Sciences major requirements, a minimum of 40 credits must be completed at the Upper Division (300-400) level.

## ADDITIONAL INFORMATION

Students who graduate with a Bachelor's degree in ISS have numerous career options. Some go on to work for social service agencies or educational institutions; others work in human resources, criminal justice, and urban planning. Others enter graduate or professional programs in one of the social sciences, education, law, social work, public administration, public health, medicine, or business. As important, students gain experience and document success in one of the crucial predictors of success in any of those fields: the ability to undertake a self-directed project in collaboration with others, to reflect critically on its development in process, and to complete it in a timely fashion.

## PROGRAM OF STUDY: MAJOR: LAW, ECONOMICS AND PUBLIC POLICY

### PROGRAM OVERVIEW

Law, Economics & Public Policy (LEPP) major is designed for students who want to explore how legal institutions shape policy decisions and the political and economic contexts that influence the creation of the law. The degree provides a grounding in economics and political science as students learn to analyze legal and policy problems, alternatives, and consequences. LEPP curriculum combines theoretical analysis and practical experience through applied coursework and undergraduate research, community-based learning and academic internship opportunities, and the possibility of contributing to and working on the UW Bothell Policy Journal. Like all IAS degrees, LEPP emphasizes core capacities in critical and creative thinking, interdisciplinary research, collaboration and shared leadership, and writing and communication.

This program of study leads to the following credential:

Bachelor of Arts degree with a major in Law, Economics, and Public Policy

### RECOMMENDED PREPARATION

- BIS 200 Introduction to Microeconomics
- BIS 175 Introduction to American Government
- BIS 226 Foundations of US Social Services
- BIS 282 Globalization
- BIS 284 International Relations

- BIS 279 Introduction to Law & Society

## ADMISSION REQUIREMENTS

- English Composition Coursework
  - B WRIT 133 OR B WRIT 134 OR ENGL 131 or equivalent Composition Course (5 credits)
  - B WRIT 135 OR E NGL 141 OR equivalent Composition course (5 credits)
- Introduction Economics Course
  - Microeconomics BIS 200/B BUS 220, ECON 200 or equivalent (5 credits)
- Introduction to American Government or American Politics
  - BIS 175, BIS 280, POL S 202 or equivalent (5 credits)

Minimum 2.0 grade for each course required for admission

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN LAW, ECONOMICS, AND PUBLIC POLICY CREDENTIAL OVERVIEW

The Law, Economics & Public Policy (LEPP) major is designed for students who want to explore how legal, political and economic institutions and contexts shape policy formation and development and what the implications of those policies are for issues of social justice. The degree provides a grounding in law, economics and political science as students learn to analyze legal decisions, economic disparities, political movements, and policy problems, alternatives, and consequences. The LEPP curriculum combines theoretical analysis and practical experience through applied coursework and undergraduate research, community-based learning and academic internship opportunities. LEPP students build a powerful foundation for graduate school and law school, and careers with social service organizations, NGOs and nonprofits, and local, state, and federal government.

## COMPLETION REQUIREMENTS

- LEPP Core Courses
  - BISLEP 301 (5 credits)
  - BISLEP 302 (5 credits)
- LEPP Statistics: BIS 215 OR B BUS 215 OR B MATH 215 OR STAT 220 OR STAT 221/CS&SS 221/SOC 221 OR QMETH 201 or STAT 290 (4-5 credits)
- LEPP Skills & Methods Course (5 credits) select from an approved list. See major webpage for list.
- LEPP Policy Foundation Courses (10 credits) select from an approved list. See major webpage for list.
- LEPP Policy Foundation and/or Policy Problem Courses (20 credits) select from an approved list. See major webpage for list.
- Additional IAS Coursework (20 credits at any level): Select from any School of IAS prefix (BIS, BISSKL, BISAES, BISCLA, BES, BISGST, BISIA, BISGWS, BISMCS, BISPSY, BISSTS, BISSTA)

Total: 70 Credits

## SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can overlap with 70 credit major coursework or it can be completed through elective credits. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to the major requirements, a minimum of 35 credits must be completed at the Upper Division (300-400) level.

## ADDITIONAL INFORMATION

Students in LEPP build a powerful foundation for careers with non-governmental organizations, policy analysis think-tanks, and local, state, and federal government. LEPP graduates are prepared to undertake graduate study in law, policy studies, public policy, and management, among other fields.

## PROGRAM OF STUDY: MAJOR: MEDIA AND COMMUNICATION STUDIES

### PROGRAM OVERVIEW

The Media and Communication Studies (MCS) major prepares students to develop and hone skills as critical readers and practitioners that cross a range of disciplines and professional contexts. Those who graduate with an MCS major think critically about access, use, and control of communication and media on the local, national, and global level. The major combines hands-on production with a rich grounding in media and communication theory and history that focuses on power, difference, and injustice. MCS students develop the intellectual capacities and skills needed to use media and communication effectively and ethically. MCS coursework integrates theory and practice through media production workshops, classroom seminars, and community-based research projects.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Media and Communication Studies

### RECOMMENDED PREPARATION

- BIS 161 Introduction to Film Narrative
- BIS 178 Introduction to Communication
- BIS 233 Participatory Media Culture
- BIS 235 Critical Media Literacy
- BIS 236 Introduction to Interactive Media
- BIS 237 Public Speaking and Communication
- BISMCS 234 Media and Communication Techniques
- BISMCS 240 Working with Video
- BISMCS 260 Working with Audio

## ADMISSION REQUIREMENTS

Students in good academic standing may declare this major at any time.

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN MEDIA AND COMMUNICATION STUDIES CREDENTIAL OVERVIEW

The Media and Communication Studies (MCS) major prepares students to develop and hone skills as critical readers and practitioners that cross a range of disciplines and professional contexts. Those who graduate with an MCS major think critically about access, use, and control of communication and media on the local, national, and global level. The major combines hands-on production with a rich grounding in media and communication theory and history that focuses on power, difference, and injustice. MCS students develop the intellectual capacities and skills needed to use media and communication effectively and ethically. MCS coursework integrates theory and practice through media production workshops, classroom seminars, and community-based research projects.

## COMPLETION REQUIREMENTS

- 10 credits of Composition Coursework
  - B WRIT 133 OR B WRIT 134 OR ENGL 131 OR equivalent (5 credits)
  - B WRIT 135 OR ENGL 141 OR equivalent (5 credits)
- BIS 290: Seminar in Intermediate Writing (5 credits) \*
- MCS Core Course (5 credits)- BISMCS 333
- MCS Communication Practice and Media Production Courses (MCS:P&P) (10 credits): select from an approved list. See the webpage for the approved list.
- MCS Courses (MCS) (25 credits): select from an approved list. See the webpage for the approved list.
- Additional IAS Coursework (20 credits at any level): Select from any School of IAS prefix (BIS, BISSKL, BISAES, BISCLA, BES, BISGST, BISGWS, BISIA, BISLEP, BISPSY, BISSTS, BISSTA)

\* BIS 290 is highly recommended to be taken before the MCS Core Course.\*

Total: 75 Credits

## SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can overlap with 75 credit major coursework or it can be completed through elective credits. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to the major requirements, a minimum of 35 credits must be completed at the Upper Division (300-400) level.

## ADDITIONAL INFORMATION

The major prepares students for careers in the media industries, including digital media production, journalism, writing, and strategic communication, as well as community organizing and social justice work. The MCS major also provides a strong foundation for students pursuing advanced degrees in Communication, Media Studies, Cultural Studies, and Media Production, among many other fields.

## PROGRAM OF STUDY: MAJOR: SCIENCE, TECHNOLOGY, AND SOCIETY

### PROGRAM OVERVIEW

The Science, Technology & Society (STS) degree examines emerging technologies and scientific ideas within social and cultural contexts. We use methods and approaches from the humanities and social sciences to study issues like algorithm ethics, digital surveillance, artificial intelligence, biomedical practice, smart cities, public health, and global climate change. Students in STS develop applied skills in research, writing, critical analysis, and creative practice, with a particular attention to power and knowledge production.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Science, Technology, and Society

### RECOMMENDED PREPARATION

- BIS 115 Digital Cultures
- BIS 232 Introduction to Data Visualization
- BIS 242 Environmental Geography
- BIS 245 Environment and Humanities
- BIS 252 Politics of Science

### ADMISSION REQUIREMENTS

Students in good academic standing may declare this major at any time.

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN SCIENCE, TECHNOLOGY, AND SOCIETY

### CREDENTIAL OVERVIEW

The Science, Technology & Society (STS) degree examines emerging technologies and scientific ideas within social and cultural contexts. We use methods and approaches from the humanities and social sciences to study issues like algorithm ethics, digital surveillance, artificial intelligence, biomedical practice, smart cities, public health, and global climate change. Students in STS develop applied skills in research, writing, critical analysis, and creative practice, with a particular attention to power and knowledge production.

### COMPLETION REQUIREMENTS

- 10 credits of Composition Coursework

- B WRIT 133 OR B WRIT 134 OR ENGL 131 OR equivalent (5 credits)
- B WRIT 135 OR ENGL 141 OR equivalent (5 credits)
- BISSTS 307 (5 credits)
- BISSTS 355 (5 credits)
- BES 301 (5 credits) min 2.0 grade
- BIS 312 OR BIS 340 (5 credits) min 2.0 grade
- Science, Technology, and Society coursework (25 credits) select from an approved list. See the webpage for the approved list.
- Approaches to Data coursework (5 credits) select from an approved list. See the webpage for the approved list.
- Additional IAS Coursework (20 credits at any level): Select from any School of IAS prefix (BIS, BISSKL, BISCLA, BES, BISGWS, BISGST, BISIA, BISLEP, BISMCS, BISPSY, BISAES, BISSTA)
- Total: 70 Credits

### SCHOOL OF IAS REQUIREMENTS & POLICIES

- Residency Requirement: 30 credits must be completed in residency at UW Bothell
- Cumulative GPA Requirement: Major GPA must be at a cumulative of 2.00 or higher
- Interdisciplinary Practices & Reflection (IPR): The IPR requirement can overlap with 70 credit major coursework or it can be completed through elective credits. Please see the IPR page for course options.
- Upper Division Credit Policy: Of the credits applying to the major requirements, a minimum of 35 credits must be completed at the Upper Division (300-400) level.

### ADDITIONAL INFORMATION

STS students work with faculty members trained in disciplines ranging from biology and mathematics to political economy and philosophy. Housed in Interdisciplinary Arts & Sciences, the major enables students to develop their skills in scientific and technological research along with their capacities for critical, creative, and ethical reflection. Students leave the program with the capacity to make informed decisions about the responsible use of science and technology -- as professionals and citizens.

Graduating STS students are prepared for careers with a wide variety of for-profit, not-for-profit, and governmental organizations that analyze, produce, and use scientific and technical knowledge. These careers include planning and administration, public and investor relations, and advocacy and communications, among other areas. STS students also pursue graduate and professional education in such fields as law, education, policy studies, and media and cultural studies.

## PROGRAM OF STUDY: MINOR: CREATIVE WRITING

### PROGRAM OVERVIEW

The Minor in Creative Writing enables students to explore and engage diverse creative writing practices and to develop artistic, critical and conceptual competence in an interdisciplinary context.

This program of study leads to the following credential:

- Minor in Creative Writing

### ADMISSION REQUIREMENTS

Students in good academic standing with a declared major may declare this minor at any time.

### MINOR IN CREATIVE WRITING

#### CREDENTIAL OVERVIEW

The Minor in Creative Writing enables students to explore and engage diverse creative writing practices and to develop artistic, critical and conceptual competence in an interdisciplinary context.

### COMPLETION REQUIREMENTS

- Core (5 credits)
- BISIA 219 Introduction to Interdisciplinary Arts  
20 Credits of courses in the area of Creative Writing Coursework  
Students are required to take at least 15 credits at the 300 or 400 level  
See the Creative Writing Minor website for list of courses
- No more than 10 credits from the Creative Writing Minor can be applied to a student's major requirements.

## PROGRAM OF STUDY: MINOR: DIVERSITY

### PROGRAM OVERVIEW

The Minor in Diversity Studies is an option for students who want to explore key concepts related to power, identity, and difference, and to understand how historical and structural relations of power and difference shape social relations.

This program of study leads to the following credential:

- Minor in Diversity

### ADMISSION REQUIREMENTS

Any undergraduate student who is declared in a major may declare a minor.

### MINOR IN DIVERSITY

#### CREDENTIAL OVERVIEW

The Diversity Minor is intended to acquaint students with a broad and introductory understanding of human diversity, domestic and abroad. Upon completion of the minor,



students should have foundational knowledge of socially constructed identities, including race, class, gender, sexuality, disability, age, ethnicity, and nationality.

#### COMPLETION REQUIREMENTS

- 5 credits: B EDUC 255/BIS 255: Critical Diversity Studies
- 5 credits: Course satisfying the University of Washington's Diversity (DIV) Requirement
- 15 credits: Upper Division Diversity Studies Minor Electives- See website for approved list of courses.
- No more than 10 credits from the Diversity Studies Minor can be applied to a student's major requirements. Minimum 15 credits taken in residence at UW Bothell.

### PROGRAM OF STUDY: MINOR: ECOLOGICAL RESTORATION

#### PROGRAM OVERVIEW

The minor in Ecological Restoration (ER) prepares students to address the complex relationships of human communities and ecological sustainability. ER minor is a tri-campus initiative (UW Bothell, UW Seattle, and UW Tacoma). Students may, but are not required to, take courses from more than one campus in order to earn the minor.

This program of study leads to the following credential:

- Minor in Ecological Restoration

#### MINOR IN ECOLOGICAL RESTORATION

##### CREDENTIAL OVERVIEW

The minor in Ecological Restoration (ER) prepares students to address the complex relationships of human communities and ecological sustainability. ER minor is a tri-campus initiative (UW Bothell, UW Seattle, and UW Tacoma). Students may, but are not required to, take courses from more than one campus in order to earn the minor.

#### COMPLETION REQUIREMENTS

- Introductory course in restoration ecology (5 credits)
- UW-REN capstone course sequence in ecological restoration (10 credits)
- Restoration related courses (10 credits)

Students must complete at least 15 credits of the minor at their home campus. Also, no more than 10 credits from the Ecological Restoration Minor can be applied to a student's major requirements. Students pursuing the BS in Science are not eligible to complete the Ecological Restoration Minor.

### PROGRAM OF STUDY: MINOR: GENDER, WOMEN, AND SEXUALITY STUDIES

#### PROGRAM OVERVIEW

The minor in Gender, Women & Sexuality Studies (GWSS) positions students to examine social, political, and cultural realities shaped by gender, sexuality, and power. GWSS approaches topics from transnational and intersectional perspectives, enabling students

to analyze and address issues of gender, sexuality, and social difference at personal, historical, institutional, and structural levels.

This program of study leads to the following credential:

- Minor in Gender, Women, and Sexuality Studies

## ADMISSION REQUIREMENTS

Students in good academic standing may declare this minor at any time.

## MINOR IN GENDER, WOMEN, AND SEXUALITY STUDIES

### CREDENTIAL OVERVIEW

The minor in Gender, Women & Sexuality Studies (GWSS) positions students to examine social, political, and cultural realities shaped by gender, sexuality, and power. GWSS approaches topics from transnational and intersectional perspectives, enabling students to analyze and address issues of gender, sexuality, and social difference at personal, historical, institutional, and structural levels.

### COMPLETION REQUIREMENTS

Core Course - 5 Credits

- BISGWS 301 Critical Gender & Sexuality Studies (5 credits)
- GWSS Coursework - 20 Credits- See website for approved course list
- At least 15 credits of minor course work must be at the 300 or 400 level

### SCHOOL OF IAS REQUIREMENTS & POLICIES

- School of IAS Major Students: Only 10 credits of major coursework can be applied to the GWSS Minor
  - GWSS Major Students cannot complete the GWSS Minor

## PROGRAM OF STUDY: MINOR: HUMAN RIGHTS

### PROGRAM OVERVIEW

The Minor in Human Rights is an option for students who are interested in the rapidly emerging field of human rights. The minor is a tri-campus initiative (UW Bothell, UW Seattle, and UW Tacoma). Students may, but are not required to, take courses from more than one campus in order to earn the minor.

This program of study leads to the following credential:

- Minor in Human Rights

## MINOR IN HUMAN RIGHTS

### COMPLETION REQUIREMENTS

- Human Rights Core (Tier One, 10 credits)
- Human Rights Broad Context (Tier Two, 5 credits)
- Human Rights Core or Broad Context (Tier One or Tier Two, 10 credits)

- Human Rights Core (Tier One 10 Credits)  
Courses concerned with the study of “human rights” (i.e. as defined in the Universal Declaration of Human Rights) as a core concept.
- Human Rights Broad Context (Tier Two, 5 credits)  
Courses concerned with human rights in a broad context, e.g. poverty, race/ethnicity, gender.
- In addition to the courses listed above, students must complete the equivalent of 3 credits of a practical experience in a human rights-related area. This requirement may be met through an internship, practicum, yearlong participation in the student human rights club, Human Equality and Rights Everywhere (HERE), international study abroad program, the Washington D.C. Seminar on Human Rights or a demonstrated equivalent.

## PROGRAM OF STUDY: MINOR: PERFORMANCE

### PROGRAM OVERVIEW

The minor in Performance enables students to explore and engage diverse performing arts practices and to develop artistic and conceptual competence in an interdisciplinary context.

This program of study leads to the following credential:

- Minor in Performance

### ADMISSION REQUIREMENTS

Students in good academic standing with a declared major may declare this minor at any time.

### MINOR IN PERFORMANCE

#### CREDENTIAL OVERVIEW

The minor in Performing Arts (PA) enables students to explore and engage diverse performing arts practices and to develop artistic and conceptual competence in an interdisciplinary context

### COMPLETION REQUIREMENTS

Core ( 5 Credits)

- BISIA 219 Introduction to Interdisciplinary Arts
- Additional Performance Coursework (20 credits): A minimum of 10 credits of Performance coursework must be completed at the 300-400 level.
- See the Performance Minor website for list of courses. No more than 10 credits from the Performance Minor can be applied to a student’s major requirements.

## PROGRAM OF STUDY: MINOR: POLICY STUDIES

### PROGRAM OVERVIEW

The Policy Studies minor is designed to provide students with the analytical foundations they will need to understand policy formation, implementation, and evaluation.

This program of study leads to the following credential:

- Minor in Policy Studies

### ADMISSION REQUIREMENTS

Students in good academic standing with a declared major may declare this minor at any time.

### MINOR IN POLICY STUDIES

#### COMPLETION REQUIREMENTS

- Microeconomics (B BUS 220/BIS 200, ECON 200 or equivalent) (5 credits)
- BISLEP 302 Policy Analysis OR BISGST 324 International Political Economy (5 credits)
- BISLEP 301 Law, Economics and Public Policy OR BIS 338 Political Institutions and Processes (5 credits)
- Statistics (B BUS 215, BIS 215, B MATH 215, STAT 220, STAT 290, STAT 221/CS&SS 221/SOC 221 or equivalent) (5 credits)
- Methods (BIS 312, BES 301, BHS 300, B EDUC 300 (5 credits)
- Policy Studies Elective (5 credits)- See minor website for list of approved courses
- NOTE: Students pursuing a major in Law, Economics and Public Policy are not eligible to complete the minor in Policy Studies

## PROGRAM OF STUDY: MINOR: SCIENCE, TECHNOLOGY, AND SOCIETY

### PROGRAM OVERVIEW

The most pressing issues of our time, from global climate change to digital surveillance, are at once social and scientific, political and technological. The Science, Technology & Society minor explores these integral relationships, situating emerging technologies and scientific ideas within their complex histories and social politics. Students in STS work with faculty members trained in a range of disciplines from psychology and biology to geography and media studies. They develop skills in applied scientific and technical research as well as capacities for critical, creative, and ethical reflection, examining the relationship between power and knowledge production in science and technology contexts.

This program of study leads to the following credential:

- Minor in Science, Technology, and Society

## MINOR IN SCIENCE, TECHNOLOGY, AND SOCIETY

### CREDENTIAL OVERVIEW

The most pressing issues of our time, from global climate change to digital surveillance, are at once social and scientific, political and technological. The Science, Technology & Society minor explores these integral relationships, situating emerging technologies and scientific ideas within their complex histories and social politics. Students in STS work with faculty members trained in a range of disciplines from psychology and biology to geography and media studies. They develop skills in applied scientific and technical research as well as capacities for critical, creative, and ethical reflection, examining the relationship between power and knowledge production in science and technology contexts.

### COMPLETION REQUIREMENTS

Core Courses (10 credits)

- BISSTS 307: Science, Technology & Society
- BISSTS 355: History of Science and Technology

Methods (5 credits): Take one of the following courses.

- BES 301: Science Methods and Practice
- BIS 312: Approaches to Social Research
- BIS 340: Approaches to Cultural Research

Science, Technology, and Society courses (10 credits total): selected from an approved list. See the webpage for the approved list.

Total: 25 credits

Students must earn a minimum cumulative 2.0 GPA for courses applied to the minor. A minimum of 15 credits applied to the minor must be completed in residence at UW Bothell.

### ADDITIONAL INFORMATION

For specific course lists information, please visit the minor webpage:

<https://www.uwb.edu/ias/undergraduate/minors/science-technology-society>

## PROGRAM OF STUDY: MINOR: VISUAL AND MEDIA ARTS

### PROGRAM OVERVIEW

The Minor in Visual & Media Arts enables students to explore and engage diverse visual and media arts practices and to develop artistic, critical and conceptual competence in an interdisciplinary context.

This program of study leads to the following credential:

- Minor in Visual and Media Arts

## ADMISSION REQUIREMENTS

Students in good academic standing with a declared major may declare this minor at any time.

## MINOR IN VISUAL AND MEDIA ARTS

### CREDENTIAL OVERVIEW

The Minor in Visual & Media Arts enables students to explore and engage diverse visual and media arts practices and to develop artistic, critical and conceptual competence in an interdisciplinary context.

### COMPLETION REQUIREMENTS

- Core (5 credits)
  - BISIA 219 Introduction to Interdisciplinary Arts
- 20 credits of courses in the area of Visual and Media Arts Coursework  
Students are required to take at least 15 credits at the 300 or 400 level
  - see the VMA Minor website for list of approved courses.
- No more than 10 credits from the Visual and Media Arts Minor can be applied to a student's major requirements.

## PROGRAM OF STUDY: GEOGRAPHIC INFORMATION SYSTEMS

### PROGRAM OVERVIEW

The Minor in Geographic Information Systems (GIS) is designed for students who are interested in the rapidly expanding field of geo-technologies and geo-techniques, and learning how to apply them to solve complex socio-environmental problems.

This program of study leads to the following credential:

- Minor in Geographic Information Systems

## ADMISSION REQUIREMENTS

Students in good academic standing may declare this minor at any time. BA and BS in Data Visualization major students are not eligible to complete this minor.

## MINOR IN GEOGRAPHIC INFORMATION SYSTEMS

### COMPLETION REQUIREMENTS

Core Courses (10 credits)

- BIS 342 Introduction to GIS
- BIS 343 Geographic Visualization
- Advanced geospatial research methods course (5 credits): See website for approved list
- Diverse approaches to data analysis and visualization (10 credits): See website for approved list.

Students must earn a minimum cumulative 2.00 GPA for courses applied to the minor. A minimum of 15 credits applied to the minor must be completed in residence at UW

Bothell. Students are required to take at least 15 credits at the 300-400 level coursework out of 25 credits. Students pursuing either the BA or BS in Data Visualization at UW Bothell are not eligible to complete the Geographic Information Systems Minor.

## GRADUATE PROGRAMS

### INTERDISCIPLINARY ARTS AND SCIENCES

360 Bothell Campus Building UW1

425.352.3406

[iasgrad@uw.edu](mailto:iasgrad@uw.edu)

### PROGRAM OF STUDY: MASTER OF ARTS IN POLICY STUDIES

#### PROGRAM OVERVIEW

The Master of Arts in Policy Studies is a community of people who believe policy can make a difference, promote the public good, and advance social equity. It offers an integrated, interdisciplinary approach to the study and practice of contemporary policymaking. Students learn rigorous policy analysis and research skills, and a thorough understanding of the policymaking process. They also develop the professional competencies in management, leadership, strategic planning, and program evaluation essential to working effectively with diverse groups for sustainable social change. The Policy Studies program prepares students for a variety of careers involving policy analysis, research, community development, public service, democracy building, consulting and social problem solving. Policy Studies alumni act as leaders and change makers regionally, nationally and internationally in public, private, and non-profit organizations. The Policy Studies learning community is cohort-based. Students enter with diverse academic, professional, and personal backgrounds and a range of policy interests and commitments. Evening classes are designed for working professionals, recent graduates, and returning students. Through a scaffolded curriculum of core classes, a community-based practicum experience, and a capstone project, students acquire the depth of knowledge, practical experiences, and sophisticated professional skills critical to their success as future leaders.

This program of study leads to the following credential:

- Master Of Arts In Policy Studies

#### ADMISSION REQUIREMENTS

Please see this program's Graduate Admissions Page for specific requirements.

### MASTER OF ARTS IN POLICY STUDIES

#### COMPLETION REQUIREMENTS

48 credits

1. Core (30 credits): BPOLST 502, BPOLST 509 (5 credits total), BPOLST 510, BPOLST 511, BPOLST 513, BPOLST 514
2. Capstone (8 credits): BPOLST 515
3. Research Methods (5 credits): BPOLST 594 Research Design (5)

4. Elective (5 credits): Any 500-level BPOLST course excluding core classes.

## PROGRAM OF STUDY: MASTER OF FINE ARTS (CREATIVE WRITING AND POETICS)

### PROGRAM OVERVIEW

The Master of Fine Arts in Creative Writing & Poetics is dedicated to helping each student develop their creative work through a course of study that encourages exploration and discovery. We organize our curriculum into areas of inquiry rather than genres, so students enjoy the freedom to experiment across genres and media as suits their creative purposes. Our program invites students to participate in a community concerned with the pursuit of creative writing in a rapidly changing society. In the first year, students participate in a sequence of paired workshops and poetics seminars. Workshops and seminars explore the central question of poetics: why do we write how we write? The sequence explores diverse genres and writing practices in relation to social and cultural change; relationships between fact and imagination; generative research methods; and processes of thinking and memory in relation to technologies and media. The second year is thesis-intensive, focused on the development and completion of independent creative work, in or across the genre(s), forms(s) or media of your choosing, together with a poetics statement that situates you and your individual artistic practice. A Thesis Practicum provides students with mentored opportunities to practice presenting or performing artistic work in progress, submitting for publication, or interning at local arts and educational organizations, in accordance with their individual goals. The second year can be completed part-time or full-time, in residency or nonresidency. Each academic year, kicks off with a Fall Convergence, a gathering of nationally and internationally renowned writers and artists to engage topics in contemporary poetics. The year closes with the Spring Festival, where graduating students share their thesis work publicly and receive a benedictory reading from a student-nominated invited speaker.

This program of study leads to the following credential:

- Master Of Fine Arts (Creative Writing And Poetics) (fee-based)

### ADMISSION REQUIREMENTS

Please see this program's Graduate Admissions Page for specific requirements.

## MASTER OF FINE ARTS (CREATIVE WRITING AND POETICS) (FEE-BASED)

### COMPLETION REQUIREMENTS

51 credits

- Core Courses (30 credits): BCWRIT 500, BCWRIT 510, BCWRIT 501, BCWRIT 511, BCWRIT 502, BCWRIT 512
- Thesis Practicum (6 credits): BCWRIT 599
- Thesis (15 credits): BCWRIT 700



# SCHOOL OF NURSING AND HEALTH STUDIES

## SCHOOL OF NURSING AND HEALTH STUDIES

UW1 211 Bothell Campus

425-352-5376

[uwnhs@uw.edu](mailto:uwnhs@uw.edu)

The School of Nursing and Health studies offers three degree programs; A Master of Nursing, a Bachelor of Science in Nursing and a Bachelor of Arts in Health Studies. As a School, we are committed to supporting and improving the health of diverse communities through excellence and innovation in education, scholarship, leadership and service. The health of individuals, communities and the globe are inextricable. Whether as a nurse, a global health worker or patient, understanding one's position and contributions to a healthier world is the goal of health literacy. A social justice approach to health literacy requires the critical thinking, writing and community engagement skills that are central to the mission of UW Bothell. The interdisciplinary faculty in the School of Nursing and Health Studies create unique educational approaches grounded in inclusive learning environments that are accessible, oriented to life-long learning and are based on the highest professional standards.

- Undergraduate Programs
  - Program of Study: Major: Health Studies
    - Bachelor of Arts degree with a major in Health Studies
  - Program of Study: Major: Nursing
    - Bachelor of Science in Nursing (Direct Entry)
    - Bachelor of Science in Nursing degree
  - Program of Study: Minor: Global Health
    - Minor in Global Health
  - Program of Study: Minor: Health Studies
    - Minor in Health Education and Promotion
    - Minor in Health Studies
- Graduate Programs
  - Program of Study: Master Of Nursing
    - Master Of Nursing
    - Master of Nursing (Administrative Leadership)
    - Master of Nursing (BSN/MN)
    - Master of Nursing (Nurse Educator)
  - Program of Study: Master of Science in Community Health and Social Justice
    - Master of Science in Community Health and Social Justice

## UNDERGRADUATE PROGRAMS

SCHOOL OF NURSING AND HEALTH STUDIES

UW1 211 Bothell Campus

425-352-5376

[uwnhs@uw.edu](mailto:uwnhs@uw.edu)

## PROGRAM OF STUDY: MAJOR: HEALTH STUDIES

### PROGRAM OVERVIEW

In the Health Studies program, students develop and apply a range of skills for public health practice. Students explore the social and biological predictors of health; conduct policy analyses; use health education and community engagement strategies; apply social justice critiques; understand global health perspectives, and evaluate health related research. The student will develop critical thinking and encourage knowledge analysis and synthesis while building technical and analytical skills to address challenges in protecting the health of communities from local to global.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Health Studies

### ADMISSION REQUIREMENTS

Minimum 30 credits

- Two college English composition courses (10 credits) with a minimum grade of 2.0 in each course
- A course that satisfies Reasoning (RSN)
- A minimum of 10 credits in each of the Areas of Inquiry (A&H, SSc, NSc)
- It is preferred that students complete a 5 credit statistics class (Any introductory-level statistics course is acceptable)

Transfer applicants must also have satisfied:

- All university admission requirements for transfer or international applicants.
- English Proficiency Requirement: All applicants for whom English is a non-native language may have to provide proof of English proficiency.

### BACHELOR OF ARTS DEGREE WITH A MAJOR IN HEALTH STUDIES

#### COMPLETION REQUIREMENTS

Health Studies Core Courses – 35 credits (a grade of 2.0 or higher is required for each core course)

- Introduction to Public Health – BHS 201 (5 credits)
- Community Health Promotion & Communication – BHS 210 (5 credits)
- Principles of Health Research – BHS 300 (5 credits)
- Social Dimensions of Health – BHS 302 (5 credits)
- Introduction to Healthcare Policy and Systems – BHS 305 (5 credits)
- Introduction to Epidemiology – BHS 403 (5 credits)
- Fieldwork in Health – BHS 496 (5 credits)

Approved Health Studies Electives with at least ten credits in B HLTH courses – 35 credits  
Statistics – 5 credits (a grade of 1.75 or higher is required)

Upper Division (300-400 level) UW Elective Courses – 15 credits

English Composition – 5 credits (a grade of 2.0 or higher is required)

Writing Across the Curriculum – 10 credits

Reasoning – 5 credits

Diversity – 5 credits  
Arts & Humanities – 15 credits  
Social Sciences – 15 credits  
Natural Sciences – 15 credits

## PROGRAM OF STUDY: MAJOR: NURSING

### PROGRAM OVERVIEW

The University of Washington Bothell Bachelor of Science in Nursing (BSN) degree is accredited as part of the University of Washington School of Nursing and awards a University of Washington degree. The degree program is combined with the UW School of Nursing's acclaimed professional program with the University of Washington Bothell's well-rounded arts and sciences curriculum, building a foundation of knowledge in nursing science, humanities and social sciences, and related professional course work. Critical thinking, decision making, and oral and written communication skills are emphasized. The School of Nursing and Health Studies offers an educational pathway to earn a Bachelor of Science in Nursing from the University of Washington Bothell; the RN-to-BSN degree completion program.

This program of study leads to the following credentials:

- Bachelor of Science in Nursing (Direct Entry)
- Bachelor of Science in Nursing degree

### ADMISSION REQUIREMENTS

- UW Bothell general transfer admissions requirements:
- \* English Proficiency as deemed required by the Office of Admissions
- Associate degree in Nursing or diploma in nursing
- Active unencumbered Registered Nurse licensure in the State of Washington
- Applicants pending passage of the NCLEX are conditionally admitted for two quarters.
- A minimum of 90 quarter credits
- English Composition: 5 credits
- Arts & Humanities: 10 credits
- Statistics: 4 to 5 credits
- Microbiology: 3 to 5 credits
- Anatomy & Physiology with a Lab: 10 credits
- \*Chemistry: 5 credits
- A minimum grade of 2.0 or higher in all BSN prerequisite coursework outlined above
- National and State Criminal Background Check with acceptable results

## BACHELOR OF SCIENCE IN NURSING (DIRECT ENTRY)

### CREDENTIAL OVERVIEW

The First Year RN to BSN degree program is an innovative dual admissions program between the UW Bothell School of Nursing and Health Studies RN to BSN program and the Everett Community College (EvCC) Associate Degree in Nursing program; two long

standing nursing education programs. The program is designed specifically for university first-year applicants. Students complete the EvCC and RN to BSN prerequisites at UW Bothell their first year and then study off-site for two years in the RN program of our community college partner institution, later returning for senior year at UW Bothell in the RN to BSN program. Students graduate with two degrees and completion of RN licensure; An Associate in Nursing Degree from the Everett Community College Nursing Program in preparation for RN licensure, and a Bachelor of Science in Nursing Degree from the UW Bothell.

### COMPLETION REQUIREMENTS

- Transfer Credit – 90
- NCLEX-RN Exam Completion Credits - 45
- Upper-Division Nursing Courses - 35
- Upper Division Non-Nursing UWB Electives - 10
- 90 credits must be upper division (300-400 level)
- Completion of last 45 credits at UWB
- Cumulative grade-point average of 2.0 or higher
- Minimum 2.0 grade in all BSN degree program coursework

### BACHELOR OF SCIENCE IN NURSING DEGREE

#### CREDENTIAL OVERVIEW

The RN to BSN is a degree completion program for graduating, new and experienced Registered Nurses licensed in Washington State who have completed an Associate Degree in Nursing or a Nursing Diploma, and who are ready to advance their nursing education. The program is grounded by the School's student centered and community-partner based nursing mission and values the students' nursing education and professional experience with curriculum that applies directly to the nursing practice. Students in the program benefit by working with community partners, developing their critical thinking abilities in an interdisciplinary setting with faculty actively engaged in academic scholarship and who are committed to addressing the barriers and challenges of providing quality health care to all segments of society. The RN to BSN program awards 45 credits for completion of the Washington State RN - NCLEX exam toward the 90 credits required to complete the program.

### COMPLETION REQUIREMENTS

- Transfer Credit – 90
- NCLEX-RN Exam Completion Credits - 45
- Upper-Division Nursing Courses - 35
- Upper Division Non-Nursing UWB Electives - 10
- 90 credits must be upper division (300-400 level)
- Completion of last 45 credits at UWB
- Cumulative grade-point average of 2.0 or higher

- Minimum 2.0 grade in all BSN degree program coursework

### ADDITIONAL INFORMATION

Intended for students holding an RN, and an Associate Degree in Nursing or Nursing Diploma from a regionally accredited institution. The RN-to-BSN degree completion program values the professional experience of Registered Nurses, allows for students to apply their learning to their professional practice, allows students to explore their own interests, and prepares students for graduate level study. The curriculum meets the American Association of Colleges of Nursing's Essentials of Baccalaureate Education for Professional Nursing Practice and is accredited by the Commission on Collegiate Nursing Education. The School of Nursing and Health Studies at UW Bothell is committed to providing access to education through offering flexible scheduling options. It is based on an understanding that the student is a practicing nurse who must balance professional and personal responsibilities with educational pursuits.

The UW Bothell School of Nursing and Health Studies offers RN-to-BSN students:

- A hybrid in-person and online schedule with class meetings one day every other week,
- A 4 quarter or an 8-9 quarter completion plan,
- Admits multiple quarters and locations: Summer Bothell; Fall Bothell; Fall Everett; Fall Shoreline; Winter Everett

### PROGRAM OF STUDY: MINOR: GLOBAL HEALTH

#### PROGRAM OVERVIEW

Global Health is a diverse field of research and practice that aims to improve population health and work towards equity for all people. The minor in Global Health will introduce students to a range of career possibilities related to global health through critically-engaged and multi-disciplinary coursework and experiences. The minor invites students with diverse career plans and majors to consider how their training can be applied to global health challenges and opportunities. Through the minor, students will: learn to critically analyze global health trends; understand programs, policies, and social movements that aim to improve health around the world; build a foundation for lifelong learning about cultural humility, social justice, equity, and inclusion in relation to health; and apply knowledge to practice by engaging in experiential, practice-oriented, and problem-based learning. The minor is designed to develop skills in global health practice that can be applied in pursuing careers or further training related to global health.

This program of study leads to the following credential:

- Minor in Global Health

### MINOR IN GLOBAL HEALTH

#### CREDENTIAL OVERVIEW

Through the minor, students will: learn to critically analyze global health trends; understand programs, policies, and social movements that aim to improve health around

the world; build a foundation for lifelong learning about cultural humility, social justice, equity, and inclusion in relation to health; and apply knowledge to practice by engaging in experiential, practice-oriented, and problem-based learning. The minor is designed to develop skills in global health practice that can be applied in pursuing careers or further training related to global health.

## COMPLETION REQUIREMENTS

Minimum 25 credits

- B HLTH 201 Introduction to Global Health (5 credits)
- B HLTH 301 Global Health Practice: Systems, Places, and People (5 credits)
- B HLTH 423 Global Health: Critical Perspectives (5 credits)

Electives (10 credits) At least 5 credits from two of the three following categories must be completed:

- Core topics in global health
- Populations, regions, & issues
- Skills & applications

Students may not have more than 10 credits of overlap between this minor and their chosen major.

## PROGRAM OF STUDY: MINOR: HEALTH STUDIES

### PROGRAM OVERVIEW

The Minor in Health Studies will prepare students to identify the various factors that influence health and wellness at individual, community and global levels.

This program of study leads to the following credentials:

- Minor in Health Education and Promotion
- Minor in Health Studies

## MINOR IN HEALTH EDUCATION AND PROMOTION

### CREDENTIAL OVERVIEW

The Minor in Health Education and Promotion will prepare students to improve and promote health locally and globally through effective community based, culturally tailored health education, communication, leadership and advocacy. This minor prepares students to take the Certified Health Education Specialist (CHES) exam through the National Commission for Health Education & Credentialing (NCHEC), allowing them to be nationally certified Health Educators.

## ADMISSION REQUIREMENTS

- BHS 201 – Introduction to Public Health (5 credits)

## COMPLETION REQUIREMENTS

- BHS 300: Principles of Health Research OR approved introductory research course (5 credits)
- BHS 305: Introduction to Healthcare Systems, Policy, and Advocacy (5 credits)

- B HLTH 435: Foundations & Principles of Health Education & Communication (5 credits)
- B HLTH 436: Introduction to Management & Leadership for Health Professionals (5 credits)
- B HLTH 437: Program Planning and Strategies for Health Promotion (5 credits)
- B HLTH 438: Program Evaluation for Health Education & Promotion (5 credits)

Total number of credits required: 30

## MINOR IN HEALTH STUDIES

### COMPLETION REQUIREMENTS

Required Health Studies core courses: 10 credits

- BHS 201 Introduction to Public Health (5 credits)
- BHS 302 Social Dimensions of Health (5 credits)
- One of the following research courses for 5 credits:
  - BHS 300 Principles of Health Research (5 credits)
  - BIS 312 Approaches to Social Research (5 credits)
  - BES 301 Science Methods and Practice (5 credits)

BNURS 460 Translating Scholarly Knowledge to Nursing Practice (5 credits)

- Credits of approved Health Studies electives with at least five credits in completed with a BHS or BHLTH prefix.

## GRADUATE PROGRAMS

### SCHOOL OF NURSING AND HEALTH STUDIES

#### PROGRAM OF STUDY: MASTER OF NURSING

##### PROGRAM OVERVIEW

The University of Washington Bothell Master of Nursing program prepares nurses for advanced roles in areas such as nurse education, administrative leadership, and population health. The program includes core coursework, completion of at least 100 hours of individualized fieldwork practice and a written capstone project. This practice component permits substantive experience in a variety of settings in order to examine advanced nursing roles and apply core concepts into the real-world context of health care. The curriculum meets the American Association of Colleges of Nursing's Essentials of Master's of Nursing (2011) and is accredited by the Commission on Collegiate Nursing Education. The content highlights scholarly inquiry, health care systems, policies, and social issues related to the pressing health issues facing our state, nation, and the global community. Central to curriculum is the development of leadership skills in practice, research and education through theory, research methods, health care policy, and program development and evaluation. Core nursing values emerge through coursework in ethics, diversity and social justice.

This program of study leads to the following credentials:

- Master Of Nursing
- Master of Nursing (Administrative Leadership)

- Master of Nursing (BSN/MN)
- Master of Nursing (Nurse Educator)

## ADMISSION REQUIREMENTS

Please see this program's Graduate Admissions Page for current requirements.

Master Of Nursing

## COMPLETION REQUIREMENTS

51-55 credits, depending on option

- Core Nursing Coursework (24 credits): B NURS 504, B NURS 509, B NURS 520, B NURS 522, B NURS 525, B NURS 506
- Fieldwork and Capstone (11 credits): B NURS 590, B NURS 591, B NURS 592
- Additional Requirements: See additional option-specific requirements below.

## ADDITIONAL COMPLETION REQUIREMENTS

Option-specific requirements

- Electives (16 credits): 400-, 500-, and/or 600-level coursework from degree program or from other UW degree programs (degree plan is developed in conjunction with and approved by graduate faculty adviser).

## MASTER OF NURSING (ADMINISTRATIVE LEADERSHIP)

### COMPLETION REQUIREMENTS

51-55 credits, depending on option

- Core Nursing Coursework (24 credits): B NURS 504, B NURS 509, B NURS 520, B NURS 522, B NURS 525, B NURS 506
- Fieldwork and Capstone (11 credits): B NURS 590, B NURS 591, B NURS 592
- Additional Requirements: See additional option-specific requirements below.

Additional Completion Requirements

Option-specific requirements - this option requires a total of 55 credits

- Administrative Leadership Coursework (20 credits): B HLTH 532, B HLTH 534, B HLTH 536, B HLTH 538, B HLTH 540

## MASTER OF NURSING (BSN/MN)

### COMPLETION REQUIREMENTS

51-55 credits, depending on option

- Core Nursing Coursework (24 credits): B NURS 504, B NURS 509, B NURS 520, B NURS 522, B NURS 525, B NURS 506
- Fieldwork and Capstone (11 credits): B NURS 590, B NURS 591, B NURS 592
- Additional Requirements: See additional option-specific requirements below.



## MASTER OF NURSING (NURSE EDUCATOR)

### COMPLETION REQUIREMENTS

51-55 credits, depending on option

- Core Nursing Coursework (24 credits): B NURS 504, B NURS 509, B NURS 520, B NURS 522, B NURS 525, B NURS 506
- Fieldwork and Capstone (11 credits): B NURS 590, B NURS 591, B NURS 592
- Additional Requirements: See additional option-specific requirements below.

### ADDITIONAL INFORMATION

#### PROGRAM LEARNING GOALS

- Evaluate the adequacy of underlying knowledge from nursing science, related fields and professional foundations as it informs advanced practice.
- Competently access and manage health-related issues within a defined population or care system, and evaluate the effectiveness of these advanced nursing practices.
- Utilize knowledge and skills in professional practice among diverse and multicultural populations.
- Demonstrate competence in development of inquiry relevant to practice, education or administration.
- Develop and utilize leadership strategies that foster improvement of health care.

## PROGRAM OF STUDY: MASTER OF SCIENCE IN COMMUNITY HEALTH AND SOCIAL JUSTICE

### PROGRAM OVERVIEW

This program of study leads to the following credential:

- Master of Science in Community Health and Social Justice

### ADMISSION REQUIREMENTS

Contact department for requirements.

### COMPLETION REQUIREMENTS

Contact department for requirements.

## SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS (STEM)

### BIOLOGICAL SCIENCE

352 Bothell Discovery Hall

425-352-3746

stemadv@uw.edu

The Bachelor of Science in Biology degree provides students with a foundation that will enable them to pursue careers or graduate study in medicine, dentistry, health professions, pharmaceuticals, biotechnology, ecology, biology, and biology education. The curriculum combines theory with hands-on experience that draws on the University of Washington Bothell's strengths: small classes; strong faculty-student mentorship; integrative, problem-based teaching approaches; and research and internship opportunities outside the classroom. Undergraduate research is an essential part of our degree program. Faculty and students utilize biology laboratory space designed specifically for research and conduct field studies on the North Creek Wetlands Restoration, which lies adjacent to our campus.

- Undergraduate Programs
  - Program of Study: Major: Biology
    - Bachelor of Science degree with a major in Biology
  - Program of Study: Minor: Biology
    - Minor in Biology
  - Program of Study: Minor: Neuroscience
    - Minor in Neuroscience

## UNDERGRADUATE PROGRAMS

### BIOLOGICAL SCIENCE

352 Bothell Discovery Hall

425-352-3746

stemadv@uw.edu

### PROGRAM OF STUDY: MAJOR: BIOLOGY

#### PROGRAM OVERVIEW

The Bachelor of Science in Biology degree provides students with a foundation that will enable them to pursue careers or graduate study in medicine, dentistry, health professions, pharmaceuticals, biotechnology, ecology, biology, and biology education. The curriculum combines theory with hands-on experience that draws on the University of Washington Bothell's strengths: small classes; strong faculty-student mentorship; integrative, problem-based teaching approaches; and research and internship opportunities outside the classroom. Undergraduate research is an essential part of our degree program.

This program of study leads to the following credential:

- Bachelor of Science degree with a major in Biology

### ADMISSION REQUIREMENTS

#### Chemistry Series

- B CHEM 143/144 General Chemistry I w/ Lab
- B CHEM 153/154 General Chemistry II w/ Lab
- B CHEM 163/164 General Chemistry III w/ Lab

Minimum 2.00 cumulative GPA required for Chemistry Series courses.

#### Introductory Biology

- B BIO 180 Introductory Biology I
- B BIO 200 Introductory Biology II
- B BIO 220 Introductory Biology III

Minimum 2.0 grade is required in each of the Introductory Biology courses

### BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN BIOLOGY

#### COMPLETION REQUIREMENTS

Required Courses — Complete all of the following:

##### Introductory Requirements

- B BIO 180 Introductory Biology I
- B BIO 200 Introductory Biology II
- B BIO 220 Introductory Biology III

Minimum 2.0 grade is required in each of the Introductory Biology courses

- B CHEM 143/144 General Chemistry I w/ Lab
- B CHEM 153/154 General Chemistry II w/ Lab
- B CHEM 163/164 General Chemistry III w/ Lab

Minimum 2.00 cumulative GPA required for Chemistry Series courses.

Mathematics — Choose one course:

- STMATH 124 Calculus I
- B MATH 144 Calculus for the Life and Social Sciences

Physics — Choose one set of courses:

- B PHYS 114/117 General Physics I w/ Lab and B PHYS 115/117 General Physics II w/ Lab
- B PHYS 121 Mechanics and B PHYS 122 Electromagnetism

Statistics — Choose one course - See approved list on the division webpage.

Biology Requirements:

- B BIO 360 Introduction to Genetics
- B BIO 466 Evolution

Ecology — Choose one course:

- BES 312 Ecology
- B BIO 471 Plant Ecology

Cell Biology — Choose one course:

- B BIO 370 Microbiology I
- B BIO 372 Stem Cells
- B BIO 380 Cell Biology

Physiology — Choose one course:

- B BIO 351 Principles of Anatomy and Physiology I
- B BIO 352 Principles of Anatomy and Physiology II

Investigative Biology — Choose one course:

- B BIO 495 Investigative Biology
- Approved Undergraduate Research (B BIO 499)
- Approved Non-Credit Internship / Other Experience

Biology and Society — from the approved list of courses

- Biology Electives — Choose 20 credits of coursework from at least two different categories. Each elective course is 5 credits unless otherwise noted.
- Category A – Ecology/Diversity/Evolution – See approved list maintained on the division website
- Category B – Cell/Molecular Biology – See approved list maintained on the division website
- Category C – Physiology/Neurobiology – See approved list maintained on the division website
- Other Electives - Do not count towards “two different categories” requirement – See approved list maintained on the division website

Additional Courses

- As needed to fulfill University General Education Requirements and to equal 180 credits

### ADDITIONAL INFORMATION

If more than one course is taken from the list of courses that satisfy the Ecology, Cell Biology, or Physiology requirement, then the additional courses may be counted as Biology Electives. For example, if a student takes both Cell Biology and Microbiology, one can count toward the Cell Biology requirement, and the other as a B-category Biology Elective. Some courses may be used to satisfy the Biology and Society requirement, or a Biology Elective requirement, but a single course cannot be used to satisfy both requirements. For example, BES 489 (Pacific Northwest Ecosystems) may count either as a Biology elective or as a Biology and Society course, but not both.

Major GPA

Minimum cumulative GPA of 2.00 is required for all courses applied toward requirements for the Biology major, including math, physics, chemistry, and biology courses, including upper-division electives required for the major. Minimum 2.0 grade is required in each of the Introductory Biology courses (B BIO180, B BIO200, and B BIO220).

### PROGRAM OF STUDY: MINOR: BIOLOGY

#### PROGRAM OVERVIEW

The University of Washington Bothell Biology Minor offers students an opportunity to delve more deeply into this field through both classroom and laboratory experiences. Students complete the introductory biology sequence, then choose from upper-level electives to complete the minor. Many areas of study intersect with biology, from natural sciences (chemistry, physics, environmental science, climate science) to computer science, mathematics, engineering, and disciplines outside the STEM fields (business, education, ethics, environmental studies); the Biology Minor allows students majoring in these and other areas to explore biology, to better understand the connections between biology and their areas of study, and to prepare for careers that involve the biological sciences.

This program of study leads to the following credential:

- Minor in Biology

## MINOR IN BIOLOGY

### COMPLETION REQUIREMENTS

Required Courses (15 credits) — Complete all of the following:

- B BIO 180 (Introductory Biology I)
- B BIO 200 (Introductory Biology II)
- B BIO 220 (Introductory Biology III)
- Elective Courses (20 credits)

Choose 20 credits of coursework from at least two different categories on the list of electives for the major (see previous page). Each elective course is 5 credits unless otherwise noted.

For the purposes of the Biology minor, Evolution (B BIO 466) is a Category A elective, and Introduction to Genetics (B BIO 360) is a Category B elective.

## PROGRAM OF STUDY: MINOR: NEUROSCIENCE

### PROGRAM OVERVIEW

Neuroscience explores the molecular, cellular, and systems bases of neural function, as well as the neural basis of behavior and cognition. The Neuroscience Minor offers students an opportunity to delve more deeply into this exciting and multifaceted discipline, whether to supplement a degree in biology, computer science, or engineering; to expand their understanding of cutting-edge research that regularly appears in the news; or to ready themselves for a neuroscience-based graduate program or career. Students who complete a neuroscience program are also equipped for educational and employment opportunities in research, teaching, medicine, and allied health.

This program of study leads to the following credential:

- Minor in Neuroscience

### ADMISSION REQUIREMENTS

Required Courses (15 credits) — Complete all of the following (minimum 2.0 grade required):

- B BIO 180 (Introductory Biology I)
- B BIO 200 (Introductory Biology II)
- B BIO 220 (Introductory Biology III)

## MINOR IN NEUROSCIENCE

### CREDENTIAL OVERVIEW

Neuroscience is field that explores the molecular, cellular, and systems bases of neural function, as well as the neural basis of behavior and cognition. Students enrolling in the minor will be equipped a variety of opportunities in research, teaching, medicine, or allied health. The minor is designed to offer students an opportunity to delve deeply into this

discipline, whether to supplement a degree in biology, computer science, or engineering; expand their understanding of cutting-edge research that regularly appears in the news; or ready themselves for a neuroscience-based graduate program or job. Students will learn to: -Understand core and advanced concepts in neuroscience (neurophysiology and cell signaling, behavioral neuroscience, cellular and molecular neuroscience, neurodevelopment, neural diseases, and advanced neurophysiology). - Assess and discuss contemporary neuroscience articles, research, technology, and clinical outcomes in a societal context.

## COMPLETION REQUIREMENTS

Required Courses (15 credits) — Complete all of the following:

- B BIO 320 Behavioral Neuroscience
- B BIO 351 Anatomy and Physiology I
- B BIO 480 Neurobiology

Elective Courses (10 credits) — Choose two courses:

- B BIO 355 Behavioral Endocrinology
- B BIO 385 Animal Behavior
- B BIO 390 Diseases & Disorders of the Nervous System
- B BIO 394 Special Topics in Neuroscience
- BIS 270 Abnormal Psychology
- BIS 422 Clinical Psychology
- B BIO 499 Undergraduate Research in Biology (approved Neuroscience research only). Approved B PHYS 499 Research (1-5 credits, max. 10)

## COMPUTING AND SOFTWARE SYSTEMS

352 Bothell Discovery Hall

425-352-3746

stemadv@uw.edu

We offer software engineering oriented computer science degrees that emphasize how to think about, design, and create quality software-enabled systems that have real impact in organizations and the world. Our degrees provide the broad educational background valued by employers and by computing professionals seeking rewarding careers. Our aim is a transformative educational experience that not only provides fundamentals and technical skills, but also the perspective to understand how to be an effective, confident, and respected member of our profession.

- Undergraduate Programs
  - Program of Study: Major: Applied Computing
    - Bachelor of Arts degree with a major in Applied Computing
  - Program of Study: Major: Computer Science and Software Engineering
    - Bachelor of Science degree with a major in Computer Science and Software Engineering
    - Bachelor of Science degree with a major in Computer Science and Software Engineering: Information Assurance and Cybersecurity

- Program of Study: Minor: Computer Science and Software Engineering
  - Minor in Computer Science and Software Engineering
- Program of Study: Minor: Cybersecurity
  - Minor in Cybersecurity
- Program of Study: Minor: Data Science
  - Minor in Data Science
- Program of Study: Minor: Information Technology
  - Minor in Information Technology
- Graduate Programs
  - Program of Study: Graduate Certificate In Software Design And Development
    - Graduate Certificate In Software Design And Development (fee-based)
  - Program of Study: Master Of Science In Computer Science And Software Engineering
    - Master Of Science In Computer Science And Software Engineering (fee-based)
  - Program of Study: Master Of Science In Cybersecurity Engineering
    - Master Of Science In Cybersecurity Engineering (fee-based)

## PROGRAM OF STUDY: MAJOR: APPLIED COMPUTING

### PROGRAM OVERVIEW

The Bachelor of Arts in Applied Computing is a multidisciplinary degree that allows students to become experts in integrating computer technology across their minor elective field. In their CSS coursework, students concentrate on programming, software engineering, management, communications, and hardware and operating systems from an application perspective. These core classes create a solid foundation of knowledge in computer hardware, programming, and software development.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Applied Computing

### ADMISSION REQUIREMENTS

The Applied Computing major is competitive; having the minimum grade of a 2.0 in the prerequisite courses does not guarantee admission. Prerequisites must be completed prior to admission:

- B WRIT 134; or ENGL 111, 121, or 131 English Composition
- Second Composition, Research Writing, or Introduction to Technical Writing
- CSS 132 or 142; or CSE 142 Intro Programming I
- CSS 133 or 143; or CSE 143 Intro Programming II
- STMATH 124 Calculus I
- Statistics (recommended for admission; must be completed before graduation)

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN APPLIED COMPUTING

### CREDENTIAL OVERVIEW

The Bachelor of Arts in Applied Computing (BAAC) combines courses in computer systems with elective classes in a subject or field of the students' choosing. Graduates will be able to combine their acquired detailed knowledge of their chosen application with a practical understanding of modern computing.

### COMPLETION REQUIREMENTS

Required Courses — Complete all of the following:

- CSS 301 Technical Writing for Computing Professionals
- CSS 340 Applied Algorithms or CSS 342 Data Structure and Algorithms I
- CSS 350 Management Principles for Computing Professionals
- CSS 360 Software Engineering
- CSS 421 Introduction to Hardware Architecture and Operating Systems
- CSS 496 Applied Computing Capstone

CSS Electives (25 credits)

A maximum of 10 credits are allowed at the 200 level, and a minimum of 10 credits must be at the 400 level. A maximum of 10 credits of combined CSS 290, 390, and 490 (Special Topics), and a maximum of 15 credits of combined CSS 397, 495, 498, and 499 are allowed towards the CSS Elective requirement.

Minor/Concentration Electives (25 credits); or any other non-computing related Major (or approved course of study)

This must be an approved minor, concentration, or major from another department or program. Students may also work with CSS faculty and program advisors to develop custom knowledge domain expertise – subject to departmental approval. If student has a baccalaureate degree in another area, this requirement may be waived. Students must submit a Minor Elective Contract for approval to the CSS advisor by the end of their 3rd quarter in the major.

Upper-Level Electives (10 credits)

Upper-level electives of any discipline. Must be at the 300 or 400 level.

### GRADUATION REQUIREMENTS

- Completion of 180 or more total credits including the above stated requirements, with a cumulative GPA of 2.0 or higher
- Students must earn a grade of 2.0 in all required courses (please note that some courses may require a higher prerequisite GPA)
- Completion of the last 45 credits at UW Bothell
- Completion of all University of Washington Bothell graduation requirements



## ADDITIONAL INFORMATION

Students combine their CSS coursework with studies in a non-computing subject that is of interest to them. This subject area, called a Minor Elective, can take the form of either an established minor at the University of Washington or an approved concentration of courses that covers complex subject matter. To integrate their CSS coursework with the courses in their minor elective, Applied Computing students take part in a final Applied Computing Capstone, where they gain a deeper understanding of the inherent relations between computer science, software development, and their concentration in another discipline.

## PROGRAM OF STUDY: MAJOR: COMPUTER SCIENCE AND SOFTWARE ENGINEERING

### PROGRAM OVERVIEW

The Bachelor of Science in Computer Science & Software Engineering (CSSE) is a computer science degree that stresses computer programming and people-centered software development processes. Students will gain essential knowledge in object-oriented programming, data structures, algorithm analysis, software engineering, management principles, hardware architecture and operating systems. The CSSE elective courses provide the student the opportunity to develop a solid technical foundation of new and complex technologies.

This program of study leads to the following credentials:

- Bachelor of Science degree with a major in Computer Science and Software Engineering
- Bachelor of Science degree with a major in Computer Science and Software Engineering: Information Assurance and Cybersecurity

### ADMISSION REQUIREMENTS

- B WRIT 134; or ENGL 111, 121, or 131 English Composition
- Second Composition, Research Writing, or Introduction to Technical Writing
- CSS 132 or 142 Intro Programming I
- CSS 133 or 143 Intro Programming II
- STMATH 124 Calculus I
- STMATH 125 Calculus II
- Statistics (recommended for admission; must be completed before graduation)

## BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN COMPUTER SCIENCE AND SOFTWARE ENGINEERING

### CREDENTIAL OVERVIEW

The Bachelor of Science in Computer Science and Software Engineering (CSSE) is a computer science degree that places a greater emphasis on software engineering and relevant business and management concepts than would be found in a more traditional computer science degree.

## COMPLETION REQUIREMENTS

- CSS 301 Technical Writing for Computing Professionals
- CSS 342 Data Structures & Algorithms I
- CSS 343 Data Structures & Algorithms II
- CSS 350 Management Principles for Computing Professionals
- CSS 360 Software Engineering
- CSS 370 Analysis & Design
- CSS 422 Hardware & Computer Organization
- CSS 430 Operating Systems

### CSS Electives (25 credits)

CSS electives are 200-400 level courses, of which a minimum of 15 credits must be at the 400-level. A maximum of 10 credits of combined CSS 290, 390, and 490 (Special Topics), and a maximum of 10 credits of combined CSS 397, 498, and 499 are allowed towards the CSS Elective requirement.

### General Electives (15 Credits)

Upper-level electives of any discipline. Must be at the 300 or 400 level.

### CSSE Capstone

The scope and nature of each project will require students to integrate and apply their knowledge in a "real world" setting. Students complete 10 credits (400 hours) of Capstone in their final quarter(s). Project options consist of internships, research with faculty, individual projects, or group projects. Upon completion of the Capstone, students present at the CSS Colloquium.

- Completion of 180 or more total credits including the above stated requirements, with a cumulative GPA of 2.0 or higher
- Students must earn a grade of 2.0 in all required courses (please note that some courses may require a higher prerequisite GPA)
- Completion of the last 45 credits at UW Bothell
- Completion of all University of Washington Bothell graduation requirements

## BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN COMPUTER SCIENCE AND SOFTWARE ENGINEERING: INFORMATION ASSURANCE AND CYBERSECURITY

### CREDENTIAL OVERVIEW

The Bachelor of Science in Computer Science and Software Engineering (CSSE) is a computer science degree that places a greater emphasis on software engineering and relevant business and management concepts than would be found in a more traditional computer science degree. The Information Assurance & Cybersecurity option allows students to focus their CSSE electives on information assurance policy, secure coding, or networking and systems security. Students will be equipped with the knowledge to create, deploy, use, and manage systems that preserve individual and organizational privacy and security.

## COMPLETION REQUIREMENTS

- CSS 301 Technical Writing for Computing Professionals
- CSS 342 Data Structures & Algorithms I
- CSS 343 Data Structures & Algorithms II
- CSS 350 Management Principles for Computing Professionals
- CSS 360 Software Engineering
- CSS 370 Analysis & Design
- CSS 422 Hardware & Computer Organization
- CSS 430 Operating Systems
- CSS 310

### Option Electives (15 credits)

- CSS 337 Secure Systems
- CSS 415 Emerging Topics in IAC
- CSS 432 Network Design
- CSS 411 Computing, Technology, and Public Policy

### Additional CSS electives (5 credits)

### General Electives (15 Credits)

Upper-level electives of any discipline. Must be at the 300 or 400 level.

Completion of 180 or more total credits including the above stated requirements, with a cumulative GPA of 2.0 or higher Students must earn a grade of 2.0 in all required courses (please note that some courses may require a higher prerequisite GPA)

- Completion of the last 45 credits at UW Bothell
- Completion of all University of Washington Bothell graduation requirements

## PROGRAM OF STUDY: MINOR: COMPUTER SCIENCE AND SOFTWARE ENGINEERING

### PROGRAM OVERVIEW

The CSSE minor provides students with the necessary programming and software management skills to work within a software development environment within their major discipline.

This program of study leads to the following credential:

- Minor in Computer Science and Software Engineering

## MINOR IN COMPUTER SCIENCE AND SOFTWARE ENGINEERING

### CREDENTIAL OVERVIEW

The CSSE minor provides students with the necessary programming and software management skills to work within a software development environment within their major discipline. Courses for the CSSE minor are programming intensive and require a strong foundational knowledge of programming skills to be successful.

## COMPLETION REQUIREMENTS

- CSS 132 or 142; or CSE 142 Intro Programming I (2.7 minimum)
- CSS 133 or 143; or CSE 143 Intro Programming II (2.5 minimum)
- CSS 342 Data Structures & Algorithms I
- CSS 360 Software Engineering
- Two additional CSS courses above the 200 level, with a minimum of at least 5 credits at the 300- or 400-level

A minimum of 30 credits with at least a 2.0 in each course. Minimum of 15 credits must be completed in residence at UW Bothell campus

## PROGRAM OF STUDY: MINOR: CYBERSECURITY

### PROGRAM OVERVIEW

Cybersecurity is a multi-disciplinary field that is in high demand regionally, nationally, and internationally. Career opportunities are not limited to those with a technical background. Individuals with a variety of backgrounds are required to address the significant need for more people to protect organizations from a variety of threats, both technical and non-technical. The minor in Cybersecurity prepares students for such careers by providing foundational knowledge that will allow them to contribute to an organization's needs by combining the knowledge they acquired from their major with the foundational knowledge from this minor.

This program of study leads to the following credential:

- Minor in Cybersecurity

## MINOR IN CYBERSECURITY

### COMPLETION REQUIREMENTS

30 Credits Total (17-20 required + 10-13 electives)

Required (17-20 credits)

- Cybersecurity Foundations (CSS 310, INFO 310, or T INFO 310) (5 credits)
- Ethics, Policy, and Law (CSS 315, CSS 211, CSS 411, INFO 351, or TCSS 325) (4-5 credits)
- Programming (CSS 112, CSS 132, CSS 142, CSE 121, CSE 122, CSE 142, or TCSS 142) (4-5 credits)
- Networking (CSS 431, CSS 432, T INFO 250, TCSS 430, CSE 461, or INFO 314) (4-5 credits)

Electives (10-13 credits at the 300-400 level)

- See *website for list of approved courses*.

Other Requirements

- At least 15 of the credits applied to the minor must be at the 300-400 level
- At least 15 credits applied to the minor must have been completed at UW Bothell (in-person, online, or hybrid)
- At least 10 credits applied to the minor must be courses from the Division of Computing and Software Systems (i.e., CSS prefix)
- A minimum grade of 2.0 must be earned for each course applied to the minor

- Courses taken Satisfactory / Not Satisfactory will not be counted toward the minor
- At least 10 of the credits completed for this minor must not also simultaneously satisfy a major requirement

## ADDITIONAL INFORMATION

### Learning Outcomes

- Understand information assurance and cybersecurity technologies and concepts
- Describe the role of confidentiality, integrity, and availability (i.e., CIA triad) and how CIA may be protected through the use of various tools, technologies, and processes
- Analyze information security in an organizational context
- Identify ethical decision making in professional and personal settings related to cybersecurity
- Explain and synthesize cybersecurity laws at the state, national, and international levels
- Describe the history of computer networks, how they have evolved and why, current security challenges, and future directions
- Identify essential network hardware, software, management policies and procedures, and security requirements based on application needs
- Identify security issues within a network infrastructure and design and implement network security solutions
- Develop competencies associated with problem-solving, design, programming, and testing techniques
- Learn and use good software engineering and algorithm analysis techniques

## PROGRAM OF STUDY: MINOR: DATA SCIENCE

### PROGRAM OVERVIEW

The Data Science Minor gives students background in data analysis and visualization in the natural sciences and engineering, including exposure to algorithms and lower-level programming tools.

This program of study leads to the following credential:

- Minor in Data Science

### ADMISSION REQUIREMENTS

Prerequisite Courses: Prior to declaring the Minor, students must complete a course or course option in the following categories:

- Introduction to Computer Programming: One of the following: (a) CSS 112 (4 cr), (b) CSS 132 and CSSSKL 132 (6 cr), (c) CSS 142 and CSSSKL 142 (6 cr), or (d) CSE 142 (4 cr) or equivalent.
- Statistics: B BUS 215, BIS 215, BMATH 215, STMATH 341, STMATH 390, STMATH 392, STAT 220, STAT 290 (AP Statistics, if score is 3 or above), or equivalent.

## MINOR IN DATA SCIENCE

### CREDENTIAL OVERVIEW

The Data Science Minor gives students background in data analysis and visualization in the natural sciences and engineering, including exposure to algorithms and lower-level programming tools.

### COMPLETION REQUIREMENTS

The Data Science Minor requires a minimum of 25 credits, consisting of courses from four required categories and 10 credits from the list of approved elective courses. The list of approved elective courses is published online by the School of STEM. The required courses consist of one course or course option in each of the following four categories:

- Computers, Ethics, and Society: CSS 211 (5 cr) or BISSTS 307 (5 cr).
- Data Visualization: B DATA 232 (5 cr).
- Data Science Programming: One of the following: (a) CSS 123 (3 cr), (b) CSS 133 and CSSSKL 133 (6 cr), (c) CSS 143 and CSSSKL 143 (6 cr), or (d) CSE 143 (5 cr) or equivalent.
- Data Science Programming Skills: CSSSKL 123 (2 cr).

No more than 10 credits a student counts towards the Minor may count towards the student's major. Students must earn a minimum of a 2.0 grade in all prerequisite, required, and elective courses for the Minor. Students must complete at least 15 credits of the required **OR** elective courses for the Minor at UW Bothell.

## PROGRAM OF STUDY: MINOR: INFORMATION TECHNOLOGY

### PROGRAM OVERVIEW

The IT minor focuses on bridging the technology and information management and gives students a background in software design methodologies, computer programming, database systems and strategies for automating industrial and organizational processes. This program of study leads to the following credential:

- Minor in Information Technology

### ADMISSION REQUIREMENTS

- CSS 132 or 142 Intro Programming I
- CSS 133, 143, or 173 Intro Programming II

## MINOR IN INFORMATION TECHNOLOGY

### Completion Requirements

- CSS 360 Software Engineering
- CSS 475 Database Systems
- One additional 5-credit CSS course, at the 200-level or above

A minimum of 25 credits with at least a 2.0 in each course

## GRADUATE PROGRAMS

### PROGRAM OF STUDY: GRADUATE CERTIFICATE IN SOFTWARE DESIGN AND DEVELOPMENT

#### PROGRAM OVERVIEW

The Graduate Certificate in Software Design & Development (GCSDD) is designed for those who lack formal education in computer science, but desire to enter into the field of software development and/or pursue a Master of Science degree.

This program of study leads to the following credential:

- Graduate Certificate In Software Design And Development (fee-based)

#### ADMISSION REQUIREMENTS

Admission to the GCSDD requires two quarters of object-oriented programming (CSS 142 and 143 or equivalent) and one college level calculus course (BMATH 124 or equivalent), as well as a bachelor's degree from an accredited institution with a 3.0 GPA in the last 90 quarter or 60 semester credits. Admission to the Graduate Certificate is currently for Fall Quarter only, and is competitive.

### GRADUATE CERTIFICATE IN SOFTWARE DESIGN AND DEVELOPMENT (FEE-BASED)

#### COMPLETION REQUIREMENTS

18 credits

1. Required Courses (18 credits): CSS 501, CSS 502, CSS 503, CSS 506, CSS 507, CSS 508

### PROGRAM OF STUDY: MASTER OF SCIENCE IN COMPUTER SCIENCE AND SOFTWARE ENGINEERING

#### PROGRAM OVERVIEW

The Master of Science in Computer Science & Software Engineering (MSCSSE) partners advanced studies in computer science with detailed analysis of software engineering methodologies. By coupling theoretical computing concepts with real-world problems, students develop the breadth of expertise necessary to succeed in today's competitive software profession, and are prepared for rewarding positions and advanced career opportunities in sectors such as software development, biotech, medicine, aerospace, entertainment, and finance. The Master of Science in Computer Science & Software Engineering requires completion of 48-49 credits of graduate level coursework, dependent upon a student's results in the Writing Assessment. Part-time students should plan on enrolling in approximately 5 credits per quarter; full-time students should plan on taking approximately 10 credits per quarter.

This program of study leads to the following credential:

- Master Of Science In Computer Science And Software Engineering (fee-based)

## ADMISSION REQUIREMENTS

Please see this program's Graduate Admissions page for current requirements.

## MASTER OF SCIENCE IN COMPUTER SCIENCE AND SOFTWARE ENGINEERING (FEE-BASED) COMPLETION REQUIREMENTS

48-49 credits

- CSS Core Coursework (16 credits): CSS 599 and one course from each of the following groups - course lists maintained by the program:
  1. Development
  2. Design
  3. Foundations
- Writing Assessment (0-1 credits): CSSSKL 511 (based on writing assessment)
- Scientific Writing (2 credits): CSSSKL 594
- Electives (20 credits): CSS 500-level coursework, course list maintained by the program.
- Capstone or thesis (10 credits): CSS 595 or CSS 700

Additional information:

- Students who completed the Graduate Certificate in Software Design and Development prior to admission may be required to complete 5 – 10 credits of systems coursework as determined by the CSS Faculty upon admission to the MS CSSE program, which may be counted towards the elective requirements.
- With BOTH departmental and UW Graduate School approval, students may petition to include up to 5 credits of graduate-level transfer credits from accredited outside institutions; a minimum grade of 3.0 in each transfer course is required.
- Courses in the Graduate Certificate in Software Design & Development cannot be counted towards any CSS Division graduate degree requirements.
- Credits earned in CSS 601 do not apply to degree requirements. CSS 601 is intended for students needing to earn credit for an internship.

## PROGRAM OF STUDY: MASTER OF SCIENCE IN CYBERSECURITY ENGINEERING PROGRAM OVERVIEW

The Master of Science in Cybersecurity Engineering at UW Bothell prepares students to protect today's and tomorrow's cyber systems with the necessary technical and leadership skills. Supported by a collaborative and personal learning environment, students gain expertise and confidence in building more secure systems. Students have the opportunity to gain hands-on experience by conducting research with faculty in a myriad of areas such as penetration testing, emerging technologies, vulnerability analysis, network security, human computer interaction, wireless security, and cryptography. The Master of Science in Cyber Security Engineering requires 48-49 credits, dependent upon a student's results in the Writing Assessment.

This program of study leads to the following credential:

- Master Of Science In Cybersecurity Engineering (fee-based)



## ADMISSION REQUIREMENTS

Please see this program's Graduate Admissions page for current requirements.

## MASTER OF SCIENCE IN CYBERSECURITY ENGINEERING (FEE-BASED)

### COMPLETION REQUIREMENTS

48-49 credits

- *Core Courses (16 credits)*: CSS 517, CSS 537, CSS 577, CSS 599
- *Writing Assessment (0-1 credits)*: CSSSKL 511 (based on writing assessment)
- *Scientific Writing (2 credits)*: CSSSKL 594
- *Cybersecurity Electives (10 credits)*: Course list maintained by the program.
- *Additional Electives (10 credits)*: Cybersecurity electives and/or computer science electives. This includes any CSS 500-level courses except the following: CSS 514, CSS 501, CSS 502, CSS 503, CSS 506, CSS 507, & CSS 508. A maximum of 6 credits of CSS 600: Independent Study or Research, up to 10 credits may be requested on approved petition. A maximum of 10 credits of approved CSS 400-level courses
- *Project or Thesis (10 credits)*: CSS 700 or CSS 595

Additional information:

- Courses in the Graduate Certificate in Software Design & Development cannot be counted towards any CSS Division graduate degree requirements.
- Credits earned in CSS 601 do not apply to degree requirements. CSS 601 is intended for students needing to earn credit for an internship.

## SCHOOL OF SCIENCE TECHNOLOGY ENGINEERING AND MATH (STEM)

### ENGINEERING AND MATHEMATICS

352 Bothell Discovery Hall

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Engineering & Mathematics at UW Bothell includes BS degrees in Mathematics, Electrical Engineering, Mechanical Engineering, Computer Engineering, an MS degree in Electrical Engineering and a graduate certificate in Electrical Engineering Foundations. The undergraduate Electrical Engineering, Mechanical Engineering and Computer Engineering are fully ABET accredited programs. Our students develop strong skills in the fundamental mathematical, scientific and engineering principles enabling them to either seek employment in industry or go on to graduate study. Our faculty have won national awards and funding and have an outstanding reputation in their fields.

- Undergraduate Programs
  - Program of Study: Major: Computer Engineering
    - Bachelor of Science in Computer Engineering degree
  - Program of Study: Major: Electrical Engineering
    - Bachelor of Science in Electrical Engineering degree

- Program of Study: Major: Mathematics
  - Bachelor of Science degree with a major in Mathematics
- Program of Study: Major: Mechanical Engineering
  - Bachelor of Science in Mechanical Engineering degree
- Program of Study: Minor: Actuarial Science
  - Minor in Actuarial Science
- Program of Study: Minor: Mathematics
  - Minor in Mathematics
- Graduate Programs
  - Program of Study: Graduate Certificate in Electrical and Computer Engineering Foundations
    - Graduate Certificate in Electrical and Computer Engineering Foundations (fee-based)
  - Program of Study: Master of Science in Electrical and Computer Engineering
    - Master of Science in Electrical and Computer Engineering (fee-based)

## UNDERGRADUATE PROGRAMS

### ENGINEERING AND MATHEMATICS

352 Bothell Discovery Hall

425-352-3746

stemadv@uw.edu

## PROGRAM OF STUDY: MAJOR: COMPUTER ENGINEERING

### PROGRAM OVERVIEW

The Bachelor of Science in Computer Engineering (CE) combines education in hardware and software development, with students gaining the background necessary to become broadly-educated professionals who are knowledgeable in both domains, understanding how the domains interact, restrict, or enable interdependent capabilities. Core coursework encompasses the physical and mathematical sciences, object-oriented programming, algorithms, data structures, software engineering, technical communications, circuits and systems, microprocessors, embedded systems, and operating systems. The major also offers the opportunity to build a strong foundation in various areas, including network design and development, signal processing, mobile computing, sensor systems, semiconductor devices, testing and quality assurance, and project management.

This program of study leads to the following credential:

- Bachelor of Science in Computer Engineering degree

### ADMISSION REQUIREMENTS

- B WRIT 134; or ENGL 111, 121, or 131 English Composition
- CSS 132 or 142 Intro Programming I
- CSS 133 or 143 Intro Programming II

- STMATH 124 Calculus I
- STMATH 125 Calculus II
- STMATH 126 Calculus III
- B PHYS 121 Mechanics
- B PHYS 122 Electromagnetism & Oscillatory Motion

## BACHELOR OF SCIENCE IN COMPUTER ENGINEERING DEGREE

### CREDENTIAL OVERVIEW

The Bachelor of Science in Computer Engineering combines education in hardware and software development, with students gaining the background necessary to become broadly-educated professionals who are knowledgeable in both domains, understanding how the domains interact, restrict, or enable interdependent capabilities. Core coursework encompasses the physical and mathematical sciences, object-oriented programming, algorithms, data structures, software engineering, technical communications, circuits and systems, microprocessors, embedded systems, and operating systems. The major also offers the opportunity to build a strong foundation in network design and development, signal processing, mobile computing, sensor systems, semiconductor devices, testing and quality assurance, and project management, among others.

### COMPLETION REQUIREMENTS

Complete all of the following:

Core Courses (65 credits)

- B EE 215 Fundamentals of EE
- B EE 233 Circuit Theory
- B EE 235 Continuous Time Linear Systems
- B EE 271 Digital Circuits and Systems
- B EE 331 Devices and Circuits
- B EE 425 Microprocessor System Design; or CSS 422 Hardware & Computer Organization
- CSS 342 Data Structures & Algorithms I
- CSS 343 Data Structures & Algorithms II
- CSS 360 Software Engineering
- CSS 427 Embedded Systems
- CSS 430 Operating Systems
- B ENGR 494 Engineering Design and Innovation
- B CE 495 Design Capstone I
- B CE 496 Design Capstone II
- College Level English Composition and Writing (15 credits) includes program admission prerequisites
- B WRIT 134 Composition; or ENGL 111, 121, or 131 English Composition
- B WRIT 135 Research Writing, or Introduction to Technical Writing
- CSS 301 Technical Writing for Computing Professionals

Mathematics, Natural Sciences, and Programming (61 credits) includes program admission prerequisites

- STMATH 124 Calculus I
- STMATH 125 Calculus II
- STMATH 126 Calculus III
- STMATH 207 Introduction to Differential Equations
- STMATH 208 Matrix Algebra with Applications
- STMATH 224 Multivariable Calculus
- STMATH 390 Probability & Statistics in Engineering
- B CHEM 143/144 General Chemistry I w/ Lab
- B PHYS 121 Mechanics
- B PHYS 122 Electromagnetism & Oscillatory Motion
- CSS 132 or 142 Intro Programming I
- CSS 133 or 143 Intro Programming II

Electives (10 credits)

Electives may be selected from B EE and CSS courses. All CSS/B EE electives must be at or above the 300 level. Of these credits, 5 credits must be at or above the 400 level. A maximum of 5 credits combined can be CSS or B EE Special Topics courses. A maximum of 5 credits combined can be CSS or B EE Independent Study or Undergraduate Research. Students must earn a grade of 2.0 in all required courses (please note that some courses may require a higher prerequisite GPA)

Additional Courses - As needed to fulfill University General Education Requirements and to equal 180 credits.

In order to graduate with a Bachelor of Science in Computer Engineering (BSCE) from UW Bothell, students are required to complete a total of 180 credits including the above stated requirements with a cumulative GPA of 2.0 or higher. Students must earn a 2.0 or higher in all courses that are required for the BSCE degree. Students are allowed to transfer a total of 15 credits of EE coursework including cross-campus enrollment, exceptions to this policy must be petitioned. In addition, students must meet all University of Washington Bothell graduation requirements.

### ADDITIONAL INFORMATION

The Bachelor of Science in Computer Engineering program at the University of Washington Bothell is a fully accredited program.

## PROGRAM OF STUDY: MAJOR: ELECTRICAL ENGINEERING

### PROGRAM OVERVIEW

The Bachelor of Science in Electrical Engineering provides students with a strong foundation for pursuing careers or graduate studies in Electrical Engineering. Students in the program master the fundamentals and applications of electricity, electronics, and

electromagnetism. A multidisciplinary learning environment provides experience in teamwork, design, ethics, entrepreneurship, and civic responsibility, with a focus on understanding the impact of engineering solutions in a global, economic, environmental, and societal context. The program builds on UW Bothell's strengths, emphasizing lab experience and research and internship opportunities outside the classroom. Our faculty are dedicated to teaching and building excellence and expertise through strong student-faculty relationships, small classes and hands-on, experiential learning principles.

This program of study leads to the following credential:

- Bachelor of Science in Electrical Engineering degree

## ADMISSION REQUIREMENTS

Students are required to have a minimum 2.70 cumulative GPA and the major has the following minimum requirements which must be completed prior to admission:

- A minimum grade of 2.3 in STMATH 124 - Calculus I
- A minimum grade of 2.3 in STMATH 125 - Calculus II
- A minimum grade of 2.3 in B PHYS 121 - Mechanics
- A minimum average GPA of 2.6 across STMATH 124 - Calculus I, STMATH 125 - Calculus II and B PHYS 121 - Mechanics
- A minimum grade of 2.0 in College-level English Composition course

## BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING DEGREE

### COMPLETION REQUIREMENTS

Core Courses (55 Credits)

Complete the following courses with a minimum grade of 2.0 in each course:

- B EE 200 Electric Circuits Lab
- B EE 215 Fundamentals of Electrical Engineering
- B EE 233 Circuit Theory
- B EE 235 Continuous Time Linear Systems
- B EE 271 Digital Circuits and Systems
- B EE 331 Devices and Circuits I
- B EE 332 Devices and Circuits II
- B EE 341 Discrete Time Linear Systems
- B EE 361 Applied Electromagnetics
- B EE 425 Microprocessor System Design
- B ENGR 494 Engineering Design and Innovation
- B ENGR 495 Capstone Project in Engineering I
- B ENGR 496 Capstone Project in Engineering II

Electrical Engineering Electives (15 Credits):

Complete 3 additional courses from the following list (15 credits) with a minimum grade of 2.0 in each course; a combined maximum of 10 credits of B EE 490, B EE 498, and B EE 499 may be counted toward the 15 credits requirement.

- B EE 381 Introduction to Electric Power Generation
- B EE 417 Digital Communication

- B EE 427 Introduction to Digital System Design Using Hardware Description Languages
- B EE 433 Electronic Circuit Design
- B EE 436 Biomedical Instrumentation I
- B EE 437 Biomedical Instrumentation II
- B EE 440 Electronic Test and Measurement
- B EE 442 Digital Signal Processing
- B EE 445 Fundamentals of Digital Image Processing
- B EE 447 Introduction to Control Systems
- B EE 450 Introduction to Power Electronics
- B EE 451 Introduction to MEMS
- B EE 454 Introduction to RF and Microwave Engineering
- B EE 455 Introduction to Electrical Machines and Drives
- B EE 457 Electrical/Power Electronic System in Renewable Energy
- B EE 461 Introduction to Digital Speech and Audio Processing
- B EE 465 Introduction to Electromagnetic Compatibility and Signal Integrity
- B EE 477 Power System Fundamentals
- B EE 478 Power System Analysis
- B EE 482 Semiconductor Devices
- B EE 484 Sensors and Sensor Systems
- B EE 486 Fundamentals of Integrated Circuit Technology
- B EE 490 Special Topics in Electrical Engineering
- B EE 498 Independent Study in Electrical Engineering
- B EE 499 Undergraduate Research in Electrical Engineering
- CSS 427 Introduction to Embedded Systems

#### Foundational Courses (65-66 credits)

This includes program admission prerequisites. Complete the following courses with a minimum grade of 2.0 in each course:

- STMATH 124 - Calculus I
- STMATH 125 - Calculus II
- STMATH 126 - Calculus III
- STMATH 207 Differential Equations
- STMATH 208 Matrix Algebra
- STMATH 224 Multivariable Calculus
- STMATH 390 Probability and Statistics in Engineering
- B CHEM 143/144 General Chemistry I/Lab (or CHEM 142)
- B PHYS 121 Mechanics
- B PHYS 122 Electromagnetism & Oscillatory Motion
- B PHYS 123 Waves
- CSS 132 (C++) or CSS 142 (Java) Computer Programming I
- CSS 133 (C++) or CSS 143 (Java) Computer Programming II

#### College Level English Composition and Writing (15-20 credits)

This includes program admission prerequisites. Complete the following courses with a minimum grade of 2.0 in each course:

- B WRIT 134 Composition (or both B WRIT 132 and 133) or ENGL 131
- B WRIT 135 Research Writing or ENGL 141
- CSS 301 Technical Writing for Computing Professionals

Additional Courses- As needed to fulfill University General Education Requirements and to equal 180 credits. In order to graduate with a Bachelor of Science in Electrical Engineering (BSEE) from UW Bothell, students are required to complete a total of 180 credits including the above stated requirements with a cumulative GPA of 2.0 or higher. Students must earn a 2.0 or higher in all courses that are required for the BSEE degree. Students are allowed to transfer a total of 15 credits of EE coursework including cross-campus enrollment, exceptions to this policy must be petitioned. In addition, students must meet all University of Washington Bothell graduation requirements.

### ADDITIONAL INFORMATION

The Bachelor of Science in Electrical Engineering (BSEE) program at University of Washington Bothell is a fully ABET-accredited program.

After three to five years of completing their degrees, EE program graduates:

- will have growing professional careers in electrical engineering or related fields in the public or private sector.
- will remain engaged in continuing education, including advanced degrees, in electrical engineering and related fields.
- will become contributing citizens who are conscientious of ethical and societal responsibilities.
- will become effective communicators in professional and non-professional environments and be able to function as a team member.

The EE program has the following student outcomes:

- Outcome 1: An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- Outcome 2: An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- Outcome 3: An ability to communicate effectively with a range of audiences.
- Outcome 4: An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- Outcome 5: An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- Outcome 6: An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

- Outcome 7: An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

## PROGRAM OF STUDY: MAJOR: MATHEMATICS

### PROGRAM OVERVIEW

The Bachelor of Science in Mathematics provides students with a strong applied and theoretical foundation in mathematics that enables them to pursue either industry employment or graduate studies. Students in the program gain experience using a variety of modeling techniques in combination with technology to solve real-world problems as well as develop a deep understanding of the generalizations and rigor that mathematics has to offer. Mathematics majors are supported to pursue opportunities for learning outside of the classroom such as undergraduate research with a professor, external Research Experience for Undergraduates (REU) programs, or an internship with a local industry partner.

This program of study leads to the following credential:

- Bachelor of Science degree with a major in Mathematics

## BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN MATHEMATICS

### CREDENTIAL OVERVIEW

Mathematics is an established and growing field with students pursuing careers in engineering, actuarial science, database and computer systems administration network and data communication analysis, statistical analysis secondary mathematics teaching and other fields. Students with a major in mathematics often pursue graduate studies in mathematics, physics, and engineering.

#### Completion Requirements

##### Calculus Requirements (15 Credits)

Complete the following courses with a minimum 2.50 cumulative GPA, and no grade below 2.0 in each course.

- STMATH 124 – Calculus I
- STMATH 125 – Calculus II
- STMATH 126 – Calculus III

##### Core Requirements (45 credits)

Complete the following courses with a minimum grade of 2.0 in each course:

- STMATH 207 Differential Equations
- STMATH 208 Matrix Algebra
- STMATH 224 Multivariable Calculus
- STMATH 300 Foundations of Modern Mathematics
- STMATH 301 Introduction to Professional Mathematics
- STMATH 402 Abstract Algebra I
- STMATH 424 Introduction to Analysis I
- STMATH 341 Introduction to Statistical Inference, STMATH 390 Probability and Statistics in Engineering, or STMATH 392 Probability
- STMATH 381 Discrete Mathematical Modeling or STMATH 405 Numerical Analysis I



### Mathematics Electives (25 credits)

Complete five additional STMATH courses at the 300- or 400-level with a minimum grade of 2.0 in each course, distributed as follows:

- (15 credits) At least three elective courses chosen from the following list, with at least one of these courses having an asterisk (\*) preceding it.
  - \*STMATH 403 Abstract Algebra II
  - \*STMATH 406 Numerical Analysis II
  - \*STMATH 408 Nonlinear Optimization
  - \*STMATH 409 Advanced Linear Algebra
  - \*STMATH 425 Real Analysis II
  - \*STMATH 441 Topology
  - STMATH 407 Linear Programming
  - STMATH 420 History of Mathematics
  - STMATH 427 Complex Analysis
  - STMATH 444 Foundations of Geometry
- (10 credits) Two additional elective courses chosen from a program-approved list of electives.
- No more than five credits of STMATH 498 or STMATH 499 may count toward elective credits.

### Computer Programming Requirement (5–6 credits)

A minimum grade of 2.0 in both courses from one of the following options:

- CSS 123 and CSSSKL 123
- CSS 132 and CSSSKL 132
- CSS 142 and CSSSKL 142

## ADDITIONAL COURSES

As needed to fulfill University General Education Requirements and to equal 180 credits.

## ADDITIONAL INFORMATION

Current research interests of the UWB mathematics faculty include: computed tomography; discrete geometry and tiling theory; knot theory; mathematics education; matrix theory, matrix analysis, and the geometry of polynomials; and numerical optimization, nonlinear optimization, and non-smooth optimization.

Employers often state that they prefer the critical thinking skills acquired in the mathematics major paired with secondary skills obtained from a strategically selected minor in another discipline instead of vice versa. Some strategically selected minors include, but are not limited to: Actuarial Science, Computer Science & Software Engineering, Economics, Physics, Business Administration, Education and Society, and Teaching and Learning. Pre-med and pre-law students majoring in mathematics have historically scored higher on the MCAT and LSAT exams than other majors. Careers in mathematics are frequently rated among the best jobs. The curriculum represents a standard mathematics degree; however the courses offered also reflect the recommendations put forth by the Mathematical Association of America's (MAA) CUPM

Curriculum Guide 2004 (reference is Mathematical Association of America (2004). Undergraduate Programs and Courses in the Mathematical Sciences: CUPM Curriculum Guide 2004. Ret May 2011: [http://www.maa.org/cupm/curr\\_guide.html](http://www.maa.org/cupm/curr_guide.html)) for majors preparing to be secondary mathematics teachers. According to MAA, mathematical sciences majors preparing to teach secondary mathematics should:

- Learn to make appropriate connections between the advanced mathematics they are learning and the secondary mathematics they will be teaching. They should be helped to reach this understanding in courses throughout the curriculum and through a senior-level experience that makes these connections explicit.
- Fulfill the requirements for a mathematics major by including topics from abstract algebra and number theory, analysis (advanced calculus or real analysis), discrete mathematics, geometry, and statistics and probability with an emphasis on data analysis;
- Learn about the history of mathematics and its applications, including recent work;
- Experience many forms of mathematical modeling and a variety of technological tools, including graphing calculators and geometry software.

Links:

- Mathematical Association of America (MAA) <http://www.maa.org/>
- National Council of Teachers of Mathematics <http://www.nctm.org/>

## PROGRAM OF STUDY: MAJOR: MECHANICAL ENGINEERING

### PROGRAM OVERVIEW

As an ABET accredited engineering program, the Bachelor of Science in Mechanical Engineering curriculum emphasizes hands-on experience, collaborative problem solving, and societal implications in the design, production, and implementation of mechanical and thermal fluid systems. It also complements the existing Bachelor of Science in Electrical Engineering major by providing additional learning and research opportunities in biomedical engineering and in power engineering, where electrical and mechanical technologies interweave. Prerequisites may be met through coursework at UW Bothell, another four-year institution, or a community college. Graduates will be prepared for a wide variety of careers inside and outside of engineering, or for continuation of study at the graduate level.

This program of study leads to the following credential:

- Bachelor of Science in Mechanical Engineering degree

### ADMISSION REQUIREMENTS

The major is competitive; having the minimum grade of a 2.0 in the prerequisite courses does not guarantee admission. Prerequisites must be completed prior to admission:

- STMATH 124, 125, and 126 – Calculus 1, 2, and 3
- STMATH 207 – Differential Equations
- STMATH 224 – Multivariable Calculus
- B CHEM 143/144 – General Chemistry I/Lab 1
- B PHYS 121 – Mechanics

- B PHYS 122 – Electromagnetism and Oscillatory Motion
- B ME 221 – Statics
- B ME 222 – Mechanics of Materials
- B ME 223 – Dynamics
- B WRIT 134 Interdisciplinary Writing

## BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING DEGREE

### CREDENTIAL OVERVIEW

Designed to comply with ABET accreditation criteria, the BSME curriculum emphasizes hands-on experience, collaborative problem solving, and societal implications in the design, production, and implementation of mechanical and thermal fluid systems. It also complements the existing Bachelor of Science in Electrical Engineering (BSEE) major by providing additional learning and research opportunities in biomedical engineering and in power engineering, where electrical and mechanical technologies interweave.

Prerequisites may be met through coursework at UW Bothell, another four-year institution, or a community college. Graduates will be prepared for a wide variety of careers inside and outside of engineering, or for continuation of study at the graduate level.

### COMPLETION REQUIREMENTS

Program Requirements: (97 Credits to include electives)

- STMATH 390 or IND E 315 Probability and Statistics in Engineering (5 cr)
- B PHYS 123 Waves (5 cr)
- B ENGR 310 (Computational Physical Modeling (or both MATH 308 and AMATH 301) (4cr)
- B ME 315 or ME 123 Engineering Computational Analysis & Design (4cr)
- B ENGR 320 or MSE 170 Fundamentals of Material Science (4cr)
- B ENGR 321 Materials Engineering Laboratory (2 cr)
- B ME 301 Introductory Seminar for Mechanical Engineering (1 cr)
- CSS 112 Introduction to Programming for Scientific Applications (4 cr)
- B ME 331 Thermodynamics (4 cr)
- B ME 332 Fluid Mechanics (4 cr)
- B ME 333 Heat Transfer (4 cr)
- B ME 334 Thermal Fluids Lab (2 cr)
- B ME 341 Mechanical Systems Design I (4 cr)
- B ME 342 Mechanical Systems Design II (4 cr)
- B ME 343 Mechanical Systems Design III (5 cr)
- B ME 410 Electric Power and Machinery (5 cr)
- B ME 481 Citizen Engineer (5 cr)
- B ENGR 494 Engineering Design and Innovation (3 cr)
- B ME 495 Capstone Project in ME I (3 cr)
- B ME 496 Capstone Project in ME II (4 cr)
- B WRIT 135, ENGL 182, or HCDE 231 (to fulfill Research or Technical Writing requirement (5 cr)

- 16 credits of technical electives from the list of approved courses. No more than 4 credits of BME 498/499 can be counted toward elective credits.
- Additional Courses:  
As needed to fulfill University General Education Requirements and to bring total number of credits to 180 credits.

### ADDITIONAL INFORMATION

The Bachelor of Science in Mechanical Engineering (BSME) program at University of Washington Bothell is a fully accredited program.

## PROGRAM OF STUDY: MINOR: ACTUARIAL SCIENCE

### PROGRAM OVERVIEW

The actuarial science minor provides a pathway for students to prepare for a rewarding career while completing their studies at UW Bothell. After completing the minor, students will be prepared to take the first two actuarial exams—Probability and Financial Mathematics—which will make them excellent candidates for actuarial positions.

This program of study leads to the following credential:

- Minor in Actuarial Science

### ADMISSION REQUIREMENTS

Students must earn a 2.70 prerequisite GPA and a minimum grade of 2.5 in each of the following prerequisite courses:

- B BUS 220/BIS 200 Introduction to Microeconomics
- STMATH 124 Calculus I
- STMATH 125 Calculus II
- STMATH 126 Calculus III

### MINOR IN ACTUARIAL SCIENCE

#### COMPLETION REQUIREMENTS

Students must earn a minimum 2.70 cumulative GPA for courses applied to the minor. There are five core requirement classes totaling 25 credits. At least three of the core requirement classes must not already be counted towards a student's major; specifically, only one of STMATH 330 and STMATH 392 can count as an elective towards the Mathematics major for students also interested in obtaining a minor in Actuarial Science.

- STMATH 224 Multivariable Calculus
- STMATH 330 Financial Mathematics
- STMATH 392 Probability
- B BECN 302 Intermediate Microeconomics
- B BECN 382 Introduction to Econometrics OR B BECN 458/B BUS 458 Risk Modeling

Acceptance of transfer courses or alternative elective courses needs to be considered by the School of Business and STEM Petition Committees.

## PROGRAM OF STUDY: MINOR: MATHEMATICS

### PROGRAM OVERVIEW

A minor in mathematics is designed to help develop students' formal critical and analytical thinking skills as well as their ability to communicate abstract and technical ideas. Such skills are highly valued in a wide range of career fields, including engineering, science, computer science, and business, so a minor in mathematics pairs especially well with majors related to these fields. Further, a minor in mathematics enhances students' marketability in private industry and helps students prepare for graduate school in fields where analytical skills are necessary.

This program of study leads to the following credential:

- Minor in Mathematics

### ADMISSION REQUIREMENTS

Prerequisites (15 credits)

A 2.50 GPA in the following three courses is required, with no grade below 2.0 in each course:

- STMATH 124 - Calculus I
- STMATH 125 - Calculus II
- STMATH 126 - Calculus III

### MINOR IN MATHEMATICS

#### CREDENTIAL OVERVIEW

Mathematics is an established and growing field with students pursuing careers in engineering, actuarial science, database and computer systems administration network and data communication analysis, statistical analysis secondary mathematics teaching and other fields. Students with a minor in mathematics often combine it with majors in chemistry, computer science, physics, or engineering.

Completion Requirements

Must complete 25 credits, distributed as follows:

Core-requirements (20 credits)

- STMATH 208 Matrix Algebra with Applications
- STMATH 207 Introduction to Differential Equations or STMATH 224 Multivariable Calculus
- STMATH 300 Foundations of Modern Math
- One of the following courses:
  - STMATH 402 Abstract Algebra I
  - STMATH 408 Nonlinear Optimization
  - STMATH 409 Advanced Linear Algebra
  - STMATH 420 History of Mathematics
  - STMATH 424 Real Analysis I

- STMATH 427 Complex Analysis
- STMATH 444 Foundations of Geometry

Elective course (5 credits)

One additional STMATH course at or above the 300-level chosen from a program-approved list of electives.

Grade requirement

Minimum 2.0 grade in courses applied to the minor.

## GRADUATE PROGRAMS

### ENGINEERING AND MATHEMATICS

#### PROGRAM OF STUDY: GRADUATE CERTIFICATE IN ELECTRICAL AND COMPUTER ENGINEERING FOUNDATIONS

##### PROGRAM OVERVIEW

The Graduate Certificate in Electrical and Computer Engineering Foundations provides a pathway for students trained in other STEM disciplines to earn a certificate in EE, and thus be academically prepared to apply for admission to the Master of Science in Electrical and Computer Engineering program. Students will learn the fundamental concepts of electrical engineering and be prepared for a graduate degree in the field. For students who do not wish to pursue a Master of Science in Electrical and Computer Engineering degree, the Graduate Certificate in Electrical and Computer Engineering Foundations provides a strong background that can be leveraged to move into EE related fields. The Graduate Certificate in Electrical and Computer Engineering Foundations is geared toward individuals with a bachelor's degree in a STEM field who want to pursue a master's degree in electrical engineering, or professionals working in or hoping to enter a related field such as technical marketing or technical program management.

This program of study leads to the following credential:

- Graduate Certificate in Electrical and Computer Engineering Foundations (fee-based)

##### ADMISSION REQUIREMENTS

A degree in a STEM field and the following courses (or equivalent coursework):

- A full year of Calculus: STMATH 124, 125 and 126
- Differential Equations: STMATH 307
- Matrix or Linear Algebra: STMATH 308
- Multivariable Calculus: STMATH 324
- Engineering Physics 1 and 2: BPHYS 121 and 122
- General Chemistry 1: B CHEM 143 and 144 (lab)

Graduate Certificate in Electrical and Computer Engineering Foundations (fee-based)

Completion Requirements

18 credits

- Required courses (18 credits): B EE 503, BEE 504, B EE 505, B EE 506, B EE 507, B EE 508

## PROGRAM OF STUDY: MASTER OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING

### PROGRAM OVERVIEW

The Master of Science in Electrical and Computer Engineering curriculum is designed to provide students with advanced studies in state-of-the-art technology to become innovators, researchers, and technical leaders in their profession. The Master of Science in Electrical and Computer Engineering offers either a coursework or thesis option, giving students the opportunity to acquire advanced skills and conceptual understanding of topics in more depth than offered by a Bachelor of Science in Electrical Engineering degree. Graduates will be able to apply these concepts directly to applications in many diverse fields, but also with special emphasis towards focused areas in biomedical devices and sensors, renewable energy, and embedded system design and characterization.

This program of study leads to the following credential:

- Master of Science in Electrical and Computer Engineering (fee-based)

### ADMISSION REQUIREMENTS

Graduate degree program admission requirements vary. Please see this program's [Graduate Admissions Page](#) for specific requirements.

## MASTER OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING (FEE-BASED)

### COMPLETION REQUIREMENTS

46 credits

Choose thesis option or non-thesis option

Non-thesis option:

- Graduate Seminar (1 credit): B EE 599
- Advanced Courses (10 Credits): B EE Course list maintained internally by the program.
- Elective Courses (35 credits): Graduate-level B EE coursework. Course list maintained internally by the program.

Thesis option:

- Graduate Seminar (1 credit): B EE 599
- Advanced Courses (10 Credits): B EE Course list maintained internally by the program.
- Thesis (10 credits): B EE 700
- Elective Courses (25 Credits): Graduate-level B EE coursework. Course list maintained internally by the program.

Additional information:

- A maximum of 6 credits of B EE 600 may be used toward degree requirements, students wishing to continue with research should consider the thesis option.
- Students may use a maximum of 10 credits of 400 level BEE undergraduate courses to meet the elective course requirement. Approval by the Division Petition Committee is required before enrolling in the course. See the graduate advisor for restrictions.
- No Electrical Engineering Foundations Certificate courses (B EE prefix) will be counted towards the Master of Science in Electrical and Computer Engineering degree.

## PHYSICAL SCIENCE

352 Bothell Discovery Hall

425-352-3746

Physical Sciences at UW Bothell includes degrees in Chemistry/Biochemistry and Physics. Our students develop strong knowledge in the Sciences by having close access to top teachers and scholars in Chemistry and Physics. Our faculty have won national awards and funding and have an outstanding reputation in their fields. The PSD website provides an introduction to our degrees and news.

- Undergraduate Programs
  - Program of Study: Major: Chemistry
    - Bachelor of Arts degree with a major in Chemistry
    - Bachelor of Science degree with a major in Chemistry
    - Bachelor of Science degree with a major in Chemistry: Biochemistry
  - Program of Study: Major: Physics
    - Bachelor of Arts degree with a major in Physics
    - Bachelor of Science degree with a major in Physics
  - Program of Study: Minor: Chemistry
    - Minor in Chemistry
  - Program of Study: Minor: Physics
    - Minor in Physics

## PROGRAM OF STUDY: MAJOR: CHEMISTRY

### PROGRAM OVERVIEW

UW Bothell offers the following Chemistry degrees: Bachelor of Arts (BA) Bachelor of Science (BS) Bachelor of Science (BS) with a Biochemistry option the BS and BA Chemistry curricula will inform and expose students to the interdisciplinary nature of STEM fields and programs along with training them to solve various technical problems for the general good. Students in both the BS and BA Chemistry programs will get extensive hands-on opportunities with modern chemical instrumentation. This includes a 400 MHz NMR, a Fourier Transform Infra-Red Spectrometer, Flame Atomic Absorption and other high-end instrumentation.



This program of study leads to the following credentials:

- Bachelor of Arts degree with a major in Chemistry
- Bachelor of Science degree with a major in Chemistry
- Bachelor of Science degree with a major in Chemistry: Biochemistry

## ADMISSION REQUIREMENTS

Applicants must complete each prerequisite with a minimum grade of 2.0, and have a minimum overall GPA of 2.5 to be considered:

- STMATH 124 Calculus I
- STMATH 125 Calculus II
- STMATH 126 Calculus III
- B CHEM 143/144 General Chemistry I w/ Lab
- B CHEM 153/154 General Chemistry II w/ Lab
- B CHEM 163/164 General Chemistry III w/ Lab
- B CHEM 237 Organic Chemistry I
- \*B CHEM 238/241 Organic Chemistry II w/ Lab
- \*B CHEM 239/242 Organic Chemistry III w/ Lab
- \* Internal applicants may apply prior to completing Organic Chemistry II, III, and their accompanying labs.

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN CHEMISTRY

### CREDENTIAL OVERVIEW

The Bachelor of Arts in Chemistry degree allows students to get a focused STEM degree with an emphasis on chemical education. In consort with the UWB Education program, BA Chemistry students will have the opportunity to complete a Teaching and Learning minor and continue on to get a Washington State secondary teacher certification in Chemistry.

### COMPLETION REQUIREMENTS

- STMATH 124 Calculus I
- STMATH 125 Calculus II
- STMATH 126 Calculus III
- B CHEM 143/144 General Chemistry I w/ Lab
- B CHEM 153/154 General Chemistry II w/ Lab
- B CHEM 163/164 General Chemistry III w/ Lab
- B CHEM 237 Organic Chemistry I
- B CHEM 238/241 Organic Chemistry II w/ Lab
- B CHEM 239/242 Organic Chemistry III w/ Lab
- B PHYS 121 Mechanics
- B PHYS 122 Electromagnetism and Oscillatory Motion
- B PHYS 123 Waves
- B CHEM 294 Chemistry Seminar

- B CHEM 312 Inorganic Chemistry I
- B CHEM 315 Quantitative Environmental Analysis
- B CHEM 401 Physical Chemistry I
- B CHEM 402 Physical Chemistry II
- B CHEM 495 Investigative Chemistry I
- B CHEM 497 Apprenticeship in Chemistry Education

Mathematics — Choose one course:

- STMATH 307 Introduction to Differential Equations
- STMATH 308 Matrix Algebra with Applications
- STMATH 324 Multivariable Calculus

Upper Division Chemistry Electives — Complete 9 credits, including at least one lab. Each elective course is 5 credits unless otherwise noted:

- B CHEM 310 Molecular Modeling
- B CHEM 313 Inorganic Chemistry II (3 credits)
- B CHEM 350 Atmospheric Chemistry and Air Pollution
- B CHEM 364 Biochemistry I
- B CHEM 365 Biochemistry II
- B CHEM 366 Biochemistry Lab (3 credits)
- B CHEM 375 Molecular Biology
- B CHEM 404 Physical Chemistry Lab (4 credits)
- B CHEM 426 Instrumental Analysis
- B CHEM 493 Advanced Topics in Chemistry (1-5 credits, max. 15)
- B CHEM 494 Special Topics in Biochemistry (3 credits, max. 12)
- B CHEM 497 Apprenticeship in Chemistry Education (1-3 credits, max. 6)
- Approved Independent Study in Chemistry (B CHEM 498) (1-5 credits, max. 10)
- Approved Undergraduate Research in Chemistry (B CHEM 499) (1-5 credits, max. 10)
- Additional Courses- As needed to fulfill University General Education Requirements and to equal 180 credits

### ADDITIONAL INFORMATION

Students with this background will find good career opportunities as secondary science teachers in public and private schools.

## BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN CHEMISTRY

### CREDENTIAL OVERVIEW

The Bachelor of Science in Chemistry degree offers students a curriculum that includes all of the key elements in chemistry and is consistent with the recommendations of the American Chemical Society (ACS). Students may choose a Biochemistry option for their Chemistry BS degree.

## COMPLETION REQUIREMENTS

Required Courses — Complete all of the following:

- STMATH 124 Calculus I
- STMATH 125 Calculus II
- STMATH 126 Calculus III
- B CHEM 143/144 General Chemistry I w/ Lab
- B CHEM 153/154 General Chemistry II w/ Lab
- B CHEM 163/164 General Chemistry III w/ Lab
- B CHEM 237 Organic Chemistry I
- B CHEM 238/241 Organic Chemistry II w/ Lab
- B CHEM 239/242 Organic Chemistry III w/ Lab
- B PHYS 121 Mechanics
- B PHYS 122 Electromagnetism and Oscillatory Motion
- B PHYS 123 Waves
- B CHEM 294 Chemistry Seminar
- B CHEM 312 Inorganic Chemistry I
- B CHEM 313 Inorganic Chemistry II
- B CHEM 315 Quantitative Environmental Analysis
- B CHEM 364 Biochemistry I
- B CHEM 401 Physical Chemistry I
- B CHEM 402 Physical Chemistry II
- B CHEM 404 Physical Chemistry Lab
- B CHEM 426 Instrumental Analysis
- B CHEM 495 Investigative Chemistry I

Mathematics — Choose one course:

- STMATH 307 Introduction to Differential Equations
- STMATH 308 Matrix Algebra with Applications
- STMATH 324 Multivariable Calculus

Upper Division Chemistry Electives — Complete 16 credits. Each elective course is 5 credits unless otherwise noted:

- B CHEM 310 Molecular Modeling
- B CHEM 350 Atmospheric Chemistry and Air Pollution
- B CHEM 365 Biochemistry II
- B CHEM 366 Biochemistry Lab (3 credits)
- B CHEM 375 Molecular Biology
- B CHEM 493 Advanced Topics in Chemistry (1-5 credits, max. 15)
- B CHEM 494 Special Topics in Biochemistry (3 credits, max. 12)
- B CHEM 497 Apprenticeship in Chemistry Education (1-3 credits, max. 6)
- Approved Independent Study in Chemistry (B CHEM 498) (1-5 credits, max. 10)
- Approved Undergraduate Research in Chemistry (B CHEM 499) (1-5 credits, max. 10)

Upper Division STEM Electives — Complete 5 credits:

- Approved 300- or 400-level courses offered by the School of STEM
- Additional Courses- as needed to fulfill University General Education Requirements and to equal 180 credits

## BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN CHEMISTRY: BIOCHEMISTRY

### CREDENTIAL OVERVIEW

The BS degree will offer students a curriculum that includes all of the key elements in chemistry and is consistent with the recommendations of the American Chemical Society (ACS). The degree can include a specialization in environmental chemistry, materials chemistry or biochemistry. These topics fit well with the UW Bothell interdisciplinary mission and other teaching and research emphases on campus. As part of the BS degree, students may also choose a biochemistry option, which would appear on the students' transcripts.

### COMPLETION REQUIREMENTS

Required Courses — Complete all of the following:

- STMATH 124 Calculus I
- STMATH 125 Calculus II
- STMATH 126 Calculus III
- B CHEM 143/144 General Chemistry I w/ Lab
- B CHEM 153/154 General Chemistry II w/ Lab
- B CHEM 163/164 General Chemistry III w/ Lab
- B CHEM 237 Organic Chemistry I
- B CHEM 238/241 Organic Chemistry II w/ Lab
- B CHEM 239/242 Organic Chemistry III w/ Lab
- B PHYS 121 Mechanics
- B PHYS 122 Electromagnetism and Oscillatory Motion
- B PHYS 123 Waves
- B BIO 180 Introductory Biology I
- B BIO 200 Introductory Biology II
- B CHEM 294 Chemistry Seminar
- B CHEM 315 Quantitative Environmental Analysis
- B CHEM 364 Biochemistry I
- B CHEM 365 Biochemistry II
- B CHEM 366 Biochemistry Lab
- B CHEM 375 Molecular Biology
- B CHEM 401 Physical Chemistry I
- B CHEM 402 Physical Chemistry II
- B CHEM 404 Physical Chemistry Lab
- B CHEM 426 Instrumental Analysis

- B CHEM 495 Investigative Chemistry I

Mathematics — Choose one course:

- STMATH 307 Introduction to Differential Equations
- STMATH 308 Matrix Algebra with Applications
- STMATH 324 Multivariable Calculus

Upper Division Chemistry Electives — Complete 7 credits. Each elective course is 5 credits unless otherwise noted:

- B CHEM 310 Molecular Modeling
- B CHEM 312 Inorganic Chemistry I (3 credits)
- B CHEM 313 Inorganic Chemistry II (3 credits)
- B CHEM 350 Atmospheric Chemistry and Air Pollution
- B CHEM 493 Advanced Topics in Chemistry (1-5 credits, max. 15)
- B CHEM 494 Special Topics in Biochemistry (3 credits, max. 12)
- B CHEM 497 Apprenticeship in Chemistry Education (1-3 credits, max. 6)
- Approved Independent Study in Chemistry (B CHEM 498) (1-5 credits, max. 10)
- Approved Undergraduate Research in Chemistry (B CHEM 499) (1-5 credits, max. 10)
- Additional Courses- as needed to fulfill University General Education Requirements and to equal 180 credits

## ADDITIONAL INFORMATION

Graduates in Chemistry will have an education that fosters creative thinking, which in turn will allow them to address critical challenges and issues in STEM subjects. UWB Chemistry graduates will be noted for their understanding of the application of chemistry courses to disciplines other than their own. Furthermore, they will acquire skills that will enable them to work effectively by solving problems and communicating results within a growing and diverse field.

## PROGRAM OF STUDY: MAJOR: PHYSICS

### PROGRAM OVERVIEW

A major in physics gives students the opportunity to master fundamental laws and model-building techniques, awakens them to the power of the universe, and supports knowledge in mathematics, engineering, and other fields. Physics students develop high-demand skills, such as numeracy, problem solving, data analysis, and the communication of complex ideas, that are valued in industry and all types of organizations.

This program of study leads to the following credentials:

- Bachelor of Arts degree with a major in Physics
- Bachelor of Science degree with a major in Physics

### ADMISSION REQUIREMENTS

A minimum grade of 2.0 is required in each of the following courses:

- STMATH 124 Calculus I

- STMATH 125 Calculus II
- B PHYS 121 Calculus-based Physics I w/ Lab
- B PHYS 122 Calculus-based Physics II w/ Lab
- B PHYS 123 Calculus-based Physics III w/ Lab

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN PHYSICS

### CREDENTIAL OVERVIEW

Students obtaining the Bachelor of Arts in Physics degree use physics as a background for study in other fields. This program will appeal to students interested in a broader and more interdisciplinary physics experience. For example, a student could pair this major with a 4-year teaching certificate program from the School of Educational Studies if they are interested in teaching science.

### COMPLETION REQUIREMENTS

Required Courses — Complete all of the following:

Required STEM courses (67 credits total)

Mathematics (20 credits)

- STMATH 124 Calculus I [5 cr]
- STMATH 125 Calculus II [5 cr]
- STMATH 126 Calculus III [5 cr]
- STMATH 207 Differential Equations [5 cr]

Physics (41 credits)

- B PHYS 121 Mechanics (5 cr)
- B PHYS 122 Electromagnetism and Oscillatory Motion (5 cr)
- B PHYS 123 Waves (5 cr)
- B PHYS 221 Classical Mechanics (5 cr)
- B PHYS 222 Modern Physics (5 cr)
- B PHYS 224 Thermal Physics (5 cr)
- B PHYS 433 Senior Project (5 cr)
- B PHYS 484 Physics, Society and Industry (5 cr)
- B PHYS 494 Physics Seminar [1 cr]

Chemistry (6 credits)

- B CHEM 143 General Chemistry I [4 cr]
- B CHEM 144 General Chemistry I Lab [2 cr]

Elective Physics courses (10 credits)

Select from the approved list of BPHYS courses:

- BPHYS 231 Introduction to Experimental Physics [3 cr]
- BPHYS 293 Special Topics in Physics (1-5 credits, max. 15)
- BPHYS 311 Introduction to Astrophysics I [5 cr]
- BPHYS 312 Introduction to Astrophysics II [5 cr]
- BPHYS 314 Introduction to Cosmology [5 cr]
- BPHYS 317 Mathematical Physics [5 cr]

- BPHYS 321 Electricity and Magnetism I [5 cr]
- BPHYS 322 Electricity and Magnetism II [5 cr]
- BPHYS 323 Electricity and Magnetism III [5 cr]
- BPHYS 324 Quantum Mechanics [5 cr]
- BPHYS 325 Quantum Mechanics II [5 cr]
- BPHYS 328 Statistical Physics [5 cr]
- BPHYS 431 Experimental Physics: Analog Circuits [5 cr]
- BPHYS 432 Experimental Physics: Digital Circuits and Instrumentation [5 cr]
- BPHYS 441 Condensed Matter Physics 1 [5 cr]
- BPHYS 450 Computational and Theoretical Modeling in Physics [5 cr]
- BPHYS 493 Advanced Topics in Physics (1-5 credits, max. 15)
- Approved B PHYS 498 Independent Study (1-5 credits, max. 10)
- Approved B PHYS 499 Research (1-5 credits, max. 10)

Additional Courses as needed to fulfill University General Education Requirements and to equal a total of 180 credits

## BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN PHYSICS

### CREDENTIAL OVERVIEW

The Physics major creates opportunities for students to acquire critical thinking and reasoning skills, problem-solving abilities, and modeling skills. These skills and abilities will enable physics majors to contemplate careers and graduate school in multiple physics sub-disciplines, engineering, technology, and other mathematical and science related subjects. Students will acquire fundamental knowledge that positions them to be successful and responsible global citizens and lifelong learners.

### COMPLETION REQUIREMENTS

Required Courses — Complete all of the following:

Mathematics courses (a total of 34 credits)

- STMATH 124 Calculus I
- STMATH 125 Calculus II
- STMATH 126 Calculus III
- STMATH 207 Differential Equations
- STMATH 208 Matrix Algebra
- STMATH 224 Multivariable Calculus
- CSS 112 Introduction to Programming for Scientific Applications (4 credits)

Physics core courses (a total of 64 credits)

- B PHYS 121 Mechanics
- B PHYS 122 Electromagnetism and Oscillatory Motion
- B PHYS 123 Waves
- B PHYS 221 Classical Mechanics
- B PHYS 222 Modern Physics

- B PHYS 224 Thermal Physics
- B PHYS 231 Introduction to Experimental Physics (3 credits)
- B PHYS 321 Electricity and Magnetism I
- B PHYS 322 Electricity and Magnetism II
- B PHYS 324 Quantum Mechanics I
- B PHYS 433 Senior Project
- B PHYS 484 Physics, Society and Industry
- B PHYS 494 Physics Seminar (1 credit)

At least one course from this list:

- B PHYS 431 Experimental Physics Lab I
- B PHYS 432 Experimental Physics Lab II
- B PHYS 450 Computational and Theoretical Modeling in Physics

Upper Division Physics Electives — Choose 20 credits from the following courses. Each elective course is 5 credits unless otherwise noted:

- B PHYS 293 Special Topics in Physics (1-5 credits, max. 15)
- B PHYS 311 Introduction to Astrophysics I
- B PHYS 312 Introduction to Astrophysics II
- B PHYS 314 Introduction to Cosmology
- B PHYS 317 Mathematical Physics
- B PHYS 323 Electricity and Magnetism III
- B PHYS 325 Quantum Mechanics II
- B PHYS 328 Statistical Physics
- B PHYS 431 Experimental Physics Lab I
- B PHYS 432 Experimental Physics Lab II
- B PHYS 441 Condensed Matter Physics I
- B PHYS 442 Condensed Matter Physics II
- B PHYS 450 Computational and Theoretical Modeling in Physics
- B PHYS 493 Advanced Topics in Physics (1-5 credits, max. 15)
- Approved B PHYS 498 Independent Study (1-5 credits, max. 10)
- Approved B PHYS 499 Research (1-5 credits, max. 10)

Additional Courses- as needed to fulfill University General Education Requirements and to equal a total of 180 credits

### ADDITIONAL INFORMATION

Through the physics major, students will be gain the ability to:

- Apply critical thinking skills and quantitative reasoning abilities to the physical world.
- Apply the principles and theories of physics to a variety of areas in the sciences and other evidence-based endeavors .
- Understand the history, organization, and underlying principles of physics and the application of these principles to the physical world.



- Anticipate and assess trajectories of technological change in a variety of industries using physics, along with critical thinking abilities developed in physics courses.
- Utilize thermodynamics, modern physics, and other physics principles, in the design and optimization of new technologies.
- Understand the ethical implications of physics in nature and society.
- Teach physics in secondary schools.

## PROGRAM OF STUDY: MINOR: CHEMISTRY

### PROGRAM OVERVIEW

The Chemistry minor at UW Bothell provides students with an understanding of the fundamental principles of the chemical sciences through a combination of coursework and practical laboratory experience. Students gain a working knowledge of the principles of Chemistry and the methodologies needed to solve complex problems and communicate their ideas to the scientific community in general. A minor in Chemistry is beneficial to students majoring in fields such as biology, physics, engineering, environmental science, and mathematics, and those preparing for further study in medicine, dentistry, pharmacy, biotechnology, and forensics. It is also an asset for students considering professional work in laboratory or manufacturing fields where background and experience in chemistry is valuable.

This program of study leads to the following credential:

- Minor in Chemistry

## MINOR IN CHEMISTRY

### CREDENTIAL OVERVIEW

The Chemistry minor at UW Bothell provides students with an understanding of the fundamental principles of the chemical sciences through a combination of coursework and practical laboratory experience. Students gain a working knowledge of the principles of Chemistry and the methodologies needed to solve complex problems and communicate their ideas to the scientific community in general. A minor in Chemistry is beneficial to students majoring in fields such as biology, physics, engineering, environmental science, and mathematics, and those preparing for further study in medicine, dentistry, pharmacy, biotechnology, and forensics. It is also an asset for students considering professional work in laboratory or manufacturing fields where background and experience in chemistry is valuable.

### COMPLETION REQUIREMENTS

Required Courses (29 credits) – Complete the following:

- B CHEM 143/144 General Chemistry I w/ Lab
- B CHEM 153/154 General Chemistry II w/ Lab
- B CHEM 163/164 General Chemistry III w/ Lab
- B CHEM 237 Organic Chemistry I
- B CHEM 238/241 Organic Chemistry II w/ Lab

Elective Courses (18 or more credits) – A total of five (5) or more upper division courses chosen from a list of approved courses that fulfill the following requirements:

- A minimum of one (1) lab course.
- At least 1 course in 3 of the 5 areas of chemistry: Analytical, Biochemistry, Chemistry Education, Inorganic and Physical.

## PROGRAM OF STUDY: MINOR: PHYSICS

### PROGRAM OVERVIEW

The Physics minor and covers a flexible subset of the major degree, with applications to other scientific and science-related fields. Students of biology, business, engineering, environmental science, chemistry, mathematics, and other disciplines will find relevant courses in the minor to further their education goals.

This program of study leads to the following credential:

- Minor in Physics

### MINOR IN PHYSICS

#### COMPLETION REQUIREMENTS

Required Courses (10 credits) — Complete all of the following:

- B PHYS 122 Electromagnetism and Oscillatory Motion
- B PHYS 123 Waves

Electives Courses (20 credits) - Students may take any 200-, 300-, or 400-level Physics (B PHYS) courses offered at UWB. This can include up to 5 credits of independent study (B PHYS 498) and/or undergraduate research (B PHYS 499).

A minimum 2.00 cumulative GPA is required for courses applied to the minor.

### INTERACTIVE MEDIA DESIGN

352 Bothell Discovery Hall Bothell Campus

425-352-3746

stemadv@uw.edu

Interactive Media Design (IMD) provides students with an expansive understanding of the processes and methods involved in conceiving, creating, and evaluating technology-mediated experiences. IMD students create media products ranging from video and immersive artworks to web-based and platform-specific apps while working in collaboration with their peers. With its interdisciplinary approach to interaction design and emphasis on studio practice, IMD enables students to develop creative solutions to complex problems. The two-year curriculum, grounded in an intensive cohort-based learning environment, blends academic theory, human-centered design, artistic technique, process management approaches, and methods for gathering and analyzing critical metrics.

- Undergraduate Programs
  - Program of Study: Major: Interactive Media Design

- Bachelor of Arts degree with a major in Interactive Media Design

## UNDERGRADUATE PROGRAM

### INTERACTIVE MEDIA DESIGN

352 Bothell Discovery Hall

425-352-3746

stemadv@uw.edu

## PROGRAM OF STUDY: MAJOR: INTERACTIVE MEDIA DESIGN

### PROGRAM OVERVIEW

Interactive Media Design (IMD) provides students with an expansive understanding of the processes and methods involved in conceiving, creating, and evaluating technology-mediated experiences. IMD students create media products ranging from video and immersive artworks to web-based and platform-specific apps while working in collaboration with their peers. With its interdisciplinary approach to interaction design and emphasis on studio practice, IMD enables students to develop creative solutions to complex problems. The two-year curriculum, grounded in an intensive cohort-based learning environment, blends academic theory, human-centered design, artistic technique, process management approaches, and methods for gathering and analyzing critical metrics.

This program of study leads to the following credential:

- Bachelor of Arts degree with a major in Interactive Media Design

### ADMISSION REQUIREMENTS

Minimum one course from each of the areas below with a minimum grade of 2.0.(20 credits)

- English Composition: either B WRIT 134 or ENGL 131 (UW Seattle)
- Interactive Media/Design Thinking/Visual Arts (choose one):
  - BIS 209
  - BIS 233
  - BIS 236
  - B IMD 250
  - Design 166 (UW Seattle)
  - ART 166 (UW Seattle)
  - HCDE 210 (UW Seattle)
  - or approved alternative
- Web Development and Programming (choose one):
  - B IMD 233
  - CSE 154 (UW Seattle)
  - INFO 340 (UW Seattle)
  - or approved alternative
- Statistics/Quantitative Methods/Data Visualization (choose one):

- BIS 232
- BIS 315
- B BUS 215
- B MATH 215/BHS 215
- STMATH 341
- STAT 220 or 221 (UW Seattle)
- STAT 311 (UW Seattle)
- Q METH 201 (UW Seattle)
- or approved alternative

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN INTERACTIVE MEDIA DESIGN COMPLETION REQUIREMENTS

Core (55 credits):

- B IMD 351
- B IMD 352
- B IMD 353
- B IMD 363
- B IMD 481
- B IMD 482
- B IMD 483
- B IMD 491
- B IMD 492
- B IMD 493

Minimum 20 credits of 300-400 level electives.

- Minimum 2.0 cumulative GPA in all courses applied to the major.
- TOTAL= 75 credits

## ADDITIONAL INFORMATION

Upon completion of the IMD degree students will be able to:

- Understand and engage critically with theories and concepts related to analysis, design, development, and implementation of interactive media experiences and their social context.
- Use an interdisciplinary approach in the design and development of interactive media that applies methodologies and best practices from a variety of design approaches, including engineering, user-centered, inclusive, community-based, and universal.
- Collaborate effectively, creatively, productively, and ethically using team and communication skills imbued with respect and empathy.
- Create interactive media experiences that engage unequal relations of power, knowledge, and difference by learning from communities with multiple intersecting identities.

- Utilize a variety of technologies and tools to explore, develop, and deliver interactive experiences on commonly used platforms and infrastructure as well as on novel and experimental interfaces and systems.
- Write and communicate clearly at all stages of project research, design, and implementation.

# UW BOTHELL COURSE DESCRIPTIONS

## BUSINESS ADMINISTRATION

### ACCOUNTING

#### **B ACCT 500 Advanced**

##### **Quantitative Methods in Accounting (4)**

Reviews foundational mathematical, statistical, and programming concepts, methods, and techniques. Covers their use in contemporary accounting practice and research. Develops understanding of these approaches and their application to business problems.

#### **B ACCT 501 Accounting Theory and Data Modelling (4)**

Introduces and analyzes the key identities and equations that enables the students to develop accounting data models to consistently separate surplus from capital, measure value creation and track value distribution. Focuses on key relationships between book value, earnings, dividends, and market value. Covers concepts such as agency theory, permanent v. transitory income, statements of shareholders equity, comprehensive income, and their use.

#### **B ACCT 502 Seminar on Financial Accounting (4)**

Understand the structural relationships between financial statement elements induced by the double entry model underlying the financial reporting conceptual framework. Identify similarities and differences between accrual and cash flow based accounting performance measures that follow from these structural relationships. Apply insights

from empirical research to critically evaluate current and proposed accounting treatments

[View course details in MyPlan: B ACCT 502](#)

#### **B ACCT 503 Corporate Financial Reporting (4)**

Analyzes and critically evaluates financial and non-financial disclosures by public companies, markets and other parties reporting on public corporations; with practice using cases with limited but diverse information to build logical arguments to support a position.

[View course details in MyPlan: B ACCT 503](#)

#### **B ACCT 504 Cost Modelling and Performance Analytics (4)**

Examines the collection, analysis, and presentation of cost and operational data for internal planning, cost control, and decision making. Exposes quantitative and qualitative approaches to incorporating uncertainty in the interrelationship between cost determination, performance evaluation, and economic decision making. Apply the role of cost allocation in mechanism design and analytical skills needed for management and organizational control.

[View course details in MyPlan: B ACCT 504](#)

#### **B ACCT 505 Financial Statement Analysis (4)**

Analyze public company financial statements and reports from a user perspective. Apply knowledge and skills developed in previous courses to identify and evaluate operating, investing, and financing activities which

help different stakeholders such as banks, supply chain partners, and stockholders. Prerequisite: B ACCT 501 and B ACCT 503.

[View course details in MyPlan: B ACCT 505](#)

**B ACCT 506 Seminar on Strategic Cost Management and Analysis (4)**

Uses standard cost models and simulation to support strategic decision making under uncertainty to address use and limitations of traditional cost models. Addresses models of management controls such as variance investigation through modeling risk and Bayesian decision models. Understands the role of cost information to address incentive problems such as moral hazard and adverse selection, and incomplete contracts. Prerequisite: B ACCT 504.

[View course details in MyPlan: B ACCT 506](#)

**B ACCT 510 Accounting Profession (1-, max. 4)**

Based on participation in accounting-related seminars, workshops, symposia, and field trips. These "qualifying events" help students to understanding the demands and nature of the accounting profession; apply accounting theory and principles as needed in professional conversations; and explores the ethical dimensions of professional decision making. Credit/no-credit only.

Offered: AWSpS.

[View course details in MyPlan: B ACCT 510](#)

**B ACCT 512 Advanced Business Law (4)**

Provides introduction to legal resolutions including courts, alternative dispute resolution, and ethics; creditors' rights bankruptcy; agency and employment; corporations and

securities; small businesses and owners limited liabilities; and government regulation of business.

[View course details in MyPlan: B ACCT 512](#)

**B ACCT 520 Accounting Valuation (4)**

Introduces basic theories and practical applications of accounting valuation methods. Students study basic concepts of accounting valuation models, evaluation accounting information to apply methods, analyze, and interpret profitability of a business.

[View course details in MyPlan: B ACCT 520](#)

**B ACCT 521 Forensic Accounting (4, max. 8)**

Project-based introduction to contemporary forensic accounting theory and practice. Students analyze live fraud cases working with practicing Certified Fraud Examiners and law enforcement agencies. Requires registration as King County volunteer and criminal background check by law enforcement authorities.

[View course details in MyPlan: B ACCT 521](#)

**B ACCT 522 International Accounting (4)**

Introduction to international differences in the demand and supply of accounting information, standards and practices and their impact on business decision making processes. Course overlaps with: T ACCT 521.

[View course details in MyPlan: B ACCT 522](#)

**B ACCT 563 Advanced Financial Accounting (4)**

Covers advanced accounting topics related to consolidated financial statements; accounting for derivatives

and hedging activities; and the translation of financial statements prepared in a foreign currency.

[View course details in MyPlan: B ACCT 563](#)

**B ACCT 567 Advanced Taxation (4)**

Provides an analysis and evaluation of the federal income tax consequences affecting Corporations, Partnerships, and LLCs. Provides an introduction to entity tax accounting with emphasis on both tax consequences and tax planning.

[View course details in MyPlan: B ACCT 567](#)

**B ACCT 568 Advanced Accounting and Analytics (4)**

Accounting for and reporting of foreign currency and hedging activity, business risk and financial reporting risks. Students learn to combine guidance from authoritative literature with knowledge of current business practices and analysis of structured accounting data to develop and effectively communicate with diverse audiences including business leaders, capital markets, regulators and internal and external stakeholders.

[View course details in MyPlan: B ACCT 568](#)

**BUSINESS ADMINISTRATION**

**B BUS 110 Personal Finance (5) RSN**

Examines making intelligent decisions to maximize financial resources in all phases of life. Integrates theory with real world application to analyze financial decisions and evaluate costs and benefits. Course equivalent to: T BGEN 250. Course overlaps with: FIN 205 and TMATH 109.

[View course details in MyPlan: B BUS 110](#)

**B BUS 120 Introduction to Social Enterprise (5) SSc**

Explores the intersection of how business principles are used to help solve societal challenges on global and local levels.

Examines the history of the social sector in the U.S, global trends within the social enterprise sector, and the successes, challenges, and organizational structures of social enterprises that achieve societal goals.

[View course details in MyPlan: B BUS 120](#)

**B BUS 201 Introduction to Business (5)**

Provides an overview of the entire business function. Topics may include entrepreneurship, leadership, marketing management, financial management, and technology and innovation.

[View course details in MyPlan: B BUS 201](#)

**B BUS 210 Principles of Financial Accounting (5)**

Preparation and use of accounting reports with primary focus on uses of accounting for external reporting. Understand financial statements and prepare statements that accurately present to external entities corporate financial position, operating results, cash flows, and financial strength.

Maximum 15 credits allowed between B BUS 210; B BUS 211; T ACCT 210; T ACCT 220; and T ACCT 230 (or equivalents). Course equivalent to: ACCTG 215.

[View course details in MyPlan: B BUS 210](#)

**B BUS 211 Principles of Managerial Accounting (5)**

Uses accounting information for business planning and control purposes. Focuses on internal use of accounting information and topics include cost behavior, product costing, budgeting, performance management, and responsibility accounting. Proficiency in identifying relevant information from operational and



strategic decisions. Maximum 15 credits allowed between B BUS 210; B BUS 211; T ACCT 210; T ACCT 220; and T ACCT 230 (or equivalents). Course equivalent to: ACCTG 225. Prerequisite: minimum grade of 1.7 in B BUS 210.

[View course details in MyPlan: B BUS 211](#)

### **B BUS 215 Introduction to Business Statistics (5) RSN**

Introduces descriptive statistics, probability concepts, and statistical inference emphasizing statistical applications useful in decision making and research in the social sciences. Topics include exploratory data analysis, correlation, sampling theory, estimation, hypothesis testing, and simple regression analysis. Concepts are illustrated through case problems in sociology, psychology, consumer economics, and business. Course overlaps with: B EDUC 295; B HLTH 215; B MATH 215; and BIS 215.

[View course details in MyPlan: B BUS 215](#)

### **B BUS 220 Introduction to Microeconomics (5) SSc, RSN**

Analysis of markets: consumer demand, production, exchange, the price system, resource allocation, government intervention. Course equivalent to: ECON 200; TBECN 220; and TECON 200. Offered: jointly with BIS 200; AWSpS.

[View course details in MyPlan: B BUS 220](#)

### **B BUS 221 Introduction to Macroeconomics (5) SSc, RSN**

Analysis of the aggregate economy: national income, inflation, business fluctuations, unemployment, monetary system, federal budget, international trade and finance. Course equivalent to: ECON 201; TBECN 221; and TECON 201. Prerequisite: B BUS 220/BIS 200 or ECON 200. Offered: jointly

with BIS 201; AWSp.

[View course details in MyPlan: B BUS 221](#)

### **B BUS 230 Introduction to Business Law (5) SSc**

Introduction to the issues of business law. Covers legal resolutions, including courts, court procedures, contract law and Articles 2, 3 and 9 of the Uniform Commercial Code, business ethics, torts, and strict liability and product liability. Course overlaps with: BIS 283; MGMT 200; and T BGEN 218.

[View course details in MyPlan: B BUS 230](#)

### **B BUS 300 Organizational Behavior, Ethics, and Inclusivity (5) DIV**

Focuses on how organizations succeed through the actions of employees and innovative and evidence-based human-centered management practices. This course emphasizes diversity and inclusivity across all topics and examines managers and leaders' responsibilities in facilitating (1) individual, group, and organizational inclusive and ethical performance, (2) decision making, and (3) diversity, employee motivation, and well-being. Course equivalent to: ELCBUS 300. Course overlaps with: MGMT 300. Prerequisite: B WRIT 135 or ENGL 141. Offered: AWSp.

[View course details in MyPlan: B BUS 300](#)

### **B BUS 301 Data Management (5)**

The course provides an intensive, hands-on introduction to Data Management that involves the acquisition, transformation, manipulation, visualization and the analysis of data in a computing environment that fosters collaboration. The data manipulation and analysis will be implemented by writing programs in a discipline-specific statistical software. Course overlaps with: CSSS 321/SOC

321/STAT 321 and STAT 302. Prerequisite: either BIS 215, B BUS 215, B MATH 215, or STMATH 341.

[View course details in MyPlan: B BUS 301](#)

#### **B BUS 305 Managerial Communication (4)**

Focuses on the importance of written and oral communication for managerial success. Involves hands-on individual and group experience in preparing business documents and delivering business presentations. Co-requisite: B BSKL 305.

[View course details in MyPlan: B BUS 305](#)

#### **B BUS 307 Business Writing (5)**

Provides theoretical and practical approaches to being a better ethical writer to prepare students to be more successful in business or other organizations.

[View course details in MyPlan: B BUS 307](#)

#### **B BUS 310 Managerial Economics (5)**

Applies economic principles and quantitative methods to improve managerial decision making. Topics covered include: demand analysis, cost analysis, forecasting, asset valuation, information economics, government regulation of business. Prerequisite: a minimum grade of 1.7 in either B MATH 144, MATH 112, STMATH 114, STMATH 124, MATH 124, or MATH 134

[View course details in MyPlan: B BUS 310](#)

#### **B BUS 320 Marketing Management (5)**

Focuses on designing tools, concepts, and strategies for problem solving in marketing management. May not be repeated. Course equivalent to: ELCBUS 320. Prerequisite: either a minimum grade of 1.7 in B MATH 123, a minimum grade of 1.7 in MATH 120, a minimum score of 400 on the MTHDSP directed self-placement, or a score of 154-163 on

the MPT-AS assessment test.

[View course details in MyPlan: B BUS 320](#)

#### **B BUS 330 Information Management and Analysis (5)**

Study of the methods of gathering, structuring, analyzing and applying information in business organizations. A survey of the changes in organizations resulting from new knowledge technologies provides a framework for intensive study of a variety of tools used to gather, structure, analyze or apply information. Prerequisite: may not be repeated.

[View course details in MyPlan: B BUS 330](#)

#### **B BUS 340 Operations and Project Management (5)**

Examines service and manufacturing processes that deliver value to customers, introduces concepts and tools for critical analysis, emphasizes operating priorities (quality, cost, delivery, flexibility, social responsibility) and the underlying factors that support them. May not be repeated. Course equivalent to: ELCBUS 340. Prerequisite: a minimum grade of 1.7 in either B BUS 220/BIS 200 or ECON 200; and either B BUS 215, BIS 215, or STAT 220.

[View course details in MyPlan: B BUS 340](#)

#### **B BUS 350 Business Finance (5)**

Focuses on understanding the sources, uses, costs, and control of funds in business organizations. Issues include the internal management of working capital, sources of capital, financing new ventures, capital budgeting, and financing the growth of businesses. May not be repeated. Course equivalent to: T BUS 350. Course overlaps with: STMATH 330; FIN 350; and TMATH 316.

Prerequisite: minimum grade of 1.7 in

B BUS 310.

[View course details in MyPlan: B BUS 350](#)

**B BUS 361 Intermediate Accounting I (5)**

Examines the accounting framework and principles used to determine the income and the financial position of a firm.

Develops a conceptual and applied understanding of the preparation of financial statements and processing of transactions related to the current asset accounts. Course equivalent to: T ACCT 301. Course overlaps with: ACCTG 301. Prerequisite: may not be repeated. Offered: AWSpS.

[View course details in MyPlan: B BUS 361](#)

**B BUS 362 Intermediate Accounting II (5)**

Analyzes current accounting theory and practices used in preparing and presenting financial statements. Focuses on the accounting treatment of transactions

concerning investments; operational assets; and current and long-term liabilities.

Course equivalent to: T ACCT 302.

Course overlaps with: ACCTG 402.

Prerequisite: a minimum grade of 1.7 in B BUS 361; may not be repeated.

Offered: AWSpS.

[View course details in MyPlan: B BUS 362](#)

**B BUS 363 Advanced Financial Accounting (5)**

Analyzes current accounting theory and practices used in preparing and presenting financial statements. Focuses on the accounting treatment of transactions that apply to stockholders' equity; income taxes; accounting changes and error corrections; retirement plans; and the statement of cash flows. May not be repeated. Course overlaps with: ACCTG 403.

Prerequisite: minimum grade of 1.7 B BUS 362. Offered: AWSpS.

[View course details in MyPlan: B BUS 363](#)

**B BUS 373 Cost Accounting (5)**

Examines the use of accounting and operational data for internal planning and control purposes. Focus includes job-order and process costing, activity based budgeting, profit planning, responsibility accounting, standard costing and variance analysis, transfer pricing and performance evaluation systems. May not be repeated. Course equivalent to: T ACCT 311. Course overlaps with: ACCTG 311.

[View course details in MyPlan: B BUS 373](#)

**B BUS 401 Work Motivation and Performance (5)**

Provides students with an understanding of the factors influencing individual motivation and performance in work environments. Includes employee attitudes and personality, goal setting and reward systems, communications, power, and conflict management, job design, and organizational culture and change.

[View course details in MyPlan: B BUS 401](#)

**B BUS 402 Managing Work Teams (5)**

Provides students with an understanding of the factors influencing team effectiveness in work environments. Includes team process, decision making, conflict resolution, team creativity, external dynamics, and emerging issues in managing teams. Course equivalent to: ELCBUS 380.

[View course details in MyPlan: B BUS 402](#)

**B BUS 411 Auditing Theory and Practice (5)**

Provides intensive exposure to the attestation functions in accounting, including provisions of the Sarbanes-

Oxley legislation. Analyzes the environment, process, and report of the public auditor. Discusses theory and practice related to the auditing environment, including general audit technology, programmatic applications and reporting obligations. Course equivalent to: T ACCT 411. Course overlaps with: ACCTG 411. Prerequisite: minimum grade of 1.7 in B BUS 362; may not be repeated.

[View course details in MyPlan: B BUS 411](#)

#### **B BUS 412 Advanced Business Law (5)**

In-depth study of legal resolutions including courts, alternative dispute resolution and ethics; creditors' rights and bankruptcy; agency and employment; corporations and securities; small business and owners limited liabilities; and government regulation of business.

[View course details in MyPlan: B BUS 412](#)

#### **B BUS 421 Consumer Marketing (5)**

Examines the process by which consumer goods and services are brought to the market. Analyzing existing markets to identify problems and opportunities, developing and modifying products, establishing and managing distribution, setting prices and undertaking promotional efforts, especially advertising. Emphasizes mass marketing and end users. Prerequisite: a minimum grade of 1.7 in either B BUS 320 or ELCBUS 320.

[View course details in MyPlan: B BUS 421](#)

#### **B BUS 423 Market Intelligence (5)**

Focuses on the major methodologies of marketing research. Deals with the entire research process, from problem definition, research design, questionnaire construction, and sample selection to data collection and analysis. Introduction

to various standard and state-of-the-art data analyses techniques and software packages. Prerequisite: a minimum grade of 1.7 in either B BUS 320 or ELCBUS 320; may not be repeated.

[View course details in MyPlan: B BUS 423](#)

#### **B BUS 426 International Marketing (5-)**

Integrated study of institutions, factors, and trends that have a bearing on global business operations and strategy. Utilizes lectures, research, case studies, guest speakers, and extensive practical application of modern marketing principles. Special emphasis on developing a marketing plan for the export of product or service. Prerequisite: a minimum grade of 1.7 in either B BUS 320 or ELCBUS 320.

[View course details in MyPlan: B BUS 426](#)

#### **B BUS 427 Entrepreneurial Marketing (5)**

Explores how marketing and entrepreneurship affect and are affected by one another. Examines role of marketing in entrepreneurial ventures, and the role of entrepreneurship in marketing efforts for all firms.

Prerequisite: a minimum grade of 1.7 in either B BUS 320 or ELCBUS 320.

[View course details in MyPlan: B BUS 427](#)

#### **B BUS 429 Special Topics in Marketing (5, max. 20)**

Topics of current interest to faculty and students. Offered when allowed by faculty availability and sufficient student interest. Prerequisite: a minimum grade of 1.7 in either B BUS 320 or ELCBUS 320.

[View course details in MyPlan: B BUS 429](#)

#### **B BUS 431 Electronic Marketing (5)**

Critically analyze new marketing models; study how firms can effectively leverage new technology and maximize long-term profits. Includes:

web marketing strategy, e-commerce issues, channel issues, pricing models, advertising and promotion models and business plans. Course equivalent to: ELCBUS 401. Prerequisite: a minimum grade of 1.7 in either B BUS 320 or ELCBUS 320.

[View course details in MyPlan: B BUS 431](#)

### **B BUS 435 Accounting Information Systems (5)**

Provides in-depth coverage of accounting information systems from the perspectives of accounting transition cycles. Examines systems processes, flowcharting and internal controls relevant to each transaction processing cycles. Discusses various technologies underlying accounting information systems, including stand-alone and integrated enterprise application. Course equivalent to: T ACCT 330. Course overlaps with: ACCTG 320. Prerequisite: minimum grade of 1.7 in B BUS 361; may not be repeated.

[View course details in MyPlan: B BUS 435](#)

### **B BUS 438 Marketing Management Laboratory (5)**

Capstone marketing course. Development and implementation of tactical as well as strategic aspects of marketing decisions. Integrates marketing concepts from other marketing classes to formulate coherent marketing decisions. Topics include multi-product, multi-market businesses, and challenges inherent in developing and implementing marketing decisions in a complex environment. Analysis of markets, businesses and competitive situations. Prerequisite: a minimum grade of 1.7 in either B BUS 320 or ELCBUS 320; a minimum grade of 1.7 in either B BUS 421, B BUS 423, B BUS

424, B BUS 425, B BUS 426, B BUS 427, B BUS 429, or B BUS 431; may not be repeated.

[View course details in MyPlan: B BUS 438](#)

### **B BUS 441 Business Project Management (5)**

In-depth coverage of skills that prepare students for roles as business project leaders and team members. Topics include project selection, risk, definition, stakeholder analysis, communication plans, scheduling, software, resource allocation, monitoring, post-project assessment. Emphasis on critical thinking and analysis.

[View course details in MyPlan: B BUS 441](#)

### **B BUS 443 Entrepreneurship Seminar (5)**

Creates or works within a new venture. New venture situations include for-profit and non-profit companies and launching new products/services within existing companies. Develops a business plan. Offered: jointly with CSS 473.

[View course details in MyPlan: B BUS 443](#)

### **B BUS 444 Product Development Lab (5)**

Includes a technology project and product development within the dynamic of time-pressured competition. Focuses on systematically improving products to beat competition and win the customer. Topics include benchmarking, competitive intelligence, and managing small group product development. Offered: jointly with CSS 474.

[View course details in MyPlan: B BUS 444](#)

### **B BUS 445 Merchandise Acquisition (5)**

Examines retail companies' merchandise acquisition practices and financial structure. Includes retail inventory management, processes of planning, and negotiating for the buying merchandise,



Includes participation in a buying simulation. Prerequisite: B BUS 300; may not be repeated.

[View course details in MyPlan: B BUS 445](#)

**B BUS 446 Strategic Retail Promotion (5)**

Examines key driver, strategies, and methods necessary to succeed in retail applying advanced promotion methods to achieve competitive advantage through innovative approaches. Prerequisite: B BUS 300; either B BUS 320 or ELCBUS 320; and may not be repeated.

[View course details in MyPlan: B BUS 446](#)

**B BUS 447 Retail Operations and Supply Chain Management (5)**

Examines the fundamental of operations management in a retail setting and the operations issues faced by firms in the retail environment including blend strategic and design decision.

Prerequisite: B BUS 300; may not be repeated.

[View course details in MyPlan: B BUS 447](#)

**B BUS 448 Retail Technology and Leadership (5)**

Provides exposure to new technologies in the retail industry and creates an understanding of how they can drive sales, increase efficiencies, and improve the customer experience. Includes a class project designed to integrate foundation of learning from the three previous retail course. Prerequisite: B BUS 300; B BUS 445; B BUS 446; B BUS 447; may not be repeated.

[View course details in MyPlan: B BUS 448](#)

**B BUS 449 Accounting Practices in Not-for-Profit Organizations (5)**

Examines accounting and reporting practices in governments, universities, hospitals and charitable foundations. Focuses on fund accounting

fundamentals, followed by a review of current challenges in budgeting, auditing, and reporting to multiple stakeholders. Course overlaps with: T ACCT 480.

Prerequisite: minimum grade of 1.7 in B BUS 363.

[View course details in MyPlan: B BUS 449](#)

**B BUS 450 Federal Income Taxation (5)**

Examines federal income tax principles that apply to gross incomes, deductions, property transactions and compensation. Equips students with the tools to conduct basic tax research and planning. Focuses primarily on the taxation of individuals, with some exposure to corporate and partnership environments.

Prerequisite: minimum grade of 1.7 in B BUS 361; may not be repeated.

[View course details in MyPlan: B BUS 450](#)

**B BUS 451 Financial Policy and Practice (5)**

Emphasizes major current theories and practices in the field of financial management. Topics include financial ratio analysis; break-even analysis; cash, marketable securities, inventory, and accounts receivable management models; dividend policy; short-term and long-term financing decisions; and international finance. Course equivalent to: ELCBUS 451.

Prerequisite: minimum grade of 1.7 in B BUS 350; may not be repeated.

[View course details in MyPlan: B BUS 451](#)

**B BUS 452 Financial Modeling (5)**

Presents the theory and practice of financial management, emphasizing computer-based modeling and forecasting. Uses spreadsheets and other software products to analyze the impacts of financial decisions related to financial statement analysis, cash budgeting, cost

of capital, capital budgeting, and capital structure choices. Covers a variety of techniques such as sensitivity and scenario analysis, optimization methods, and regression analysis. Prerequisite: a minimum grade of 1.7 in B BUS 350.

[View course details in MyPlan: B BUS 452](#)

### **B BUS 453 Financial Institutions and Markets (5)**

Role of banks and non-bank financial institutions in the financial system; asset choices of banks and non-bank financial institutions; problems in the management of financial institutions with emphasis on commercial banks. Course equivalent to: ELCBUS 453.

Prerequisite: minimum grade of 1.7 in B BUS 350; may not be repeated.

[View course details in MyPlan: B BUS 453](#)

### **B BUS 454 Investments (5)**

Introduction to the nature, problems, and process of evaluating particular securities and portfolio construction and administration. Special attention is directed to the risk and rate of return aspects of particular securities portfolios; and total wealth.

Course equivalent to: ELCBUS 454.

Prerequisite: minimum grade of 1.7 in B BUS 350; may not be repeated.

[View course details in MyPlan: B BUS 454](#)

### **B BUS 455 Financial Risk Management (5)**

Introduction to the field of derivative securities, focusing in particular on futures, forwards, and options. Pays special attention to the use of derivative securities in the management of risk and the general principles underlying the pricing of derivative securities. Course equivalent to: ELCBUS 455. Course overlaps with: B BECN 460.

Prerequisite: minimum grade of 1.7 in

B BUS 454.

[View course details in MyPlan: B BUS 455](#)

### **B BUS 456 Entrepreneurial Finance (5)**

Examines financial challenges common to new ventures, and discusses each participate in the venture arena. Explores alternative sources of private equity for new ventures. Course equivalent to: T FIN 457. Course overlaps with: FIN 457/ENTRE 457.

Prerequisite: minimum grade of 1.7 in B BUS 350.

[View course details in MyPlan: B BUS 456](#)

### **B BUS 457 Advanced Valuation (5)**

Focuses in the use of the primary valuation models and the issues faced when valuing public and private companies. These include determining the cost of capital estimate; developing cash flow projections; evaluating investment complications, such as taxes, inflation and competitive and economic risks, and adjusting models to reflect the different maturity stages of companies.

Prerequisite: minimum grade of 1.7 in B BUS 454.

[View course details in MyPlan: B BUS 457](#)

### **B BUS 458 Risk Modeling (5) RSN**

Focuses on the allocation and pricing of risk, analyzing what motivates economic agents to trade, how they manage risky endowments, and how financial assets are used for investment decisions to hedge risk. Includes analysis of how insurance premiums, stocks, bonds, and option prices are determined.

Prerequisite: B BECN 302; recommended: calculus, linear algebra, as well as familiarity with Excel. Offered: jointly with B BECN 458.

[View course details in MyPlan: B BUS 458](#)

**B BUS 459 Special Topic in Finance (5)**

Study and research topics of current concern to faculty and to students pursuing the finance concentration.

Prerequisite: minimum grade of 1.7 in B BUS 350.

[View course details in MyPlan: B BUS 459](#)

**B BUS 460 Sustainable Business (5)**

Explores the critical challenges facing business when becoming more environmentally sustainable without forgoing traditional indicators of success.

Topics involve elements of strategy, marketing, manufacturing and technology, finance, organization theory, and accounting and draw from current major concerns related to environment and sustainability, such as climate, toxins, and food.

[View course details in MyPlan: B BUS 460](#)

**B BUS 461 Business, Government, and Society (5)**

Covers capitalism and its critics; corporate social responsibility and business ethics; government and politics; regulation business; stakeholders and interest groups; the role of technology and the future of business. Prerequisite: a minimum grade of 1.7 in B BUS 300; and a minimum grade of 1.7 in B BUS 310.

[View course details in MyPlan: B BUS 461](#)

**B BUS 462 Negotiations and Conflict Management (5)**

Explores creative, integrative approaches to conflict resolution. Bargaining games, role-plays, cases, issues in conflict management, interpersonal influence processes, ethical implications of bargaining problems and personal negotiating styles. Course equivalent to: ELCBUS 403. Prerequisite: a minimum grade of 1.7 in B BUS 300; and a minimum grade of 1.7 in either B BUS 320 or

ELCBUS 320.

[View course details in MyPlan: B BUS 462](#)

**B BUS 463 Advanced Financial Accounting (5)**

Covers advanced accounting topics related to consolidated financial statements; accounting for derivatives and hedging activities, and the translation of financial statements prepared in a foreign currency.

Prerequisite: minimum grade of 1.7 in B BUS 362.

[View course details in MyPlan: B BUS 463](#)

**B BUS 464 New Product Marketing (5)**

Focuses on the process of New Product Marketing. Examines the contemporary practices of market development as it complements new product development. Emphasis given to

understanding customer value, its measurement and relationship to new product design. Practical exposure through focused homework, student projects, and case studies. Prerequisite: a minimum grade of 1.7 in either B BUS 320 or ELCBUS 320.

[View course details in MyPlan: B BUS 464](#)

**B BUS 465 Applied Financial Accounting (5)**

Emphasizes what analysts and managers need to know about the issues and procedures involved in the preparation of the financial statement, rather than on the actual preparation of the statements. Prepares students for professional certification as management accountants or financial analysts.

Prerequisite: minimum grade of 1.7 in B BUS 350.

[View course details in MyPlan: B BUS 465](#)



**B BUS 466 Applied Managerial Accounting (5)**

Examines the principles of management accounting and the tools and techniques used to prepare and disseminate management accounting reports. Prepares students for professional certification as management accountants or financial analysts. Prerequisite: minimum grade of 1.7 in B BUS 350.

[View course details in MyPlan: B BUS 466](#)

**B BUS 467 Advanced Taxation (5)**

Examines issues of taxation for entities other than individuals, including corporation, subchapter S corporations, partnerships, estates, and trusts. Includes corporate distributions, liquidations, and reorganizations. Prerequisite: minimum grade of 1.7 in B BUS 450.

[View course details in MyPlan: B BUS 467](#)

**B BUS 468 Advanced Accounting and Analytics (5)**

Accounting for and reporting of foreign currency and hedging activity, business risk and financial reporting risks. Students learn to combine guidance from authoritative literature with knowledge of current business practices and analysis of structured accounting data to develop and effectively communicate with diverse audiences including business leaders, capital markets, regulators and internal and external stakeholders. Prerequisite: a minimum grade of 1.7 in B BUS 363.

[View course details in MyPlan: B BUS 468](#)

**B BUS 470 Business Policy and Strategic Management (5)**

Capstone course. Focuses on identification, analysis and resolution of

managerial problems; creation and implementation of management policies in business organizations; and revision of policies over time. Prerequisite: a minimum grade of 1.7 in B BUS 300; a minimum grade of 1.7 in B BUS 307; a minimum grade of 1.7 in B BUS 320; a minimum grade of 1.7 in B BUS 340; and a minimum grade of 1.7 in B BUS 350; may not be repeated.

[View course details in MyPlan: B BUS 470](#)

**B BUS 471 Entrepreneurial Management (5)**

Focuses on the processes of entrepreneurship within an organization, including how to create products and services which add value to consumers, how to start and nurture a new business venture, and how to develop and sustain innovation within existing organizations.

[View course details in MyPlan: B BUS 471](#)

**B BUS 472 Managing Employees (5)**

Focuses on how companies are succeeding through innovative human-resource practices and on the steps that managers can take to overcome barriers to change in order to meet the challenges of today and the future. May not be repeated. Prerequisite: minimum grade of 1.7 in B BUS 300.

[View course details in MyPlan: B BUS 472](#)

**B BUS 473 Leadership and Decision Making (5)**

The manager is seen as a business leader and decision-maker. Covers various individual and group-level decision-making models. May not be repeated. Course equivalent to: ELCBUS 402. Prerequisite: a minimum grade of 1.7 in B BUS 300.

[View course details in MyPlan: B BUS 473](#)

**B BUS 475 Managing Innovation (5)**

Examines topics such as the nature of innovation, technology strategy, organizational and technical capabilities, and new product development processes. Course requirements typically include readings, case analyses, classroom discussion, and research project(s). Prerequisite: may not be repeated.

[View course details in MyPlan: B BUS 475](#)

**B BUS 476 New Technology and Future Markets (5)**

Examines the business dynamics of technological revolutions. The primary objective is to help managers critically analyze the potential impacts of upcoming "leading edge" technologies on their industry sector. Students engage in forecasting a high technology sector. May not be repeated. Prerequisite: a minimum grade of 1.7 in B BUS 300; a minimum grade of 1.7 in either B BUS 320 or ELCBUS 320; and a minimum grade of 1.7 in B BUS 350.

[View course details in MyPlan: B BUS 476](#)

**B BUS 477 Human Resource Management (5)**

Provides an introduction to the strategic role of the Human Resource function within modern organizations. Examines HR management practices associated with individual and organizational effectiveness, employee satisfaction and motivation; develops an understanding of how general managers can apply these concepts in dealing with their employees. Prerequisite: a minimum grade of 1.7 in B BUS 300.

[View course details in MyPlan: B BUS 477](#)

**B BUS 478 Startup Management and Growth (5)**

Provides in-depth examination of how

entrepreneurs staff and fund their startups. Examines team building, funding options, startup financials, and investor expectations. Students prepare to pitch their startups to venture capitalists. Course equivalent to: ELCBUS 444.

[View course details in MyPlan: B BUS 478](#)

**B BUS 479 Special Topics in Management (5, max. 20)**

Topics of current interest to faculty and students. Offered when allowed by faculty availability and sufficient student interest. Prerequisite: a minimum grade of 1.7 in B BUS 300.

[View course details in MyPlan: B BUS 479](#)

**B BUS 480 Global Environment of Business (5)**

Focuses on the major changes and issues facing businesses and managers operating in an increasingly global environment. Emphasizes topics such as trade policy, accelerating advances in technology, the changing nature of the work force, and societal expectations of business. Problems and issues from the perspective of directing the entire business enterprise.

Prerequisite: a minimum grade of 1.7 in B BUS 300; a minimum grade of 1.7 in B BUS 307; a minimum grade of 1.7 in B BUS 320; a minimum grade of 1.7 in B BUS 340; a minimum grade of 1.7 in B BUS 350; may not be repeated.

[View course details in MyPlan: B BUS 480](#)

**B BUS 482 Introduction to Supply Chain Management (5) RSN**

Introduces basic supply chain management concepts, as well as strategic and design decisions faced by service and manufacturing organizations. Provides an overview of the supply chain architecture and discusses various

aspects of managing inventory, sourcing relationships, revenue management, performance management, and supply chain information systems.

Course equivalent to: ELCBUS 482.

Course overlaps with: OPMGT 443.

Prerequisite: a minimum grade of 1.7 in either B BUS 340 or ELCBUS 340;

recommended: Operations Management

[View course details in MyPlan: B BUS 482](#)

### **B BUS 483 Global Strategic Sourcing (5)**

Introduces foundational theories, tools, and techniques related to managing sourcing and procurement related activities in manufacturing, services, retailing, and governmental sectors.

Course equivalent to: ELCBUS 483.

Course overlaps with: OPMGT 443.

Prerequisite: a minimum grade of 1.7 in B BUS 441; and a minimum grade of 1.7 in B BUS 482; recommended: operations management and supply chain management.

[View course details in MyPlan: B BUS 483](#)

### **B BUS 486 Supply Chain Resource Planning (5) RSN**

Introduction to the design and control of production functions. Focuses on the principles, models, and techniques for resource planning, analysis, and design of integrated production control systems.

Topics include forecasting, inventory management, production planning, scheduling, and materials requirement planning problems. Course equivalent to: ELCBUS 486. Course overlaps with: OPMGT 443.

Prerequisite: minimum grade of 1.7 in B BUS 340; recommended: Operations management.

[View course details in MyPlan: B BUS 486](#)

### **B BUS 487 Managing and Improving Supply Chain Processes (5)**

Integrates the topics covered in the foundational Supply Chain Management courses as well as engage students in topics related to managing and improving supply chains. Analyze a real-world supply chain problem and develop viable solutions. Course equivalent to: ELCBUS 487. Course overlaps with: OPMGT 443. Prerequisite: a minimum grade of 1.7 in B BUS 441; and a minimum grade of 1.7 in B BUS 482; recommended: operations management and supply chain management.

[View course details in MyPlan: B BUS 487](#)

### **B BUS 489 Digital Business Lab (5)**

MIS concentration capstone. Provides a broad understanding of the impact of information technology on the corporation. Uses various learning tools such as case studies, portfolios, site visits, visiting speakers, and term papers. Prerequisite: a minimum grade of 1.7 in B BUS 330; a minimum grade of 1.7 in either CSS 143 or CSS 173; a minimum grade of 1.7 in CSS 360; and may not be repeated.

[View course details in MyPlan: B BUS 489](#)

### **B BUS 490 Special Topics in Business (5, max. 20)**

Topics of current interest to faculty and students. Offered when allowed by faculty availability and sufficient student interest. Prerequisite: a minimum grade of 1.7 in B BUS 300; and a minimum grade of 1.7 in B BUS 310.

[View course details in MyPlan: B BUS 490](#)

### **B BUS 491 Business Consulting (5)**

Applies principles and methods of consulting to organizations. Teams work as consultants for local businesses, applying management theory and concepts to develop strategic and tactical solutions to client-driven

problems involving multiple functions.

[View course details in MyPlan: B BUS 491](#)

### **B BUS 492 Supply Chain Management Practicum (5)**

Supply chain management is a practical and hands on discipline. In this course, students will apply their supply chain management knowledge acquired from their multiple supply chain courses in a real-world setting. Students will work as a consultant on a sponsored project and experience a real-world supply chain and its associated challenges. Cannot be taken if credit received for OPMGT 495. Prerequisite: B BUS 441; B BUS 482; B BUS 483; B BUS 486; and B BUS 487.

[View course details in MyPlan: B BUS 492](#)

### **B BUS 497 Guided Internship (1-10, max. 10)**

A significant research project planned and carried out by the student under the direction of one or more faculty. Course equivalent to: ELCBUS 497.

[View course details in MyPlan: B BUS 497](#)

### **B BUS 498 Directed Readings (3-5, max. 15)**

A significant research project planned and carried out by the student under the direction of two or more faculty.

[View course details in MyPlan: B BUS 498](#)

### **B BUS 499 Undergraduate Research (1-5, max. 15)**

Individual advanced research on topics related to business issues and conducted under the direction of one or more instructors. Course equivalent to: ELCBUS 499.

[View course details in MyPlan: B BUS 499](#)

### **B BUS 500 Quantitative Business Methods (2)**

Reviews fundamental concepts of differential calculus,

descriptive statistics and probability theory, emphasizing applications most useful in modeling business problems. Topics include differentiation and optimization, descriptive statistics, measures of association, probability concepts, decision analysis and discrete and continuous probability distributions. Concepts are illustrated through case problems in business. Credit/no-credit only. Offered: S.

[View course details in MyPlan: B BUS 500](#)

### **B BUS 501 Leadership, Team Process and Decision Making: A Workshop (4)**

Examines factors associated with leader and team effectiveness using high- and low-element exercises and lecture/discussion. Introduces management analysis and decision-making using the case study method. Three-day off-campus retreat followed by two evening class meetings on campus. Credit/no-credit only. Offered: A.

[View course details in MyPlan: B BUS 501](#)

### **B BUS 502 Statistics for Business (4)**

Reviews descriptive statistics, exploratory data, and probability distributions. Studies the theory and methods of statistical inference, emphasizing those applications most useful in modeling business problems. Topics include sampling theory, estimation, hypothesis testing, linear regression, analysis of variance, and several advanced applications of the general linear model. Offered: A.

[View course details in MyPlan: B BUS 502](#)

### **B BUS 503 Financial Reporting and Analysis (4)**

Read, interpret, and analyze company financial reports. Understand the procedural aspects of the preparation of financial statements. Acquire a working

knowledge of generally accepted accounting principles and financial reporting standards. Understand the ambiguities that arise in preparing financial statements and the role of good business judgment in resolving these ambiguities.

[View course details in MyPlan: B BUS 503](#)

#### **B BUS 504 MICROECONOMICS FOR BUSINESS (4)**

Considers some of the most important economic aspects of a business enterprise including demand and cost analysis, pricing strategy (including auctions), and the economics of information. Highlights the usefulness of game theory. Offered: W.

[View course details in MyPlan: B BUS 504](#)

#### **B BUS 505 Financial Management (4)**

Provides an introduction to the models used in the investment and financing decisions of a firm.

Topics include: valuation of stocks and bonds; measurement of risk and return; project evaluation and analysis; financial leverage and optimal capital structure, and optimal dividend policy. Prerequisite: B BUS 503; B BUS 504. Offered: Sp.

[View course details in MyPlan: B BUS 505](#)

#### **B BUS 506 Marketing Management (4)**

Facilitates the development of a customer orientation and explores the use of the marketing mix of product, price, place and promotion to create, communicate and deliver value to targeted customer segments. Explains how marketing strategy is developed, implemented, and controlled in the marketplace. Prerequisite: B BUS 504. Offered: Sp.

[View course details in MyPlan: B BUS 506](#)

#### **B BUS 507 Global Business (4)**

Synthesizes and extends perspective

on global business environment.

Demonstrates how choices related to organization and strategy (such as outsourcing and diversification) require an understanding of trade theory and policy, differences in national cultures, and international institutions.

Prerequisite: B BUS 504; B BUS 505; B BUS 506. Offered: Sp.

[View course details in MyPlan: B BUS 507](#)

#### **B BUS 508 Business Law and Ethics (4)**

Provides an understanding of the impact of legal considerations on managerial decision making. Topics include anti-trust law, intellectual property law, consumer protection and investor protection. Offered: W.

[View course details in MyPlan: B BUS 508](#)

#### **B BUS 509 Operations Management (4)**

Examines the operations function in service and manufacturing organizations from a managerial perspective. Key topics include strategic and design decisions relating to operations and processes, quality management, lean systems, inventory control and supply chain management. Uses blend of theory, cases, analytical techniques, and business vignettes. Prerequisite: B BUS 505; B BUS 506 Offered: A.

[View course details in MyPlan: B BUS 509](#)

#### **B BUS 510 Managing Organizational Effectiveness (4)**

Explores intangible assets and "meso" issues that underpin organizational effectiveness. Topics include organizational phenomena (cultures, structures, routines, capabilities, life cycles), intellectual capital, and knowledge management (creating, maintaining, and diffusing knowledge). Projects require application of best practices to

personally relevant situations. Offered: Sp.

[View course details in MyPlan: B BUS 510](#)

#### **B BUS 512 Strategic Management (4)**

Focuses on major top management decisions, emphasizing how competitive advantage is created and maintained through planning and strategy. Using readings and cases, demonstrates importance in diverse industries of external environments (customers, competitors, science and technology, laws), organizational phenomena (structure, processes, decision making), and an international perspective. Prerequisite: B BUS 509. Offered: Sp.

[View course details in MyPlan: B BUS 512](#)

#### **B BUS 514 Business Communications for Leaders (4)**

Focuses on making written and spoken communications effective and authentic, using case studies of several communication challenges that occur in organizations. Teaches how successful communication is both intentional and strategic; and how to formulate communication goals, understand your audience, and use the correct approach in each situation. Offered: S.

[View course details in MyPlan: B BUS 514](#)

#### **B BUS 521 Enterprise IT Management (4)**

Focuses on critical issues for aligning information technology resources with the enterprise. Demonstrates the role of company mission and objectives on decisions regarding project approval and implementation. Topics include: project due diligence; technology process management; technology agility; enterprise system implementation, legal

and ethical aspects, and contemporary issues. Offered: S.

[View course details in MyPlan: B BUS 521](#)

#### **B BUS 522 Organizational Behavior (4)**

Improves student's effectiveness as managers and leaders. Introduces frameworks for understanding organizational processes. Includes a one-day, overnight retreat to help second-year students to reflect on their experiences, and examine progress toward their development goals to enhance success during the second year. Prerequisite: B BUS 501. Offered: A.

[View course details in MyPlan: B BUS 522](#)

#### **B BUS 524 Creativity and Innovation Management (4)**

Provides senior management perspective and analytical frameworks for managing creativity and innovation to achieve strategic goals and objectives. Topics include the language of innovation, use of lateral thinking and group collaboration techniques to create breakthrough new ideas, and building innovation eco-systems through integration of strategy, process, organization, and technologies.

[View course details in MyPlan: B BUS 524](#)

#### **B BUS 525 Technology and Innovation Management (4)**

Provides a general manager's perspective on the management of innovation. Focuses on conceptual frameworks and analytical tools for managing innovation throughout the firm. Topics include the nature of innovation, how organizational and technical capabilities affect innovation, product/process development systems, and technology implementation. Offered: W.

[View course details in MyPlan: B BUS 525](#)



**B BUS 526 Entrepreneurship Practicum (4)**

Focuses on providing immersive real-life experiences that require application of fundamental business principles.

Students in the "new venture" track make a trial presentation to practitioners at the quarter's end. Students in the "live case" track meet pre-established and agreed-upon goals. Offered: W.

[View course details in MyPlan: B BUS 526](#)

**B BUS 527 Entrepreneurial Marketing (4)**

Explores how marketing and entrepreneurship affect and are affected by one another. Examines role of marketing in entrepreneurial ventures, and the role of entrepreneurship in marketing efforts for all firms.

[View course details in MyPlan: B BUS 527](#)

**B BUS 528 New Product Marketing (4)**

Examines strategies and state-of-the art analytical methods that support profitable new product introductions.

[View course details in MyPlan: B BUS 528](#)

**B BUS 531 Leadership and Social Responsibility (4)**

Focuses on leadership and managerial effectiveness. Builds upon students' knowledge of factors which influence leadership behavior and the critical personal and interpersonal associated with leadership. At a two-day, overnight retreat, students engage in an organizational simulation and receive feedback from faculty and mentors.

Prerequisite: B BUS 501. Offered: A.

[View course details in MyPlan: B BUS 531](#)

**B BUS 533 Advanced Leadership Models (4)**

Provides an advanced overview of leadership theory and practice and helps students understand and develop their

own leadership potential. Relies on a variety of approaches including readings, cases, simulations, guest speakers, activities, discussion, assessments, lectures, and reflection.

[View course details in MyPlan: B BUS 533](#)

**B BUS 534 Human Resource Management (4)**

Provides an introduction to the strategic role of the human resource function within modern organizations; examines human resource management practices associated with individual and organizational effectiveness, employee satisfaction, and motivation; and develops an understanding of how general managers can apply these concepts in managing people within their organizations.

[View course details in MyPlan: B BUS 534](#)

**B BUS 535 Advanced Marketing Simulation Laboratory (4)**

Develops and evaluates marketing strategies and tactics for multi-product multi-market organizations. Expands knowledge through hands-on simulation. Discusses strategies for market entry, innovation, pricing, and brand repositioning. Examines diffusion of innovation models and analytical methodologies for evaluating and implementing marketing strategy such as conjoint analysis.

Prerequisite: minimum grade of 2.7 in B BUS 506.

[View course details in MyPlan: B BUS 535](#)

**B BUS 539 Market Intelligence (4)**

Focuses on understanding design, data analysis techniques, and interpretation of market segmentation studies, customer satisfaction studies, user experience studies, product positioning research, and recommender system. Students have

hands-on experience designing research projects and deriving marketing insights from various data analysis exercise and projects. Prerequisite: B BUS 502.

[View course details in MyPlan: B BUS 539](#)

#### **B BUS 541 Advanced Corporate Finance (4)**

Reviews basic financial concepts and introduces more advanced financial tools. Uses case analysis to confront the complexities of real-world financial situations. Students work to identify relevant issues necessary to address the financial problems raised in cases. Prerequisite: B BUS 505. Offered: S.

[View course details in MyPlan: B BUS 541](#)

#### **B BUS 542 Customer Satisfaction Models (5)**

Examines the role of customer satisfaction in a market economy; how information on customer satisfaction can be used to understand the economy, to help investment decisions, and to improve business management. Theoretical objectives include broadening the pre-purchase and post-purchase decision-making focus into the consumption and post-consumption areas. Offered: S.

[View course details in MyPlan: B BUS 542](#)

#### **B BUS 543 Investments (4)**

Examines various types of investment securities and derivatives, the mechanics of security markets, the relationship between risk and return, and the distinction between fundamental and technical analysis. Prerequisite: B BUS 505. Offered: S.

[View course details in MyPlan: B BUS 543](#)

#### **B BUS 544 Negotiations (4)**

Examines the theory and processes of negotiation. Includes a broad spectrum of

negotiation problems.

[View course details in MyPlan: B BUS 544](#)

#### **B BUS 546 Seminar on Global Economic Issues (4)**

Analyzes economic structures and trends in nations across the globe and examines their implications for business decision-making. Examines how these economies are influenced by political, legal, regulatory, and technological issues in a global context. Offered: S.

[View course details in MyPlan: B BUS 546](#)

#### **B BUS 549 Management Consulting (4)**

A project-based applied learning practicum focused on introducing students to the field of management consulting. Designed to serve an integrative role, bringing together the functional disciplines and components of the MBA curriculum in a summative project-based consulting experience.

[View course details in MyPlan: B BUS 549](#)

#### **B BUS 551 Project Management (4)**

This course is designed to introduce students to concepts, methods and tools of project management. Students will be exposed to topics such as exploring the processes of selecting and defining the project, planning the project, leading the project team, monitoring and controlling the execution of the project, and closing and evaluating the project. Offered: S.

[View course details in MyPlan: B BUS 551](#)

#### **B BUS 556 Entrepreneurial Finance (4)**

Examines financial challenges common to new ventures, and discusses each participant in the venture arena. Explores alternative sources of private equity for new ventures.

[View course details in MyPlan: B BUS 556](#)

#### **B BUS 558 Corporate Financial Reporting (4)**

Using critical thinking skills, students



develop professional judgment in evaluating corporate general purpose financial reporting. Through case studies, readings, and exercises, students build knowledge and skills for creating and using financial reports, particularly around long-term business arrangements. Students learn to document and clearly communicate their analysis.

[View course details in MyPlan: B BUS 558](#)

#### **B BUS 560 Sustainable Business (4)**

Explores the critical challenges facing businesses in becoming more environmentally sustainable without forgoing traditional indicators of success. Topics drawn from current major concerns related to environment and sustainability, such as climate, water, toxics, transportation, buildings, and food. Application of economics, strategy, marketing, manufacturing and technology, finance, organization theory, and accounting.

[View course details in MyPlan: B BUS 560](#)

#### **B BUS 561 Digital Marketing (4)**

Provides knowledge and insights to construct, implement, and evaluate digital marketing strategies based on data-driven analysis. Explores topics including search engine optimization, search advertising, display advertising, web analytics, social media marketing, and mobile marketing. Course overlaps with: MKTG 566. Prerequisite: B BUS 506.

[View course details in MyPlan: B BUS 561](#)

#### **B BUS 562 Corporate Governance: An International Perspective (4)**

Explores the variety of corporate control and governance structures around the world. Examines important governance practices and their impact on

corporate strategy and competitiveness.

[View course details in MyPlan: B BUS 562](#)

#### **B BUS 563 Cost Analysis for Strategic Decision Making (4)**

Addresses how managers can identify, analyze, and use costs and other information for decision making and performance evaluation. Students learn how to classify costs for different purposes, the key difference between expenses and costs, budgeting and use of budgets, controlling costs through understanding the demands for resources, how cost allocation affects incentives and aspects of decentralized control. Course equivalent to: T ACCT 513. Prerequisite: B BUS 503.

[View course details in MyPlan: B BUS 563](#)

#### **B BUS 569 Introduction to Game Theory (4)**

The course focuses on the study of strategic interaction among agents in situations characterized by both complete and incomplete information. While the course is mathematical in nature, it is built under the premise that game theory is applicable in everyday situations. Game theoretical principles are taught through the study of examples taken from business, economics, political science and other fields. Prerequisite: B BUS 504 or permission of instructor.

[View course details in MyPlan: B BUS 569](#)

#### **B BUS 590 Special Topics for MBA Study (1-4, max. 32)**

Topics of interest Business faculty and students. Offered when allowed by faculty availability and sufficient student interest.

[View course details in MyPlan: B BUS 590](#)

#### **B BUS 591 Global Business Study Tour ([1-10]-, max. 10)**

Study abroad tour that cultivates a rich understanding of business theory and a genuine global perspective. Develops an appreciation of national difference in culture and economic, legal, and political systems that affect business strategy, operations, and performance.

[View course details in MyPlan: B BUS 591](#)

### **B BUS 600 Independent Study or Research (1-4)**

Independent study or research on business topics conducted under the direction of one or more instructors. Offered: AWPSS.

[View course details in MyPlan: B BUS 600](#)

### **B BUS 601 Internship (1-6, max. 12)**

Provides a circumscribed practical experience at an organization under the supervision of a faculty member. Credit/no-credit only. Offered: AWPSS.

[View course details in MyPlan: B BUS 601](#)

## **BUSINESS ECONOMICS**

### **B BECN 300 Quantitative Methods in Economics (5) RSN**

Provides a comprehensive introduction to basic mathematical tools most often used by economists. Students will become familiar with the mathematical concepts presented, and will be able to use them to solve economics problems. Micro and macro models will be used to place optimization tools in economic contexts. Prerequisite: B MATH 144.

[View course details in MyPlan: B BECN 300](#)

### **B BECN 302 Intermediate Microeconomics (5) RSN**

Intermediate level analysis of theories of household behavior (demand for consumer goods, labor supply, and savings decisions) and producer behavior (supply of output, demand for labor and capital). Various notions of equilibria in

competitive and noncompetitive markets are introduced, and their welfare properties are discussed. Course equivalent to: TBECN 420. Prerequisite: B BUS 220/BIS 200 and either B MATH 144, MATH 112, STMATH 114, STMATH 124, MATH 124, or MATH 134.

[View course details in MyPlan: B BECN 302](#)

### **B BECN 303 Intermediate Macroeconomics (5)**

Analyze the determinants of the aggregate level of employment, output, prices, and income of an economy. Explore policy issues and applications with special reference to current monetary and fiscal policy. Course overlaps with: ECON 301. Prerequisite: B BUS 221/BIS 201 and B BECN 302.

[View course details in MyPlan: B BECN 303](#)

### **B BECN 382 Introduction to Econometrics (5) RSN**

Introduces students to basic econometric tools and provides a background to apply statistical analysis to economic data, quantifying causal effects of economic relationships. It combines theory with hands-on experience in econometric modeling, emphasizing empirical applications to data and real-world problems. Course overlaps with: ECON 382. Prerequisite: B BECN 302.

[View course details in MyPlan: B BECN 382](#)

### **B BECN 458 Risk Modeling (5) RSN**

Focuses on the allocation and pricing of risk, analyzing what motivates economic agents to trade, how they manage risky endowments, and how financial assets are used for investment decisions to hedge risk. Includes analysis of how

insurance premiums, stocks, bonds, and option prices are determined.

Prerequisite: B BECN 302;

recommended: calculus, linear algebra, as well as familiarity with Excel. Offered: jointly with B BUS 458.

[View course details in MyPlan: B BECN 458](#)

### **B BECN 460 Financial Economics (5) RSN**

An introduction to the economic foundations of financial and actuarial models with applications to insurance and financial risk management, and the role of derivative securities in arbitrage, quantitative investment management and algorithmic trading. Course overlaps with: B BUS 455; ELCBUS 455; FIN 461; and T FIN 427. Prerequisite: B BECN 302; and either B BECN 458, or STMATH 330 and STMATH 392.

[View course details in MyPlan: B BECN 460](#)

### **B BECN 469 Introduction to Game Theory (5)**

The course focuses on the study of strategic interaction among agents in situations characterized by both complete and incomplete information. While the course is mathematical in nature, it is built under the premise that game theory is applicable in everyday situations. Game theoretical principles are taught through the study of examples taken from business, economics, political science and other fields. Course overlaps with: STMATH 310; ECON 485; and TECON 420. Prerequisite: either STMATH 124 or B BUS 310.

[View course details in MyPlan: B BECN 469](#)

## **BUSINESS ADMINISTRATION** **BUSINESS SKILLS**

### **B BSKL 200 Preparing for the Business World (5)**

Examines professionalism, productivity, communication, networking, and career management. Develops skills for business case analysis, project planning and management, public speaking, writing, team work, and introspection. Credit/no-credit only.

[View course details in MyPlan: B BSKL 200](#)

### **B BSKL 305 Business Research Skills (1)**

Familiarize students with analytical reasoning and research methods, the case method of teaching, and group writing skills. Provides students with the tools necessary to succeed in the UWB Business Program. Must be taken concurrently with B BUS 305, Managerial Communication. Credit/no-credit only. Offered: AW.

[View course details in MyPlan: B BSKL 305](#)

## **BUSINESS ADMINISTRATION** **EASTSIDE LEADERSHIP CENTER** **ELCBUS 210 Principles of Financial Accounting (5)**

Preparation and use of accounting reports with primary focus on uses of accounting for external reporting. Understand financial statements and prepare statements that accurately present to external entities corporate financial position, operating results, cash flows, and financial strength.

[View course details in MyPlan: ELCBUS 210](#)

### **ELCBUS 211 Principles of Managerial Accounting (5)**

Uses accounting information for business

planning and control purposes. Focuses on internal use of accounting information and topics include cost behavior, product costing, budgeting, performance management, and responsibility accounting.

Develops proficiency in identifying the relevant information for making operational and strategic decisions.

Prerequisite: either ELCBUS 210 or B BUS 210.

[View course details in MyPlan: ELCBUS 211](#)

### **ELCBUS 215 Introduction to Business Statistics (5) RSN**

Introduces descriptive statistics, probability concepts, and statistical inference emphasizing statistical applications useful in decision making and research in the social sciences. Topics include exploratory data analysis, correlation sampling theory, estimation, hypothesis testing, and simple regression analysis. Concepts are illustrated through case problems in sociology, psychology, consumer economics, and business.

[View course details in MyPlan: ELCBUS 215](#)

### **ELCBUS 300 Organizational Behavior, Ethics, and Inclusivity (5) DIV**

The course focuses on how organizations succeed through the actions of employees and innovative and evidence-based human-centered management practices. This course emphasizes diversity and inclusivity across all topics and examines managers and leaders' responsibilities in facilitating (1) individual, group, and organizational inclusive and ethical performance, (2) decision making, and (3) diversity, employee motivation, and well-being.

Course equivalent to: B BUS 300. Course overlaps with: MGMT 300.

Offered: AWSp.

[View course details in MyPlan: ELCBUS 300](#)

### **ELCBUS 301 Business Statistics (5) RSN**

Examines statistical methods useful in modeling business problems. Topics include exploratory data analysis and the visual representation of data, probability distributions, statistical inference (sampling theory, estimation, hypothesis testing), and multiple regression models. Concepts illustrated through case problems and the intensive use of statistical software.

[View course details in MyPlan: ELCBUS 301](#)

### **ELCBUS 305 Managerial Communication (5)**

Focuses on the importance of topics such as written and oral communication for managerial success. Involves hands-on individual and group experience in preparing business documents and delivering business presentations.

[View course details in MyPlan: ELCBUS 305](#)

### **ELCBUS 310 Managerial Economics (5)**

Applies economics principles and quantitative methods to improve managerial decision making. Topics include demand analysis, cost analysis, forecasting, asset valuation, information economics, and government regulation of business. Prerequisite: a minimum grade of 1.7 in ELCBUS 301; and a minimum grade of 1.7 in either B MATH 144, STMATH 124, or MATH 112.

[View course details in MyPlan: ELCBUS 310](#)

**ELCBUS 320 Marketing Management (5)**

Focuses on designing tools, concepts, and strategies for problem solving in marketing management. Course equivalent to: B BUS 320.

[View course details in MyPlan: ELCBUS 320](#)

**ELCBUS 330 Information Management and Analysis (5)**

Examines core technologies vital to enterprise information technology management. Topics include architectural considerations in high tech enterprises, internet tools, and enterprise resource planning systems.

[View course details in MyPlan: ELCBUS 330](#)

**ELCBUS 340 Operations and Project Management (5)**

Examines service and manufacturing processes that deliver value to customers, introduces concepts and tools for critical analysis, and emphasizes operating priorities (quality, cost, delivery, flexibility, social responsibility) including the underlying factors that support them. Course equivalent to: B BUS 340.

Prerequisite: minimum grade of 1.7 in ELCBUS 310.

[View course details in MyPlan: ELCBUS 340](#)

**ELCBUS 350 Business Finance (5)**

Focuses on understanding the sources, uses, costs, and control of funds in business organizations. Issues include the internal management of working capital, sources of capital, financing new ventures, capital budgeting, and financing the growth of businesses. Prerequisite: minimum grade of 1.7 in ELCBUS 310.

[View course details in MyPlan: ELCBUS 350](#)

**ELCBUS 380 Managing Work Teams (5)**

This course is designed to provide students with an understanding of the factors which influence team effectiveness. It also examines current theory and research regarding group and team performance and explores the application of theory to managerial practices. Course equivalent to: B BUS 402. Offered: W.

[View course details in MyPlan: ELCBUS 380](#)

**ELCBUS 382 Business, Government, and Society (5)**

Examines relationships among business, government, and civil society. Emphasizes perspectives and interests of each sector as to economic, social, and environmental goals. Addresses business ethics and corporate social responsibility. Includes intensive writing and revision, with emphasis on logical and persuasive support of recommendations and positions.

[View course details in MyPlan: ELCBUS 382](#)

**ELCBUS 400 Business Project Management (5)**

Provides in-depth coverage of skills that prepare students for roles as business project leaders and team members. Topics include project selection, risk, definition, stakeholder analysis, communication plans, scheduling, software, resource allocation, monitoring, post-project assessment. Emphasizes critical thinking and analysis.

Prerequisite: minimum grade of 1.7 in ELCBUS 340.

[View course details in MyPlan: ELCBUS 400](#)

**ELCBUS 401 Electronic Marketing (5)**

Critically analyze new marketing models; study how firms can effectively leverage new technology and maximize long-term profits. Includes: web marketing strategy, e-commerce issues, channel issues, pricing models, advertising and promotion models, and business plans. Equivalent to B BUS 431. Course equivalent to: B BUS 431. Prerequisite: minimum grade of 1.7 in ELCBUS 320.

[View course details in MyPlan: ELCBUS 401](#)

**ELCBUS 402 Leadership and Decision Making (5)**

The manager is seen as a business leader and decision-maker. Covers various individual and group-level decision-making models. Course equivalent to: B BUS 473. Prerequisite: minimum grade of 1.7 in ELCBUS 300.

[View course details in MyPlan: ELCBUS 402](#)

**ELCBUS 403 Negotiations and Conflict Management (5)**

Explores creative, integrative approaches to conflict resolution. Includes bargaining games, role-plays, cases, issues in conflict management, interpersonal influence processes, ethical implications of bargaining problems, and persona negotiating styles. Equivalent to B BUS 462. Course equivalent to: B BUS 462. Prerequisite: minimum grade of 1.7 in both ELCBUS 300 and ELCBUS 320.

[View course details in MyPlan: ELCBUS 403](#)

**ELCBUS 441 Essentials of Venturing (5)**

Provides an overview of the new venture creation process including business

formation, growth, and innovation.

Introduces forms of entrepreneurship, methods of acquiring human capital, the idea generation processes, networking, intellectual property protection, as well as types and sources of funding.

[View course details in MyPlan: ELCBUS 441](#)

**ELCBUS 442 New Venture Ideas (5)**

Focuses on the basics of new product development and marketing. Provides an understanding of the importance of the integration of design, manufacturing, and marketing processes.

Prerequisite: minimum grade of 1.7 in ELCBUS 441.

[View course details in MyPlan: ELCBUS 442](#)

**ELCBUS 443 Venture Feasibility Analysis (5)**

Focuses on methods to evaluate and obtain control over opportunities that can be exploited by starting new companies. Prerequisite: ELCBUS 442, which may be taken concurrently

[View course details in MyPlan: ELCBUS 443](#)

**ELCBUS 444 Venture Start-up, Management and Growth (5)**

Focuses on the opportunity and challenge of managing and growing of start-ups. Emphasizes understanding of the processes managing growth and effectively dealing with the growing pains. Course equivalent to: B BUS 478.

Prerequisite: minimum grade of 1.7 on ELCBUS 443.

[View course details in MyPlan: ELCBUS 444](#)

**ELCBUS 451 Financial Policy and Practice (5)**

Emphasizes major current theories and



practices in the field of financial management. Topics include financial ratio analysis; break-even analysis; cash, marketable securities, inventory, and accounts receivable management models; dividend policy; short-term and long-term financing decisions; and international finance. Course equivalent to: B BUS 451.

Prerequisite: minimum grade of 1.7 in ELCBUS 350.

[View course details in MyPlan: ELCBUS 451](#)

### **ELCBUS 453 Financial Institutions and Markets (5)**

Role of banks and non-bank financial institutions in the financial system; asset choices of banks and non-bank financial institutions; problems in the management of financial institutions with emphasis on commercial banks. Course equivalent to: B BUS 453.

Prerequisite: minimum grade of 1.7 in ELCBUS 350.

[View course details in MyPlan: ELCBUS 453](#)

### **ELCBUS 454 Investments (5)**

Introduction to the nature, problems, and process of evaluating particular securities and portfolio construction and administration. Special attention is directed to the risk and rate of return aspects of particular securities portfolios; and total wealth. Course equivalent to: B BUS 454.

Prerequisite: minimum grade of 1.7 in ELCBUS 350.

[View course details in MyPlan: ELCBUS 454](#)

### **ELCBUS 455 Financial Risk Management (5)**

Introduction to the field of derivative securities, focusing in particular on

futures, forwards, and options. Pays special attention to the use of derivative securities in the management of risk and the general principles underlying the pricing of derivative securities.

Course equivalent to: B BUS 455. Course overlaps with: B BECN 460.

Prerequisite: minimum grade of 1.7 in ELCBUS 454.

[View course details in MyPlan: ELCBUS 455](#)

### **ELCBUS 461 International Environment of Business (5)**

Focuses on major changes and issues facing businesses and managers operating in an increasingly global environment. Emphasizes topics such as trade policy, technological advances, the changing nature of the work force, and societal expectations of business. Prerequisite: minimum grade of 1.7 in ELCBUS 310.

[View course details in MyPlan: ELCBUS 461](#)

### **ELCBUS 462 International Marketing (5-)**

Integrated study of institutions, factors, and trends that have a bearing on global business operations and strategy. Utilizes lectures, research, case studies, guest speakers, and extensive practical application of modern marketing principles. Special emphasis on developing a marketing plan for the export of product or service. Prerequisite: ELCBUS 320.

[View course details in MyPlan: ELCBUS 462](#)

### **ELCBUS 463 International Finance and Trade (5)**

Covers key topics in financial management including management of foreign exchange exposure, foreign direct

investment decisions, multinational capital budgeting, balance of payments, determination of exchange rates, and the role and tools of banks in international trade. Course overlaps with: T FIN 440. Prerequisite: minimum grade of 1.7 in ELCBUS 350.

[View course details in MyPlan: ELCBUS 463](#)

### **ELCBUS 464 History and Globalization (5)**

Examines the process of globalization from a historical perspective and applies a systems theory framework based on the insights of modern science to enhance understanding of the process.

[View course details in MyPlan: ELCBUS 464](#)

### **ELCBUS 470 Business Policy and Strategic Management (5)**

Focuses on identification, analysis, and resolution of managerial problems; creation and implementation of management policies in business organizations; and revision of policies over time. Prerequisite: a minimum grade of 1.7 in each of ELCBUS 300; ELCBUS 320; ELCBUS 340; and ELCBUS 350.

[View course details in MyPlan: ELCBUS 470](#)

### **ELCBUS 482 Introduction to Supply Chain Management (5) RSN**

Introduces basic supply chain management concepts, as well as strategic and design decisions faced by service and manufacturing organizations. Provides an overview of the supply chain architecture and discusses various aspects of managing inventory, sourcing relationships, revenue management, performance management, and supply chain information systems.

Course equivalent to: B BUS 482. Course

overlaps with: OPMGT 443.

Prerequisite: minimum grade of 1.7 in ELCBUS 340; recommended: Operations Management

[View course details in MyPlan: ELCBUS 482](#)

### **ELCBUS 483 Global Strategic Sourcing (5)**

Introduces foundational theories, tools, and techniques related to managing sourcing and procurement related activities in manufacturing, services, retailing, and governmental sectors. Course equivalent to: B BUS 483. Course overlaps with: OPMGT 443.

Prerequisite: minimum grade of 1.7 in ELCBUS 482; recommended: operations management and supply chain management.

[View course details in MyPlan: ELCBUS 483](#)

### **ELCBUS 486 Supply Chain Resource Planning (5) RSN**

Introduction to the design and control of production functions. Focuses on the principles, models, and techniques for resource planning, analysis, and design of integrated production control systems. Topics include forecasting, inventory management, production planning, scheduling, and materials requirement planning problems. Course equivalent to: B BUS 486. Course overlaps with: OPMGT 443. Prerequisite: minimum grade of 1.7 in ELCBUS 340; recommended: Operations management.

[View course details in MyPlan: ELCBUS 486](#)

### **ELCBUS 487 Managing and Improving Supply Chain Processes (Capstone) (5)**

Integrates the topics covered in the foundational Supply Chain Management courses as well as engage students in



topics related to managing and improving supply chains. Analyze a real-world supply chain problem and develop viable solutions. Course equivalent to: B BUS 487. Course overlaps with: OPMGT 443. Prerequisite: a minimum grade of 1.7 in ELCBUS 400; and a minimum grade of 1.7 in ELCBUS 483; recommended: Operations management and supply chain management

[View course details in MyPlan: ELCBUS 487](#)

### **ELCBUS 497 Guided Internship (1-10, max. 10)**

A significant research project planned and carried out by the student under the direction of one or more faculty. Course equivalent to: B BUS 497.

[View course details in MyPlan: ELCBUS 497](#)

### **ELCBUS 499 Undergraduate Research (1-5, max. 15)**

Individual advanced research on topics related to business issues and conducted under the direction of one or more instructors. Course equivalent to: B BUS 499.

[View course details in MyPlan: ELCBUS 499](#)

## **COMPUTING AND SOFTWARE SKILLS**

### **CSS 101 Digital Thinking (5) RSN**

Introduces the fundamental concepts behind computing and computational thinking including logical reasoning; problem solving, data representation; abstraction; complexity management; computers and network operations; effective web searches; ethics; and legal and social aspects of information technology through the creation of popular digital artifacts such

as web pages, animations, and video games. Course overlaps with: CSE 110. Offered: jointly with BIS 111; AWSp.

[View course details in MyPlan: CSS 101](#)

### **CSS 107 Introduction to Programming through Animated Storytelling (5) A&H, RSN**

Introduces the fundamentals of programming using storytelling in virtual worlds; includes creation of characters, games, short stories, storyboards, 3-D motion, classes, methods, and functions. Contemporary topics vary addressing social, scientific, and ethical issues of information technology.

[View course details in MyPlan: CSS 107](#)

### **CSS 110 Introduction to Cybersecurity (5) SSc**

Introduces cybersecurity topics including hacking, social networking, privacy, cryptography, legal aspects, social implications, password management, digital forensics, computer networking, wireless security, and ethical issues.

Focuses on various methods and techniques to address cybersecurity threats. No technical experience needed. Course overlaps with: T INFO 110.

[View course details in MyPlan: CSS 110](#)

### **CSS 112 Introduction to Programming for Scientific Applications (4) NSc, RSN**

Introduces programming concepts using a discipline-specific computer language with an emphasis on scientific applications. Includes topics such as programming fundamentals (control structures, data types and representation, operations, functions and parameters) and introductory software engineering concepts (specifications, design, testing). Course overlaps with: CSS 132; CSS 142; CSE 142; CSE 160; and TCSS 142. Recommended: STMATH

124 or B MATH 144; and B PHYS 115 or B PHYS 122. Offered: WSp.

[View course details in MyPlan: CSS 112](#)

### **CSS 123 Programming for Data Science (3) RSN**

Transition from basic to more advanced programming skills, focusing on using computational tools to solve data science problems. Gain familiarity with higher-level programming techniques (recursion, abstract data types, algorithm analysis), methods for exploring parameter space, and the automation of workflows. A discipline-specific computer language is used for instruction. Course overlaps with: CSS 133; CSS 143; CSE 143; T INFO 473; and TCSS 143. Prerequisite: a minimum grade of 2.0 in either CSS 112, CSS 132, CSS 142, CSE 122, or CSE 142.

[View course details in MyPlan: CSS 123](#)

### **CSS 130 Fundamentals of Web Media Technology (5) RSN**

Examines core concepts and technologies used to design, build, and support interactive media applications. Focuses on creating projects using media production processes and tools and applying programming constructs, incorporating text and multimedia content, and using standard formats and languages.

[View course details in MyPlan: CSS 130](#)

### **CSS 132 Computer Programming for Engineers I (5) NSc, RSN**

Introduces programming concepts within social, mathematical, and technological context. Topics include programming fundamentals (control structures, data types, functions, etc.), computer organization, algorithmic thinking, introductory software engineering concepts, and social and professional

issues. Engineering applications are emphasized. A computer language used in engineering practice is used for instruction. Co-requisite: CSSSKL 132. Course overlaps with: CSS 112; CSS 142; CSE 142; and TCSS 142.

[View course details in MyPlan: CSS 132](#)

### **CSS 133 Computer Programming for Engineers II (5) NSc, RSN**

Transition from basic programming skills to a rigorous process of software development. Familiarization with higher level programming techniques (recursion, generic programming, stacks, queues, trees, searching, and sorting). Emphasizes connection between algorithmic thought and implementation. Engineering applications are emphasized. Co-requisite: CSSSKL 133. Course overlaps with: CSS 123; CSS 143; CSE 143; T INFO 473; and TCSS 143. Prerequisite: a minimum grade of 2.0 in CSS 132.

[View course details in MyPlan: CSS 133](#)

### **CSS 142 Computer Programming I (5) NSc, RSN**

Introduces programming concepts within social, cultural, scientific, mathematical, and technological context. Topics include programming fundamentals (control structures, data types and representation, operations, functions and parameters), computer organization, algorithmic thinking, introductory software engineering concepts (specifications, design, testing), and social and professional issues. Co-requisite: CSSSKL 142. Course equivalent to: TCSS 142. Course overlaps with: CSS 112; CSS 132; CSE 121; and CSE 142.

[View course details in MyPlan: CSS 142](#)

### **CSS 143 Computer Programming II (5) NSc, RSN**

Transition from basic programming skills to a rigorous process of software development. Familiarization with higher level programming techniques (recursion, generic programming, stacks, queues, trees, searching, and sorting).

Emphasizes connection between algorithmic thought and implementation.

Co-requisite: CSSSKL 143. Course equivalent to: CSE 143 and TCSS 143.

Course overlaps with: CSS 123; CSS 133; CSE 122; CSE 123; and T INFO 473.

Prerequisite: a minimum grade of 2.7 in either CSS 142 or CSE 142, or a minimum score of 4 on the AP Computer Science A exam.

[View course details in MyPlan: CSS 143](#)

### **CSS 173 Fundamentals of Programming Theory and Applications (5)**

Fundamental concepts and techniques for analysis, design and implementation of computer programming. May not be repeated. Prerequisite: either CSS 142, CSE 122, or CSE 142.

[View course details in MyPlan: CSS 173](#)

### **CSS 198 Supervised Study (1-5, max. 6)**

Supervised exploration of computing-related topic or concept.

[View course details in MyPlan: CSS 198](#)

### **CSS 199 Computing Research (1-5, max. 6)**

Exploration of computing research activities and processes as specified in a contract with a faculty member.

[View course details in MyPlan: CSS 199](#)

### **CSS 205 Women in STEM Seminar: College Life (1, max. 6) SSc, DIV**

Develop effective academic strategies for women in science, technology, engineering and mathematics. Explores the representation of women in STEM as they are portrayed in literature and film.

Discusses issues if STEM and gender including: mentors and support groups, social issues, role models and stereotyping, and earning respect.

Credit/no-credit only.

[View course details in MyPlan: CSS 205](#)

### **CSS 211 Computers and Society (5) SSc**

Exploration and discussion of issues related to the development, support, and usage of computing technology in today's society. Topics vary each quarter but may include coverage of areas such as intellectual property rights, cybersecurity, privacy, freedom of speech, liability, ethics, social justice, diversity, and labor. Course overlaps with: JSIS B 356.

Prerequisite: a minimum grade of 2.0 in either B WRIT 135, ENGL 141, ENGL 182, ENGL 197, ENGL 198, or ENGL 199.

[View course details in MyPlan: CSS 211](#)

### **CSS 225 Physics and Chemistry of Computer Components and Their Manufacture (5) RSN**

Examination of the basic physics and chemistry underlying the design and manufacture of computer components. Introduction to the electronic structure of the solid state, the nature of p-n junctions, and basic transistor design. Aspects of materials and polymer science and photolithography employed in microchip manufacture. May not be repeated.

[View course details in MyPlan: CSS 225](#)

### **CSS 250 Introduction to Interaction Design (5)**

Introduces core concepts of human-computer interaction and design thinking through introductory theory and practice. Explores major pillars of human-centered design such as need finding; prototyping; evaluation;

representations and mental models; and aesthetics.

[View course details in MyPlan: CSS 250](#)

**CSS 290 Topics in Computing (1-5, max. 10)**

Examines current topics and issues associated with computing that are of broad relevance.

[View course details in MyPlan: CSS 290](#)

**CSS 295 K-12 Computing Education (2) DIV, RSN**

Collaboration with community partners to develop computing education opportunities for K-12 students. Curriculum development and basic computing education environments. Prerequisite: Either CSS 143, which may be taken concurrently, or a minimum grade of 3.0 in CSS 142. Credit/no-credit only.

[View course details in MyPlan: CSS 295](#)

**CSS 301 Technical Writing for Computing Professionals (5)**

Explores the most effective methods of communication based on the common expectations for computing and other engineering professionals. Examines various writing patterns commonly used in technical writing, including compare/contrast, persuasive, process, instructions, and problem/solution, and when/why is used. Prerequisite: either B CUSP 135, B WRIT 135, ENGL 141, ENGL 182, ENGL 197, ENGL 198, ENGL 199, or HCDE 231.

[View course details in MyPlan: CSS 301](#)

**CSS 305 Survey of Computer Systems for Teachers (5) RSN**

Survey of computer systems concepts to provide context and understanding for teachers creating K-12 courseware.

Includes issues, tradeoffs, and solutions of computer systems, including

data structures, networks, databases, human computer interactions, software engineering, and cybersecurity. Non-CSS majors only. Prerequisite: a minimum grade of 2.7 in either CSE 142, CSS 142, or CSS 161; and a minimum grade of 2.0 in CSS 211. Credit/no-credit only.

[View course details in MyPlan: CSS 305](#)

**CSS 310 Information Assurance and Cybersecurity (5)**

Provides theoretical and practical introduction to information assurance and cybersecurity (IAC). Includes methods and practices for securing information and information systems. Covers how vulnerabilities arise, recognizing evolving threats, and mitigating them. Explores the role of risk analysis, information privacy, accountability, and policy. Course overlaps with: INFO 310 and T INFO 310.

[View course details in MyPlan: CSS 310](#)

**CSS 315 Cybersecurity Ethics, Policy, and Law (5) SSc**

Examines ethics, policy, and law from a cybersecurity perspective, including topics such as: ethics frameworks and philosophical perspectives; professional ethical obligations; ethical decision making; ethical hacking; policy development and implementation; privacy; legal and regulatory issues; state, national, and international cybersecurity law; intellectual property, and cybercrime. Course overlaps with: INFO 351; JSIS B 358; and TCSS 325. Prerequisite: either B WRIT 134 or B WRIT 135.

[View course details in MyPlan: CSS 315](#)

**CSS 320 Digital Forensics (5) NSc, RSN**

Examines digital forensics techniques in a variety of contexts, such as computers, mobile devices, networks, virtual

machines, social media, the cloud, and email. Entire digital forensics process is explored, including investigations, data acquisition, report writing, and expert testimony. A variety of tools and techniques are explored. Differences in Windows, Linux, and Macintosh file systems are examined. Course overlaps with: T INFO 443. Prerequisite: one CSS 100-level course; and either B WRIT 134 or B WRIT 135.

[View course details in MyPlan: CSS 320](#)

### **CSS 330 Topics in Mathematics for Software Development (1-5, max. 10)**

Topics in intermediate mathematics as applied within the context of computer software application development. Topics chosen from the fields of intermediate calculus and finite mathematics.

[View course details in MyPlan: CSS 330](#)

### **CSS 337 Secure Systems (5)**

Prepares students for deploying and operating secure systems on a heterogeneous distributed infrastructure. Covers cybersecurity principles, methods, and tools used to protect against and detect external and internal threats. Addresses ethical and professional issues for cybersecurity personnel. Assumes students have basic computer administration skills. Prerequisite: either CSS 142, CSE 142, or CSS 161; and CSS 310.

[View course details in MyPlan: CSS 337](#)

### **CSS 340 Applied Algorithmics (5)**

Extends the principles of programming and discrete math (e.g., programming languages, recursion, sorting, computational complexity, mathematical induction, logic concepts, set theory, hash tables, etc.) and applies them to the development, analysis, and

implementation of data structures and efficient software. Course overlaps with: T INFO 473. Prerequisite: either a minimum grade of 2.0 in CSS 123 and CSSSKL 123, or a minimum grade of 2.5 in either CSS 133, CSS 143, CSE 143, or CSS 162; and a minimum grade of 2.5 in either STMATH 124 or MATH 124.

[View course details in MyPlan: CSS 340](#)

### **CSS 342 Data Structures, Algorithms, and Discrete Mathematics I (5)**

Integrating mathematical principles with detailed instruction in computer programming. Explores mathematical reasoning and discrete structures through object-oriented programming. Includes algorithm analysis, basic abstract data types, and data structures. May not be repeated. Course overlaps with: T INFO 473. Prerequisite: a minimum grade of 2.8 in either CSS 133, CSS 143, CSE 143, or CSS 162; and minimum grade of 2.5 in either STMATH 125 or MATH 125.

[View course details in MyPlan: CSS 342](#)

### **CSS 343 Data Structures, Algorithms, and Discrete Mathematics II (5)**

Develops competencies associated with problem-solving, algorithms, and computational models. Explores algorithm development and analysis; abstract data types including trees, priority queues, heaps, graphs, and hash tables; use of object-oriented design/programming and design patterns; regular expressions; and language modeling. Prerequisite: CSS 301, which may be taken concurrently; and a minimum grade of 2.0 in CSS 342.

[View course details in MyPlan: CSS 343](#)

### **CSS 350 Management Principles for Computing Professionals (5)**

Through a team software project,



explores critical interpersonal, communication, leadership, decision-making, social, and cultural theories drawn from contemporary research in anthropology, sociology, psychology, and business. Prerequisite: CSS 301, which may be taken concurrently; may not be repeated.

[View course details in MyPlan: CSS 350](#)

### **CSS 360 Software Engineering (5)**

Surveys the software engineering processes, tools, and techniques used in software development and quality assurance. Topics include life-cycle models, process modeling, requirements analysis and specification techniques, quality assurance techniques, verification and validation, testing, project planning, and management. Prerequisite: either CSS 133, CSS 143, CSE 143, CSS 162, or CSS 173.

[View course details in MyPlan: CSS 360](#)

### **CSS 370 Analysis and Design (5)**

Methods and tools to capture and communicate requirements, proposed solutions, and design to management, customers, and software developers. Data, process, and object modeling using languages such as data flow diagrams, entity/relationship diagrams, and unified modeling language use cases and class and sequence diagrams. Prerequisite: Prerequisite: 2.0 in CSS 301; 2.0 in CSS 342 or CSS 340; 2.0 in CSS 360; may not be repeated.

[View course details in MyPlan: CSS 370](#)

### **CSS 371 The Business of Technology (5)**

Methods for aiding software development, communicating progress to customers/management, and developing marketing strategies for the product. Incorporates social, psychological, and ethical issues. May

not be repeated.

[View course details in MyPlan: CSS 371](#)

### **CSS 382 Introduction to Artificial Intelligence (5) RSN**

Principal ideas and developments in artificial intelligence, such as problem solving, knowledge representation, search, reasoning under uncertainty, learning, and natural language processing. Course overlaps with: CSE 415; CSE 473; and TCSS 435. Prerequisite: either a minimum grade of 2.0 in CSS 340, or a minimum grade of 2.0 in CSS 342.

[View course details in MyPlan: CSS 382](#)

### **CSS 383 Bioinformatics (5) NSc**

A project-based introduction to fundamental topics in Bioinformatics. Students develop a working knowledge of computational approaches to analyze biological datasets, including DNA, RNA and protein sequence datasets. Includes topics such as: sequence analysis, alignment, phylogeny, comparative genomics, and biological network analysis. Offered: jointly with B BIO 383; W.

[View course details in MyPlan: CSS 383](#)

### **CSS 385 Introduction to Game Development (5) A&H/NSc**

Examines the fundamental issues in designing and developing computer video games; creative and artistic elements, story narration, software architecture, interaction model, mathematic, physics, special effects, and in-game AI logic. Experiences elements in game design: world setting, game play, and interface; and experiences implementing games: conceptualization, prototyping, and play testing. Prerequisite: STMATH 125 or MATH 125; and CSS 340 or CSS

342. Offered: Sp.

[View course details in MyPlan: CSS 385](#)

**CSS 390 Special Topics (1-5, max. 10)**

Examines current topics and issues associated with computing and software systems.

[View course details in MyPlan: CSS 390](#)

**CSS 397 Computing Internship (1-5, max. 5)**

Elective internship project as delineated in a contract between student, faculty advisor, and community sponsor.

Prerequisite: CSS 301; CSS 360; and either CSS 340 or CSS 342 Credit/no-credit only. Offered: AWSpS.

[View course details in MyPlan: CSS 397](#)

**CSS 405 Women in STEM Seminar: Career/Professional Life (1, max. 6) SSc, DIV**

Develops effective academic strategies for women in science, technology, engineering and mathematics. Explores the representation of women in STEM as they are portrayed in literature and film. Discusses issues of STEM and gender including: earning respect, work-life balance, social issues, connection and networks, job hunting and technical interviews. Credit/no-credit only.

[View course details in MyPlan: CSS 405](#)

**CSS 411 Computing Technology and Public Policy (5) SSc**

In depth investigation of economical, political, organizational, and societal ramifications of using computing technology. Evaluates current policy approaches, determines trends, and proposes changes. Topics vary by quarter. Prerequisite: a minimum grade of 2.0 in CSS 301.

[View course details in MyPlan: CSS 411](#)

**CSS 415 Emerging Topics in Information Assurance and Cybersecurity (1-5, max. 15)**

Explores emerging topics and unique subjects in information assurance and cybersecurity (IAC) not otherwise covered in the IAC curriculum. Prerequisite: either CSS 310, INFO 310, or T INFO 310.

[View course details in MyPlan: CSS 415](#)

**CSS 416 Ethical Hacking and Penetration Testing (5)**

Examines ethical hacking and penetration testing tools, techniques, and methods. Will learn, understand, and execute ethical hacking and penetration testing in a manner similar to a would-be adversary so that effective defenses may later be used to counter malicious attacks. The phases of hacking and ethical considerations will also be examined. Prerequisite: either CSS 310, INFO 310, or T INFO 310.

[View course details in MyPlan: CSS 416](#)

**CSS 421 Introduction to Hardware and Operating Systems (5) NSc**

An introduction to the architecture of modern microprocessors and operating systems. Examines the basic theories and concepts of how hardware and software cooperatively interact to accomplish real-world tasks. Prerequisite: CSS 301; and either CSS 340 or CSS 342.

[View course details in MyPlan: CSS 421](#)

**CSS 422 Hardware and Computer Organization (5)**

An introduction to the architecture, operation, and organization of a modern computing machine. Topics covered include basic logic operations, state-machines, register models, memory organization, peripherals, and system issues. Assembly language taught in

order to understand the instruction set architecture and memory model of the computer. May not be repeated.

Prerequisite: CSS 342.

[View course details in MyPlan: CSS 422](#)

### **CSS 427 Introduction to Embedded Systems (5)**

Introduction to the process of specifying and designing embedded systems.

Follows the embedded systems development; software and hardware partitioning, processor selection, real-time operating systems, coding in assembly language and C, debugging, and testing. Lab experiments reinforce fundamental concepts using embedded design and debug tools. Course overlaps with: B ME 460; CSE 474/E E 474; and TCES 460. Prerequisite: CSS 342; and either B EE 425 or CSS 422, which may be taken concurrently.

[View course details in MyPlan: CSS 427](#)

### **CSS 430 Operating Systems (5)**

Principles of operating systems, including process management, memory management, auxiliary storage management, and resource allocation.

Focus on the structure of the popular desktop and real-time operating systems. May not be repeated. Course overlaps with: CSE 451 and TCES 420.

Prerequisite: a minimum grade of 2.0 in CSS 343.

[View course details in MyPlan: CSS 430](#)

### **CSS 431 Network Architecture and Management (5) RSN**

Examines configuring, deploying, managing, maintaining, and troubleshooting network infrastructure. OSI and TCP reference models, TCP/IP suite of protocols, LANs, WANs, design methodologies, security, firewalls, VPNs, IDSs, IPSs, VOIP, packet vs. circuit

switching, router configuration, ICMP, SDN, cloud design and operations, data centers, and optimization are explored. Oriented toward network operations.

Course equivalent to: T INFO 250. Course overlaps with: CSE 461; INFO 314; TCES 425; and TCSS 430.

[View course details in MyPlan: CSS 431](#)

### **CSS 432 Network Design and Programming (5) RSN**

Examines OSI architecture, TCP/IP protocols, data link networks, packet switching, routing, routing protocols, security, performance evaluation, flow control, and congestion control.

Networks are explored in the context of protocol development, implementation, writing of functionality, and inter-process communication facilities (e.g., sockets, pipes, RPC). Oriented toward networking programming and performance evaluation experiments. Prerequisite: a minimum grade of 2.0 in CSS 343; recommended: CSS 430.

[View course details in MyPlan: CSS 432](#)

### **CSS 434 Parallel and Distributed Computing (5)**

Concepts and design of parallel and distributed computing systems.

Topics include: fundamentals of OS, network and MP systems; message passing; remote procedure calls; process migration and mobile agents; distributed synchronization; distributed shared memory; distributed file system; fault tolerance; and grid computing.

Prerequisite: CSS 343.

[View course details in MyPlan: CSS 434](#)

### **CSS 436 Cloud Computing (5)**

Pragmatic, program-oriented overview of cloud computing covering key cloud technologies and components which enable and constitute the cloud (such as



virtualization, compute, storage, network, and security). Evaluation of trade-offs in building, migrating to, and using cloud services and systems. Investigation of architectural and theoretical underpinnings of cloud services, including choices in monitoring, scalability and availability. Course overlaps with: TCSS 462. Prerequisite: either CSS 430 or CSS 432. Offered: WSp.

[View course details in MyPlan: CSS 436](#)

### **CSS 444 Analyzing Biases in the Age of Digital Data (5) DIV**

Introduction to the algorithms of machine learning that are applied in the real world, considering biases, methodological limitations, and pitfalls of data. It provides students with a framework for analyzing the social, political issues, enabling them to think critically about ethical boundaries. The topics of the course draw from classical statistics, machine learning, ethics and privacy. Course overlaps with: STAT 303. Prerequisite: CSS 301; and either CSS 340 or CSS 342; recommended: experience coding non-trivial functions to manipulate datasets; and previous coursework in probability, statistics, and algorithms.

[View course details in MyPlan: CSS 444](#)

### **CSS 448 Introduction to Compilers (5)**

Introduction to the structures and organization of programming languages; fundamentals of translation; regular expressions and context-free grammars; syntax and lexical analysis, symbol tables, semantics and parsing, code generation; translation techniques such as LR, LL, and recursive descent. Prerequisite: CSS 343; may not be

repeated.

[View course details in MyPlan: CSS 448](#)

### **CSS 449 Design and Analysis of Algorithms (5)**

Introduces fundamental techniques for algorithm design and analysis, such as computational complexity, greedy algorithms, divide-and-conquer algorithms, dynamic programming, graph algorithms, randomized algorithms, and computational intractability. Course overlaps with: CSE 421. Prerequisite: CSS 343.

[View course details in MyPlan: CSS 449](#)

### **CSS 450 Computer Graphics (5)**

Introduces the fundamental concepts in computer graphics: camera model, illumination models, hardware shading, transformation pipeline, scene graphs, texture mapping, and simple modeling and animation techniques. Prerequisite: minimum grade of 2.0 in CSS 342; may not be repeated.

[View course details in MyPlan: CSS 450](#)

### **CSS 451 3-D Computer Graphics (5)**

Introduces practical and popular three-dimensional (3-D) graphic algorithms. Examines modeling (how to build 3-D objects), animation (how to describe the motion of objects), and rendering (how to generate images of 3-D objects in animation). Prerequisite: CSS 342; and STMATH 125 or MATH 125

[View course details in MyPlan: CSS 451](#)

### **CSS 452 Game Engine Development (5)**

Studies the technical fundamentals and implementation details of a game engine. Topics include software architecture, input, resource management, textures, animation, coordinate systems, object behaviors and interactions, camera manipulations, illumination and special effects, physics, and scene management

Prerequisite: a minimum grade of 2.0 in either CSS 340 or CSS 342; a minimum grade of 2.0 in CSS 360; and a minimum grade of 2.0 in either STMATH 125 or MATH 125.

[View course details in MyPlan: CSS 452](#)

### **CSS 455 Introduction to Computational Science and Scientific Programming (5)**

Introduction to principles and fundamental algorithms of scientific computing, including applied linear algebra and numerical methods. Group projects address current computational problems in the physical, biological, and life sciences. Course overlaps with: STMATH 405 and STMATH 406.

Prerequisite: either STMATH 125 or MATH 125; and either CSS 133, CSS 143, CSE 143, CSS 162, or CSS 173.

[View course details in MyPlan: CSS 455](#)

### **CSS 457 Signal Computing (5)**

How data collected from the real world is captured, represented, processed, and stored in computers. Topics include digitization, digital signal processing, filtering, compression, and how signal processing is used as part of larger systems, such as multimedia, IoT, and machine learning. May not be repeated. Prerequisite: CSS 340 or CSS 342; and STMATH 208.

[View course details in MyPlan: CSS 457](#)

### **CSS 458 Fundamentals of Computer Simulation Theory and Application (5)**

Covers all aspects of computer simulation including theory, implementation, and application. Presents real-life interdisciplinary examples. Final student project models a real-life situation with a computer simulation. Prerequisite: CSS 340 or CSS 342

[View course details in MyPlan: CSS 458](#)

### **CSS 461 Software Project Management (5)**

Fundamental skills required for effective software project management, including project planning and tracking and people management. Topics include risk analysis, project scope, scheduling, resource allocation, cost estimation, negotiation, monitoring and controlling schedule, software metrics, quality management, process improvement, staffing, leadership, motivation, and team building. Prerequisite: CSS 360, may not be repeated.

[View course details in MyPlan: CSS 461](#)

### **CSS 473 Entrepreneurship Seminar (5)**

Creates or works within a new venture. New venture situations include for-profit and non-profit companies and launching new products/services within existing companies. Develops a business plan. Offered: jointly with B BUS 443.

[View course details in MyPlan: CSS 473](#)

### **CSS 474 Product Development Lab (5)**

Includes a technology project and product development within the dynamic of time-pressured competition. Focuses on systematically improving products to beat competition and win the customer. Topics include benchmarking, competitive intelligence, and managing small group product development. Offered: jointly with B BUS 444.

[View course details in MyPlan: CSS 474](#)

### **CSS 475 Database Systems (5)**

Methods for obtaining requirements and designing database systems; differences between hierarchical, relational, and network database designs; techniques for designing and coding effective reporting procedures. Course overlaps with: TBANLT 411. Prerequisite: CSS 360

or B IMD 351.

[View course details in MyPlan: CSS 475](#)

### **CSS 477 Foundations of Secure Software Development (5) RSN**

Examines principles and techniques for developing secure software.

Secure engineering, design and coding principles are introduced with a focus on breadth over depth including topics such as secure development lifecycle, known vulnerabilities, common attack profiles, threat modeling, access controls, encryption techniques, error handling, and secure quality assurance. Course overlaps with: TCSS 483. Prerequisite: CSS 343 and CSS 360.

[View course details in MyPlan: CSS 477](#)

### **CSS 478 Usability and User-Centered Design (5)**

Application of human information processing models, theories and human-computer interaction principles for designing interactive systems. Emphasis is on how usability methods could be incorporated into the system design lifecycle. Topics include user survey, heuristic evaluation, task analysis and experimental testing. Prerequisite: either CSS 360 or B IMD 351; may not be repeated.

[View course details in MyPlan: CSS 478](#)

### **CSS 480 Principles of Human-Computer Interaction (5)**

Examines fundamentals of human perception, human cognition, attention and memory constraints; role of user experience and intelligence; input and output devices; standards compliance; design of systems for individual versus collaborative work settings; rapid prototyping, user-centered design techniques, and design evaluation methods. May not be repeated.

Prerequisite: CSS 360.

[View course details in MyPlan: CSS 480](#)

### **CSS 481 Web Programming and Applications (5)**

Examines the core web development technologies used to design, build and support web-based applications.

Introduce various web programming languages. creates interactive media projects, including applying programming constructs, incorporating text and multimedia contents, and using standard web communication formats.

Prerequisite: CSS 342 and CSS 475.

[View course details in MyPlan: CSS 481](#)

### **CSS 482 Expert Systems (5)**

Theory and application of expert systems: computer systems that capture and use human expertise. Applications include computer configuration, fault diagnosis, computer-aided instruction, data interpretation, planning and prediction, and process control. Prerequisite: CSS 343; may not be repeated.

[View course details in MyPlan: CSS 482](#)

### **CSS 483 Bioinformatics Algorithms (5)**

Covers basic molecular biology to aid in the understanding of current bioinformatics problems that need computational tools. Explores fundamental bioinformatics algorithms of current and future bioinformatics systems. Students implement algorithms on practical biology problems. Prerequisite: CSS 340 or CSS 342.

[View course details in MyPlan: CSS 483](#)

### **CSS 484 Multimedia Data Processing (5)**

Introduces the concepts, issues, design, implementation, standards and applications of multimedia technologies. Discusses the

characteristics, compression and processing of digital multimedia data.

Prerequisite: CSS 340 or CSS 342.

[View course details in MyPlan: CSS 484](#)

### **CSS 485 Artificial Neural Networks (5)**

Application of biological computing principles to machine problem solving.

State of the art in artificial neural networks (ANNs), including vision, motor control, learning, data analysis. Topics include ANN architectures, algorithms: perceptrons, Widrow-Hoff, backpropagation, Hebbian networks. May not be repeated. Prerequisite: CSS 343 and STMATH 208.

[View course details in MyPlan: CSS 485](#)

### **CSS 486 Machine Intelligence (5) RSN**

Basic machine learning (ML) and artificial intelligence (AI) methods and the related techniques used in modern AI systems.

Students learn about both the theory of the algorithms and the challenges of implementing them in a modern programming language. Course overlaps with: CSE 416/STAT 416 and TCSS 435. Prerequisite: STMATH 208 and CSS 343; recommended: coursework in probability and statistics; linear algebra; and discrete math.

[View course details in MyPlan: CSS 486](#)

### **CSS 487 Computer Vision (5)**

Methods for extracting content from digital images. Topics typically include linear filters, edge detection, segmentation, stereo vision, motion estimation, and object recognition: Examines applications of computer vision, such as image databases and robot navigation. Prerequisite: CSS 343.

[View course details in MyPlan: CSS 487](#)

### **CSS 488 Natural Language Processing (5)**

Introduces students to the fundamentals of Natural Language Processing (NLP), a subfield of linguistic and computer science that focuses on the interaction between computers and human language. Covers the essential concepts, techniques, and tools used in Natural Language Processing (NLP) and focuses on practical applications. Course overlaps with: CSE 447 and TCSS 456. Prerequisite: a minimum grade of 2.0 in CSS 343; recommended: familiarity with Python. Offered: Sp.

[View course details in MyPlan: CSS 488](#)

### **CSS 490 Special Topics in Computing and Software Systems (1-5, max. 20)**

Examines current topics and issues associated with computing and software systems. Offered: AWSpS.

[View course details in MyPlan: CSS 490](#)

### **CSS 495 Applied Computing Internship (1-5, max. 10)**

Elective completion of a work project as delineated in a contract between student, faculty advisor, and community sponsor. Prerequisite: CSS 350; CSS 360; CSS 421. Credit/no-credit only.

[View course details in MyPlan: CSS 495](#)

### **CSS 496 Applied Computing Capstone (5)**

Group seminar project requires software development and research project in applied computing.

Objectives include: integrating minor or concentration with computing, reviewing professional literature, writing technical documents, and presenting project results to technologists/end-users.

Prerequisite: CSS 301; CSS 360; CSS 421; and either CSS 340 or CSS 342.

[View course details in MyPlan: CSS 496](#)

### **CSS 497 Computer Science and Software Engineering Capstone ([1-10]-**

, max. 10)

Completion of project as delineated in a contract between student, faculty advisor, and community sponsor.

Prerequisite: CSS 350; CSS 370; CSS 422; CSS 430; two additional CSS courses.

[View course details in MyPlan: CSS 497](#)

### **CSS 498 Independent Study (1-5, max. 10)**

Individual study by arrangement with instructor.

[View course details in MyPlan: CSS 498](#)

### **CSS 499 Undergraduate Research (0-5, max. 10)**

Design and implementation of a research study as specified in a contract with a faculty member.

[View course details in MyPlan: CSS 499](#)

### **CSS 501 Data Structures and Object-Oriented Programming I (4)**

Covers data structures and object-oriented programming. Studies basic and advanced data types, their uses, and implementations. Students design solutions to programming problems using object-oriented techniques with various data types. Covers algorithms and their tradeoffs. Uses modern software engineering practices.

[View course details in MyPlan: CSS 501](#)

### **CSS 502 Data Structures and Object-Oriented Programming II (4)**

Covers advanced data structures including trees, balanced trees, heaps, graphs, and hash tables along with associated algorithms. Covers object-oriented programming with a focus on design and implementation of problems using inheritance and polymorphism. Introduces formal automata theory. Prerequisite: minimum grade of 2.7 in CSS 501.

[View course details in MyPlan: CSS 502](#)

### **CSS 503 Systems Programming (4)**

Examines the logical design and programming aspects of operating systems and network communication.

Topics include processes, threads, synchronization, deadlocks, memory management, virtual memory, file systems, and client-server network programming.

Prerequisite: minimum grade of 2.7 in CSS 502.

[View course details in MyPlan: CSS 503](#)

### **CSS 506 Software Development Processes (2)**

Provides a foundation in software engineering processes, methods, and practices associated with prescriptive and agile software process models. Includes the creation of artifacts commonly used to communicate, justify, and manage computing projects.

[View course details in MyPlan: CSS 506](#)

### **CSS 507 Software Modeling Techniques (2)**

Provides the concepts and skills needed to use modeling in software analysis and design to foster understanding and communications of a problem and its potential solutions. Includes the creation of modeling artifacts for projects by hand and using CASE tools. Prerequisite: a minimum grade of 2.7 in CSS 506.

[View course details in MyPlan: CSS 507](#)

### **CSS 508 Software Testing and Quality (2)**

Reviews approaches, concepts, and techniques used to validate and verify software and methods used to improve software processes. Students reflect on the applicability of software engineering and computer science methods.

Prerequisite: a minimum grade of 2.7 in

CSS 507.

[View course details in MyPlan: CSS 508](#)

### **CSS 514 Security, Policy, Ethics, and the Legal Environment (2)**

Addresses ethical, legal, and policy frameworks within which information assurance and secure development lifecycle professionals must practice. Covers ethical, moral, legal and policy issues related to computers and telecommunications systems, such as how they impact privacy, fair information practices, equity, content control, and freedom of electronic speech.

[View course details in MyPlan: CSS 514](#)

### **CSS 515 Contemporary Issues in Information Assurance (2)**

Addresses current developments in information assurance and cybersecurity, such as the changing threat spectrum, legal developments, international relationships, and intellectual property protection with an emphasis on the ethical and moral perspectives. Covers communities and resources important to becoming a responsible professional in the security field.

[View course details in MyPlan: CSS 515](#)

### **CSS 517 Information Assurance and Cybersecurity (5)**

Explores information assurance and cybersecurity for engineering and operational environments including topics such as: secure development lifecycle; policy development and implementation; ethical obligations; risk management; security operations; common threats, vulnerabilities, and exploits; confidentiality, integrity, and availability; cryptology; information lifecycle; privacy considerations; legal

and regulatory issues, and governance.

[View course details in MyPlan: CSS 517](#)

### **CSS 518 Human Factors in Cybersecurity (5)**

Humans are considered the weakest link in cybersecurity. Regardless of the robustness of technical solutions, without an understanding and appreciation for the human factors, there will continue to be significant compromises. This course examines the human factors involved in cybersecurity, including behavioral, psychological, social, technical, and usability components.

[View course details in MyPlan: CSS 518](#)

### **CSS 519 Incident Response and Risk Management (5)**

Risk management and incident response from an information assurance and cybersecurity perspective, including topics such as: risk management; risk assessments; threat, vulnerability and exploit analysis; risk prioritization; risk mitigation; business impact analysis; business continuity planning; disaster recovery planning; incident response and recovery; compliance; and audits.

[View course details in MyPlan: CSS 519](#)

### **CSS 527 Cryptography and Information Assurance (5)**

Explores the theory and application of cryptography from a computer science perspective. Examines the mathematical background, implementation, and deployment of cryptographic algorithms for symmetric and asymmetric encryption, hashing, and digital signatures. Discusses applications of cryptography to build and deploy secure systems. Prerequisite: either CSS 517, which may be taken concurrently or



permission of instructor.

[View course details in MyPlan: CSS 527](#)

### **CSS 532 Internet of Things (5)**

Studies the fundamental knowledge and technologies, implementation details, and the latest research findings of Internet of Things. Topics may include IoT components, IoT system architectures, cloud computing services for IoT, network protocols and standards for IoT, and IoT application development.

Recommended: Computer networks, distributed systems, cloud computing

[View course details in MyPlan: CSS 532](#)

### **CSS 533 Distributed Computing (5)**

Builds on knowledge of advanced programming methodologies in distributed computing. Topics include message passing, indirect communication, remote method invocation, distributed objects, multi-tier server-side programming, peer-to-peer systems, distributed synchronization, distributed check-pointing, and replica management.

[View course details in MyPlan: CSS 533](#)

### **CSS 534 Parallel Programming in Grid and Cloud (5)**

Exploration of theoretical programming methodology and practical middleware design used for parallel programming in grid and cloud systems. Uses different programming models, parallelizing patterns, and middleware systems for designing application-specific fault-tolerant parallel software.

[View course details in MyPlan: CSS 534](#)

### **CSS 535 High Performance Computing (5)**

Covers the essential theories, principles, concepts, and practices related to designing, implementing, evaluating, and using high-performance computing

systems. These include ways to reason about issues arising from the use of homogeneous and heterogeneous combinations of memory and computational resources (e.g. CPUs and GPUs), data, algorithms, and application domains.

[View course details in MyPlan: CSS 535](#)

### **CSS 537 Network and System Security (5)**

Examines the theory and practice of network security, the role of cryptography, and the current state of the art in building secure networked systems. Covers topics such as access control, authentication, perimeter security defense, firewalls, virtual private networks, intrusion detection systems, and wireless security and network security auditing tools. Course overlaps with: TCSS 576.

[View course details in MyPlan: CSS 537](#)

### **CSS 538 Security in Emerging Wireless and Mobile Networks (5)**

Examines the security issues associated with various emerging wireless, mobile networks, and pervasive systems. Covers topics such as MAC layer and routing layer security; robust localization; trust and reputation mechanisms; mobile malwares; authentication solutions; and machine learning based intrusion detection techniques. Course overlaps with: TCSS 576.

[View course details in MyPlan: CSS 538](#)

### **CSS 539 Cybersecurity in Emerging Environments (5)**

Explores security issues and solutions in emerging environments and non-traditional computing platforms such as vehicular networks, mobile phone systems, and pervasive systems. Also covers topic such as usable security,

managing trade-offs in resource-constrained systems, and reasoning with uncertain information.

[View course details in MyPlan: CSS 539](#)

### **CSS 545 Mobile Computing (5)**

Covers concepts related to systems once can build located at the intersections of pocket size computing devices; location aware technologies; mobile web services; and integrated sensors such as touch- and gesture-based

UIs. Uses programming projects to explore the concepts and application in each area, and enable students to define a final project to combine and intersect the above areas.

[View course details in MyPlan: CSS 545](#)

### **CSS 548 Introduction to Compilers (5)**

Introduces the structures and organization of programming languages; fundamentals of translation; regular expressions and context-free grammars; syntax lexical analysis, symbol tables, semantics and parsing, code generation; translation techniques such as LR, LL, and recursive descent. Offered: A.

[View course details in MyPlan: CSS 548](#)

### **CSS 549 Algorithm Design and Analysis (5)**

Covers fundamental techniques for algorithm design and analysis, such as computational complexity, greedy algorithms, divide-and-conquer algorithms, dynamic programming, graph algorithms, randomized algorithms, and computational intractability. Cannot be taken if credit received for CSS 449.

[View course details in MyPlan: CSS 549](#)

### **CSS 551 Advanced 3D Computer Graphics (5)**

Examine topics and issues associated with the design and implementation of commercial-scale graphical applications

including: system architecture, user interaction models, and issues and algorithms in modeling, animation, and rendering. Cannot be taken if credit received for CSS 451.

Recommended: Data Structures, Algorithms, Linear Algebra

[View course details in MyPlan: CSS 551](#)

### **CSS 552 Topics in Rendering (5)**

Studies core algorithms and technologies in synthesizing high quality images, including: camera models, 3D viewing, visibility sampling and approximation, light source models, material property approximation, illumination models, human vision system, and texture synthesis. Prerequisite: CSS 451. Offered: W.

[View course details in MyPlan: CSS 552](#)

### **CSS 553 Software Architecture (5)**

Studies the concepts, representations techniques, development methods, and tools for structuring software systems. Topics include domain-specific software architectures, architecture description languages, architectural styles, product line architectures, and standards.

Combines hands-on experience designing software with an understanding of recent developments in the field.

[View course details in MyPlan: CSS 553](#)

### **CSS 555 Evaluating Software Design (5)**

Studies best software engineering practices and methods used in prescriptive and agile approached to create and evaluate software design from an quality principled point-of-view. Considers design from quality dimensions such as performance, scalability, maintainability, usability, and security.

[View course details in MyPlan: CSS 555](#)



**CSS 565 Research Methods in Software Development (5)**

In-depth study of research design and data analysis techniques for computing-related research activities. Students prepare a research proposal; examine experimental, quasi-experimental, and qualitative design strategies; perform meta-analytic research, define and collect appropriate software metrics; and perform appropriate advanced statistical analyses.

[View course details in MyPlan: CSS 565](#)

**CSS 566 Software Management (5)**

Covers theories, principles, and practices that are designed to enable project managers and other related stakeholders as they assess, choose, and use appropriate frameworks, tools, techniques, and metrics to guide software projects toward successful completion or termination.

[View course details in MyPlan: CSS 566](#)

**CSS 572 Evidence-Based Design (5)**

Provides a foundation in evidence-based user-centered design theory, methods, and practices for creating innovative software-enabled products.

[View course details in MyPlan: CSS 572](#)

**CSS 576 Cybersecurity and Artificial Intelligence (5)**

Examines the interaction of artificial intelligence and cybersecurity. Covers topics such as data acquisition, model training, applications of AI to cybersecurity, the interaction of AI and humans in security, and securing AI-based systems. Recommended: familiarity with applied machine learning or cybersecurity concepts. Offered: W.

[View course details in MyPlan: CSS 576](#)

**CSS 577 Secure Software Development (5)**

Examines secure design and secure coding principles, practices, and methods including least privilege, threat modeling, and static analysis. Covers common vulnerabilities such as buffer overruns, integer overflows, injection attacks, cross-site scripting, and weak error handling in detail.

[View course details in MyPlan: CSS 577](#)

**CSS 578 Ethical Penetration Testing (5)**

Explores ethical hacking and penetration testing tools, vulnerability analysis and exploitation, and defense techniques. Covers topics such as reconnaissance, OS fingerprinting, remote network mapping, web application, software and network vulnerabilities, attack surface analysis, fuzz testing, exploitation of vulnerabilities, credential gathering, and privilege escalation.

[View course details in MyPlan: CSS 578](#)

**CSS 579 Malware and Attack Reverse Engineering (5)**

Explores techniques and technologies for understanding the operation of malicious software and attacks. Discusses and explores techniques for detection, identification and prevention. Presents reverse engineering of code and network exploits as a method for understanding and development of countermeasures.

[View course details in MyPlan: CSS 579](#)

**CSS 581 Machine Learning (5)**

Theory and practical use of machine learning techniques, such as decision trees, logistic regression, discriminant analysis, neural networks, naive Bayes, k-nearest neighbor, support vector machines, collaborative filtering, clustering, and ensembles. Emphasizes

hands-on experience with real-world datasets, combined with several programming projects.

[View course details in MyPlan: CSS 581](#)

### **CSS 583 Knowledge Management Systems (5)**

Explores contemporary theoretical and practical implications of how to create and manage knowledge as acquired using technology. Uses different strategies such as XML, RDF, RDFS, and other approaches to provide methods and structures to organize and reference data for use within a variety of knowledge domains.

[View course details in MyPlan: CSS 583](#)

### **CSS 584 Multimedia Database Systems (5)**

Discusses core concepts for multimedia data representation and compression. Introduces state-of-the-art techniques for multimedia data processing; compression, indexing and retrieval. Examines various multimedia systems; tools and applications.

[View course details in MyPlan: CSS 584](#)

### **CSS 586 Deep Learning and Artificial Intelligence (5)**

Develops an understanding of deep learning and explores new research directions and applications in artificial intelligence. Explores a selected list of new, cutting-edge topics such as convolutional neural networks, generative models, and deep geometric learning. Discusses new application domains of deep learning such as autonomous driving and protein structure prediction. Basic understanding of machine learning is required.

Prerequisite: CSS 581.

[View course details in MyPlan: CSS 586](#)

### **CSS 587 Advanced Topics in Computer Vision (5)**

Covers advanced topics in computer vision. Includes image and video databases, object recognition, video processing, scene reconstruction, and robot vision. Students implement projects on current topics in computer vision research.

[View course details in MyPlan: CSS 587](#)

### **CSS 590 Special Topics in Computing (5, max. 15)**

Special topics in computer science and software engineering. Prerequisite: permission of instructor.

[View course details in MyPlan: CSS 590](#)

### **CSS 593 Cybersecurity Engineering Capstone ([1-5]-, max. 10)**

Students apply their knowledge and skills related to cybersecurity engineering in a culminated capstone project.

Prerequisite: minimum grade of 2.7 in each of CSS 514, CSS 517, CSS 519, CSS 527, CSS 537, CSS 577, and CSS 578.

[View course details in MyPlan: CSS 593](#)

### **CSS 595 Master's Project ([1-10]-, max. 40)**

Students apply their knowledge and skills related to computer science and software engineering in a culminating capstone project. Credit/no-credit only.

[View course details in MyPlan: CSS 595](#)

### **CSS 599 Faculty Research Seminar (1)**

Weekly seminars on current research topics in computer science, software engineering, or cybersecurity engineering.

[View course details in MyPlan: CSS 599](#)

### **CSS 600 Independent Study or Research (1-10, max. 30)**

Independent study or research on computing topics conducted under the direction of one or more instructors.

Offered: AWSpS.

[View course details in MyPlan: CSS 600](#)

### **CSS 601 INTERNSHIP (1-5, max. 10)**

Graduate internship under the supervision of a CSS faculty member.

[View course details in MyPlan: CSS 601](#)

### **CSS 700 Master's Thesis (\*-)**

[View course details in MyPlan: CSS 700](#)

## **COMPUTING & SOFTWARE SYSTEMS SKILLS**

### **CSSSKL 123 Programming for Data Science Skills (2) RSN**

Covers computational tools and programming data structures to solve data science problems. A discipline-specific computer language is used for instruction. Course overlaps with: CSE 163. Prerequisite: a minimum grade of 2.0 in either CSS 112, CSS 132, CSS 142, or CSE 142.

[View course details in MyPlan: CSSSKL 123](#)

### **CSSSKL 132 Computer Programming for Engineers Skills I (1)**

Strengthens computer programming and problem-solving skills through critical thinking and programming practice. Engineering applications are emphasized. Co-requisite CSS 132. Credit/no-credit only.

[View course details in MyPlan: CSSSKL 132](#)

### **CSSSKL 133 Computer Programming for Engineers Skills II (1) RSN**

Strengthens computer programming and problem-solving skills through critical thinking and programming practice. Engineering applications are emphasized. Co-requisite: CSS 133 Prerequisite: a minimum grade of 2.0 in CSS 132. Credit/no-credit only.

[View course details in MyPlan: CSSSKL 133](#)

### **CSSSKL 142 Computer Programming Skills I (1)**

Strengthens computer programming and problem-solving skills through critical thinking and programming practice. Co-requisite: CSS 142. Credit/no-credit only.

[View course details in MyPlan: CSSSKL 142](#)

### **CSSSKL 143 Computer Programming Skills II (1) RSN**

Strengthens computer programming and problem-solving skills through critical thinking and programming practice. Co-requisite: CSS 143. Prerequisite: a minimum grade of 2.7 in either CSS 142, CSS 161, or CSE 142. Credit/no-credit only.

[View course details in MyPlan: CSSSKL 143](#)

### **CSSSKL 342 Programming Issues with Object-Oriented Languages (2)**

Covers language and development/execution environment differences, including data types, control structures, arrays, and I/O; addressing and memory management issues including pointers, references, functions, and their passing conventions; object-oriented design specifics related to structured data and classes. Co-requisite: CSS 342 Credit/no-credit only.

[View course details in MyPlan: CSSSKL 342](#)

### **CSSSKL 509 Technical Writing Skills (2, max. 6)**

Focuses on critical technical writing skills including formulating arguments and technical use and portrayal of data in reports and oral presentations. Credit/no-credit only.

[View course details in MyPlan: CSSSKL 509](#)

**CSSSKL 510 Scientific Writing (1, max. 4)**

Explores how to locate, analyze, and synthesize professional literature on a topic and how to assemble the resources necessary to write an review of that literature. Focuses on organization of information, writing critique process, and presentation skills for verbal defense.

[View course details in MyPlan: CSSSKL 510](#)

**CSSSKL 511 Technical Writing (1, max. 3)**

Focuses on critical technical writing skills including formulating arguments and technical use and portrayal of data in reports and oral presentations.

Credit/no-credit only.

[View course details in MyPlan: CSSSKL 511](#)

**CSSSKL 594 Scientific Writing for Thesis/Project (2, max. 6)**

Focuses on writing the Master's project paper or thesis. Topics include synthesizing professional literature, describing methodology, and presenting and discussing results. Approaches to revision and presentation skills for the oral defense are also covered. Credit/no-credit only.

[View course details in MyPlan: CSSSKL 594](#)

## EDUCATIONAL STUDIES

**B EDUC 170 Mathematics for Elementary School Teachers (5) NSc**

Overview of basic mathematical concepts used by elementary school teachers. Introduction to communicating mathematical principles to children and interpreting their thinking and learning. Introduction to principles in elementary mathematics instruction and teaching strategies. Maximum 6 credits

allowed between EDUC 170; B EDUC 170; MATH 170; and MATH 171. Course equivalent to: EDUC 170. Course overlaps with: TMATH 171. Offered: AS.

[View course details in MyPlan: B EDUC 170](#)

**B EDUC 201 Special Topics in Diversity and Education (5, max. 10) DIV**

Rotates around different topics dealing with diverse perspectives on ethnic and racial groups, gender, culture, religion, sexuality, language, social class, and special needs, among others, in education at either the K-12 or Higher Education levels. Offered: ASp.

[View course details in MyPlan: B EDUC 201](#)

**B EDUC 205 Education and Equity in the U.S. (5) SSc, DIV**

Introduces historic and contemporary struggles over issues of equity in U.S Education system. Examines issues of race, gender, and religion, evaluating positions of various stakeholders and identifying strategies used to move towards equity in U.S education. Offered: A.

[View course details in MyPlan: B EDUC 205](#)

**B EDUC 210 Teaching and Learning in a Multicultural Society (5) SSc, DIV**

Examines how race and ethnicity intersect with class, gender, sexual orientation, language, disability, and citizenship to influence school experiences and provide insights for culturally relevant teaching. Explores social, cultural, political, and economic issues impacting communities and ways they are implicated in systems of power and privilege that influence educational opportunities. Offered: AWSp.

[View course details in MyPlan: B EDUC 210](#)

**B EDUC 220 Education and Society (5) SSc**

Examines educational problems, policy, and practice from interdisciplinary perspective. Explores the tensions between education values and goals throughout the history of public schooling in the United States and develops critical perspectives through which to evaluate current proposals for school reform. Offered: ASp.

[View course details in MyPlan: B EDUC 220](#)

**B EDUC 230 Culture, Knowledge, and Education (5) SSc, DIV**

Explores the intersection of culture, knowledge, and education. Examines each concept separately then focuses on ways they interact and affect educational opportunities. Cultural issues include; race, socio-economic histories, language, gender, sexual orientation, and religious views. Uses perspectives from diverse academic disciplines and considers education as extending beyond school settings. Offered: W.

[View course details in MyPlan: B EDUC 230](#)

**B EDUC 240 Science and Engineering for an Ethical and Just Society (5) NSc, DIV**

Explores intersections of biology, race, engineering, gender, and justice. Explores fundamental and contemporary ideas in computer science engineering and inclusive gender biology, including how these disciplines systematically uphold white supremacy and reproduce societal inequalities. Offered: SpS.

[View course details in MyPlan: B EDUC 240](#)

**B EDUC 241 Time in Socio-Ecological Systems: Sun, Moon, Clocks, and Contaminants (5) NSc, DIV**

This course explores socioecological time through the lens of Western time making and keeping and its juxtaposition to ecological timescales and patterns of change. Examines the emergence of Western industrial concepts of time and time synchronization, and its impacts on species, lands, and waters. Offered: SpS.

[View course details in MyPlan: B EDUC 241](#)

**B EDUC 242 U.S. History and the Enduring War For Control of K-12 Curriculum: From Invasion to Insurrection (5) SSc, DIV**

A counternarrative survey of American history from the invasion to the insurrection. Students will read from a range of historians and education scholars to critically re-examine the myths, falsehoods, and stereotypes that comprise the story of the United States. Offered: W.

[View course details in MyPlan: B EDUC 242](#)

**B EDUC 250 Topics in Education and Popular Culture (5, max. 10) A&H**

Examines education in relation to specific elements of popular culture in order to deepen understanding of the connections and tensions within society. Explores how popular culture is used to enhance the education experience. Topics include popular forms of art, media, literature, or theatre. Offered: ASp.

[View course details in MyPlan: B EDUC 250](#)

**B EDUC 255 Critical Diversity Studies (5) SSc, DIV**

Introduces theories, concepts, research, and policies that provide a foundation for exploring connections between diversity and equity and for recognizing ways in which these connections are relevant to individuals, institutions, and the world. Offered: jointly with BIS 255; Sp.

[View course details in MyPlan: B EDUC 255](#)

**B EDUC 295 Gathering, Analyzing, and Using Data in Education (5) DIV, RSN**

In this course, you will be introduced to gathering, analyzing, using, critiquing educational data and drawing conclusions from it. To do this, we focus on two broad areas; descriptive statistics and inferential statistics. We will problematize the notion of "neutrality" in statistical analyses. We will examine ways in which bias in statistical analyses may perpetuate inequities and offer insights for practicing critical statistical analyses. Course overlaps with: B BUS 215; B HLTH 215; B MATH 215; and BIS 215. Offered: ASp.

[View course details in MyPlan: B EDUC 295](#)

**B EDUC 300 Research and Educational Knowledge (5)**

Develops critical literacy of educational research. Explores issues of subjectivity and objectivity, political implications of research, standpoint of researcher, participatory action research, bringing self into study of education, and limits and benefits of qualitative and quantitative forms of inquiry in educational research. Course overlaps with: EDUC 315. Offered: W.

[View course details in MyPlan: B EDUC 300](#)

**B EDUC 310 Theories of Learning, Culture, and Identity (5) SSc**

Introduces theories of learning based on psychology, child development, anthropology, and social justice. Examines how learning theories are applied to teaching, assessment, and educational policy. Explores how culture and identity are tied to learning. Course overlaps with: T EDUC 402.

Offered: AWSp.

[View course details in MyPlan: B EDUC 310](#)

**B EDUC 315 History of Education in the United States (5) SSc**

A historical survey of education. Emphasis on relationship between idea and practice. Topics include education and colonialism, formation of state school systems, progressive education, policy and practice, equal access and opportunity, education and social structure, and standards and reform. Offered: Sp.

[View course details in MyPlan: B EDUC 315](#)

**B EDUC 328 Diversity, Leadership, and Engagement (5) SSc, DIV**

Explores theories and practices of diversity, leadership, and engagement. Provides opportunity for leadership development and academic reflection in relation to initiatives in which students work on questions of diversity and campus or community engagement. Recommended: B EDUC 255/BIS 255. Offered: jointly with BIS 328.

[View course details in MyPlan: B EDUC 328](#)

**B EDUC 330 Race, Culture, and Identity in the Classroom (5) SSc, DIV**



Examines the ways that various aspects of student identity are entwined with pedagogy and curriculum. Focuses on multicultural education, the politics of language, racism and testing, cultural identity development, and classroom diversity. Prerequisite: either B EDUC 210, B EDUC 220 or B EDUC 230.

[View course details in MyPlan: B EDUC 330](#)

### **B EDUC 340 STEAM Education (3)**

Explores the idea that concepts integral to science, technology, engineering, and math deeply overlap with integral concepts in art. Examines how art can be incorporated into STEM curricular goals, and how to develop culturally responsive practices in STEAM pedagogy. Offered: W.

[View course details in MyPlan: B EDUC 340](#)

### **B EDUC 391 Special Topics in Education (1-5, max. 10)**

Explores perspectives on educational policy and practice. Offered: A WS pS.

[View course details in MyPlan: B EDUC 391](#)

### **B EDUC 392 Independent Study (1-5, max. 10)**

Faculty supervised readings and activities in areas of special interest for individual students.

[View course details in MyPlan: B EDUC 392](#)

### **B EDUC 399 Capstone Introductory Seminar (3)**

Focuses on learning how to develop and compile a critically reflective learning portfolio for the capstone project. The course enhances critical inquiry and self-reflection as well as refining writing and collaborative skills. Prerequisite: B EDUC 205; B EDUC 210; B EDUC 300; and B

EDUC 310. Credit/no-credit only.

Offered: A WS pS.

[View course details in MyPlan: B EDUC 399](#)

### **B EDUC 401 Study Abroad: Education (1-5, max. 15) SSc**

Combines study at UW Bothell with seminars and field trips organized by the Education faculty or the faculties of host institutions in foreign countries. Topics include education policies, teaching or learning, and cultural perspectives on education.

[View course details in MyPlan: B EDUC 401](#)

### **B EDUC 402 Human Growth and Learning (5) SSc**

Focuses on recent research in the area of child and adolescent learning and on the relationship of learning to human growth and development. Course overlaps with: T EDUC 402.

Offered: A SpS.

[View course details in MyPlan: B EDUC 402](#)

### **B EDUC 403 Introduction to Special Education (5)**

Introduces basic knowledge for facilitating the success of all children in general education classrooms, with an emphasis on children who receive special education services. Discusses various disabilities, variations in development, the history and legislation around inclusive education, referral, differentiation, and the general education teachers' role. Course overlaps with: EDSPE 304 and T EDUC 449. Offered: A SpS.

[View course details in MyPlan: B EDUC 403](#)

### **B EDUC 405 Context of Learning and Schooling (3) SSc**



Surveys major themes of historical, legal, philosophical, political, ethical and social contexts of learning and schooling in American society. Integrates several disciplines as the foundation from which to view the instructional process.

[View course details in MyPlan: B EDUC 405](#)

### **B EDUC 406 Introduction to Field Placements (2)**

Introduction to building learning communities in classrooms. Involves students in assigned field placements in K-8 schools and in seminars on campus. Credit/no-credit only.

[View course details in MyPlan: B EDUC 406](#)

### **B EDUC 408 Knowing, Teaching, and Assessing in Multicultural Education and Social Studies (5) SSc**

Provides students with classroom methods, materials, and assessment strategies for teaching social studies in elementary schools. Grounded in democratic beliefs and assumes citizenship participation as an essential part of a free, humane, and civic community. Course overlaps with: T EDUC 462. Prerequisite: B EDUC 242; B EDUC 402; B EDUC 403; B EDUC 423; B EDUC 441; and either B BUS 220/BIS 200, BIS 175, BIS 180, BIS 203, BUS 218, BIS 242, BIS 280, BIS 314, BIS 320, BIS 416, or BIS 443.

[View course details in MyPlan: B EDUC 408](#)

### **B EDUC 409 Knowing, Teaching, and Assessing in: Reading, Writing and Communicating (3)**

The first in a two-course sequence that builds understanding about literacy development and instruction. Focuses on early literacy, writing processes, and

children's literature.

[View course details in MyPlan: B EDUC 409](#)

### **B EDUC 410 Knowing, Teaching, and Assessing in Reading, Writing and Communicating (4)**

The second of two course sequence that builds understandings about literacy development and instruction. Focuses on reading for intermediate readers including comprehension, assessment, and remediation. Prerequisite: B EDUC 402; B EDUC 403; B EDUC 409; B EDUC 423; B EDUC 441; B WRIT 134 or ENGL 141; and either BIS 164, BIS 206, BIS 301, BIS 361, BIS 370, BIS 371, BIS 377, BIS 379, BIS 387, BIS 388, BIS 389, BIS 407, BIS 455, BIS 481, BIS 486, BIS 487, BIS 488, or BISCLA 384.

[View course details in MyPlan: B EDUC 410](#)

### **B EDUC 413 Knowing, Teaching, and Assessing in The Arts (3)**

Explores dance, music, visual arts, drama, and literary arts as integral strands of children's learning. Credit/no-credit only.

[View course details in MyPlan: B EDUC 413](#)

### **B EDUC 416 Instructional Design and Assessment (2)**

Explores the major concepts, theories, and research related to the development of learning opportunities for children that support individual students'

development, acquisition of knowledge, and motivation. Focuses on strategies for implementation of instruction in schools.

[View course details in MyPlan: B EDUC 416](#)

### **B EDUC 417 Families, Communities and Schools (2)**

Examines the fundamental values and

assumptions that animate our educational endeavor through families, communities, and schools. Topics include changing demographics, community resources and involvement, and diversity of families. Credit/no-credit only.

[View course details in MyPlan: B EDUC 417](#)

### **B EDUC 418 Knowing, Teaching, and Assessing in Intermediate Level Mathematics (4)**

Develops understanding of intermediate level mathematics concepts, tools, and strategies for teaching these concepts, and students' mathematical learning. Pre-service teachers explore a variety of activities to facilitate their success as intermediate level mathematics teachers. Course overlaps with: T EDUC 461. Prerequisite: B EDUC 170; B EDUC 402; B EDUC 403; B EDUC 419; B EDUC 423; and B EDUC 441.

[View course details in MyPlan: B EDUC 418](#)

### **B EDUC 419 Knowing, Teaching, and Assessing in Mathematics (3)**

Introduces the nature of mathematics as an exciting way to interpret the world and as an elegant way to solve problems. Emphasizes using mathematical thinking to discover order and represent patterns rather than memorizing mathematical rules to be followed. Course overlaps with: T EDUC 460.

[View course details in MyPlan: B EDUC 419](#)

### **B EDUC 421 Knowing, Teaching, and Assessing in: Earth, Physical, and Life Sciences (4)**

Introduces the nature of science as subject matter, as a process of inquiry, and as a fascinating way to make sense of

the world. Emphasizes the techniques, attitudes, skills, and competencies needed to become a scientifically literate citizen. Course overlaps with: T EDUC 410.

[View course details in MyPlan: B EDUC 421](#)

### **B EDUC 423 Knowing, Teaching, Assessing in Health, Fitness and Issues of Abuse (3)**

Examines health and fitness as it relates to children's development of responsibility health promoting behaviors; how to identify physical, emotional, sexual, and substance abuse; teacher report responsibilities; and methods of teaching about abuse/prevention. Open to Bothell Teacher Certification Program students only.

[View course details in MyPlan: B EDUC 423](#)

### **B EDUC 425 Reflections on Professional Practice Seminar (1-5, max. 15)**

Reflections on field work in educational settings. Credit/no-credit only.

[View course details in MyPlan: B EDUC 425](#)

### **B EDUC 427 Reflections on Professional Practice Seminar: Becoming a Professional Educator (3)**

Through readings and reflective writing, students explore teacher as a member of a professional community and as a learner, teacher as agent of social justice, and the personal, social, and professional responsibilities of teaching. Course overlaps with: T EDUC 490. Credit/no-credit only.

[View course details in MyPlan: B EDUC 427](#)

**B EDUC 430 Knowing, Teaching, and Assessing in Secondary Classrooms I (5)**

Explores fundamental, theoretical, and practical knowledge of the methods, materials, and habits of mind to begin teaching in secondary classrooms. Introduces the purposes of teaching and assessing, designing learning targets, and assessments and lesson plans. Offered: A.

[View course details in MyPlan: B EDUC 430](#)

**B EDUC 431 Knowing, Teaching, and Assessing in Secondary Classrooms II (5)**

Continues the exploration of fundamental, theoretical, and practical knowledge of the methods, materials, and habits of mind to begin teaching in secondary classrooms. Engages students in the work of teaching and assessing, designing learning targets, and assessments and lesson plans within academic disciplines. Prerequisite: B EDUC 430. Offered: W.

[View course details in MyPlan: B EDUC 431](#)

**B EDUC 435 Student Teaching (2-15, max. 15)**

Field experience in K-8 public school classroom part-time or full-time. Supervised placement transitions from observing, assisting, co-teaching, to assuming all facets of the teaching role. Prerequisite: B EDUC 240; B EDUC 241; B EDUC 340; B EDUC 402; B EDUC 403; B EDUC 423; and B EDUC 441. Credit/no-credit only. Offered: AW.

[View course details in MyPlan: B EDUC 435](#)

**B EDUC 437 Current Issues in Technology (1-3, max. 9)**

Sequenced and concentrated instruction and collaborative work in instructional technology to be integrated with other quarterly course work. Credit/no-credit only.

[View course details in MyPlan: B EDUC 437](#)

**B EDUC 438 Teaching and Learning Tribal Sovereignty (5) SSc, DIV**

Introduces students in UWB's School of Educational Studies to essential understandings of tribal sovereignty, Indigenous histories and cultures, and Indigenous education policies and movements as they begin their work as educators in the state of Washington. Course overlaps with: T EDUC 474. Offered: WSpS.

[View course details in MyPlan: B EDUC 438](#)

**B EDUC 439 Knowing, Teaching, and Assessing in Learning Tribal Sovereignty (2) SSc**

The second course in a two course sequence that builds essential understandings of tribal sovereignty, Indigenous histories and cultures, and Indigenous education. Focuses on implementation of tribal sovereignty into K12 curriculum. Recommended: B EDUC 438. Offered: WSp.

[View course details in MyPlan: B EDUC 439](#)

**B EDUC 441 Second Language Acquisition, Bilingual Education, and the Structure of English (5) SSc, DIV**

Focuses on theories in second language acquisition, bilingual education, and the structure of English. Topics include research, practice, and connections between language, literacy, cultural tradition, identity, and education in preparation for teaching ELL's in general

education of classes specifically for ELL's. Offered: AWS.

[View course details in MyPlan: B EDUC 441](#)

**B EDUC 442 Curriculum, Instruction, and Assessment in ESOL (5)**

Introduces curriculum, instruction, and assessment for teaching English for Speakers of Other Languages (ESOL).

Required for ESOL Endorsement.

Prerequisite: B EDUC 441

[View course details in MyPlan: B EDUC 442](#)

**B EDUC 443 Practicum in ESOL (5)**

Fulfills Washington State ESOL endorsement requirement for structured experience in teaching English to speakers of other languages. Completed with approved mentor teacher in public school setting. Prerequisite: B EDUC 442

Credit/no-credit only. Offered: WSp.  
[View course details in MyPlan: B EDUC 443](#)

**B EDUC 444 Leadership, Advocacy, and Program Assessment in ESOL (5) SSc, DIV**

Explores historical and political contexts of bilingual education in U.S. including legislation, inclusive principles, theory, and research. Focuses on cognitive, academic, social-cultural, and language and educational needs of English Learners through leadership and advocacy. Examines program assessments of services provided to ensure students' needs are met. Course overlaps with: T EDUC 469.

[View course details in MyPlan: B EDUC 444](#)

**B EDUC 451 Early Childhood Development (5) SSc**

Focuses on the period of development from birth through age 5. Students will

explore theoretical perspectives and develop an understanding of "developmentally appropriate practice" through connections with personal experiences, observations, and current or future work with young children. This period is foundational for future well-being, hence efforts to provide equitable access to high-quality learning and care environments. Course overlaps with: ECE 201. Offered: AWSp.

[View course details in MyPlan: B EDUC 451](#)

**B EDUC 452 Service Learning Practicum in Education (2, max. 6) SSc**

To be taken concurrently with any two or three credit UW Bothell Education courses. Requires approximately 40 hours of service learning in a school and/or other appropriate setting approved by the course instructor. Credit/no-credit only.

[View course details in MyPlan: B EDUC 452](#)

**B EDUC 453 Children in Schools and Society (5) SSc, DIV**

Focuses on the age ranges of early to middle childhood and explores how children's identities are situated within schools and society. Students will explore resources for educators, caregivers, and other professionals to support children through an asset-based approach. Childhood is thought to be a time of exploration, fun, and growth. It is also a period when development is influenced by family, peers, teachers, and community. Prerequisite: B EDUC 210. Offered: AWSp.

[View course details in MyPlan: B EDUC 453](#)

**B EDUC 456 Adolescents in School and Society (5) SSc**

Discusses some of the transformations of consciousness that occur in adolescence and examines how social structures, particularly formal schooling, help shape those transformations. Requires a community-based learning project.

Prerequisite: B EDUC 210. Offered: W.

[View course details in MyPlan: B EDUC 456](#)

### **B EDUC 458 Emerging Adulthood (5) SSc**

Emerging adulthood is a period of development distinct from both adolescence and adulthood and focuses on the age span of 18-25. This period is an exciting time to explore one's identities, but can also be filled with uncertainty. Students will analyze the tensions that characterize emerging adulthood along with the many factors that can influence the trajectories of people's lives in the spheres of education, careers, relationships, and health.

Offered: AWSp.

[View course details in MyPlan: B EDUC 458](#)

### **B EDUC 460 Moral Dimensions of Education (5) SSc**

Explores philosophies of ethics and theories of moral development, focusing on how parents, peers, culture, teachers, and schools influence ethical growth. Examines how schools transmit values, teachers' ethical roles, and moral education content and practices.

Incorporates independent learning on topics of interest. Offered: Sp.

[View course details in MyPlan: B EDUC 460](#)

### **B EDUC 461 Educational Implications of Gender Inequality (5) DIV**

Examines the historical foundations of gender inequality in education, discuss

gender as a factor in access to education, and explores recommended classroom practices designed to reduce gender inequality. Prerequisite: B EDUC 210.

[View course details in MyPlan: B EDUC 461](#)

### **B EDUC 465 Fostering Algebraic Reasoning (5) NSc, RSN**

Focuses on methods of teaching algebra from a developmental perspective, including research-based methods for developing students' algebraic thinking and structure and processes used in algebra. Prerequisite: a minimum grade of 2.0 in either STMATH 125 or MATH 125. Offered: jointly with STMATH 465.

[View course details in MyPlan: B EDUC 465](#)

### **B EDUC 466 Fostering Geometric Thinking (5) NSc, RSN**

Focuses on methods of teaching geometry from a developmental perspective, including research-based methods for developing students' geometric thinking and structure and processes used in geometry including proof. Prerequisite: a minimum grade of 2.0 in STMATH 125 or MATH 125. Offered: jointly with STMATH 466.

[View course details in MyPlan: B EDUC 466](#)

### **B EDUC 467 Fostering Statistical Thinking, Data, and Graphical Analysis (5) NSc, RSN**

Focuses on methods of teaching data and graphical analysis and statistical thinking from a developmental perspective, including how to foster secondary students' statistical thinking, and using technological tools to teach key concepts in secondary mathematics using big data sets, graphical analysis, and dynamic visualization. Prerequisite: a

minimum grade of 2.0 in either STMATH 125 or MATH 125. Offered: jointly with STMATH 467.

[View course details in MyPlan: B EDUC 467](#)

**B EDUC 470 Disability Culture in Schools and Society (5) SSc, DIV**

Examines history, theory, values, and assumptions about disability in the contexts of schools and society. Explores how disability is defined. Focuses on historical and theoretical foundations for defining disability; disability in the context of public schooling; and relationship between disability, social change, and equitable access to opportunity. Offered: W.

[View course details in MyPlan: B EDUC 470](#)

**B EDUC 473 History of U.S. Public Schooling (3)**

Examines the development of educational policy and practice over time. Emphasizes United States schools from 1750 to present.

[View course details in MyPlan: B EDUC 473](#)

**B EDUC 474 Global Englishes (5) SSc, DIV**

Explores the spread of the English language as a global language and the development of local varieties of English. Examines ways in which people use and appropriate English for their own purposes in various contexts and analyze the diverse beliefs and ideologies that people hold about English.

[View course details in MyPlan: B EDUC 474](#)

**B EDUC 475 Global Perspectives on Diversity and Citizenship Education (3) SSc, DIV**

Explores the relationship between

diversity and citizenship education in a select group of nation-states. Discusses challenges experienced by citizens in those nation-states as the nations respond to diversity while trying to maintain national cohesion.

[View course details in MyPlan: B EDUC 475](#)

**B EDUC 476 New Literacies for Digital Learning (5)**

Examines "literacy" in a time of global digital communication, collaboration, and creation. Includes both critical and theoretical readings on the rapid shifts in digital culture and hands-on experience with becoming a networked digital learner. Offered: W.

[View course details in MyPlan: B EDUC 476](#)

**B EDUC 480 Life and Learning in the Middle School (5) SSc**

Explores the theory and impact of relationships within early adolescent development, and within the context of the middle school and junior high schools. Recommended for students who are preparing to teach or work with middle school or junior high aged children. Offered: S.

[View course details in MyPlan: B EDUC 480](#)

**B EDUC 481 Adolescent Development (5) SSc**

Provides an examination of specific theories, concepts, and methods related to adolescence. Explores a wide range of topics including: cognitive development, moral development, identity formation, gender role, social relationships, and the effects of culture and schooling on adolescent development. Course overlaps with: EDPSY 404. Offered: A.



[View course details in MyPlan: B EDUC 481](#)

**B EDUC 482 Assessment in Special and Inclusive Education (5) DIV**

Introduces assessment for individuals in low incidence, high incidence, and early childhood special education programs. Focuses on principals, administration, and interpretation of legally mandated and high quality formal and informal assessments. Includes practice of scoring, interpreting computer scoring, interpretation, and writing summary reports. Prerequisite: B EDUC 403

[View course details in MyPlan: B EDUC 482](#)

**B EDUC 483 Planning for Student Success in Inclusive Education (5)**

Develop knowledge and skills related to planning instruction in inclusive learning environments. Explores methods for short- and long-range educational planning in inclusive and special education settings with a focus on the promotion of equitable educational opportunities and access for all students. Prerequisite: B EDUC 482. Offered: Sp.

[View course details in MyPlan: B EDUC 483](#)

**B EDUC 484 Inclusive Teaching and Instruction Practices (5)**

Explores methods for instruction in special education and inclusive classrooms, focusing on the promotion of equitable educational opportunities for all students. Prerequisite: B EDUC 482. Offered: Sp.

[View course details in MyPlan: B EDUC 484](#)

**B EDUC 491 Special Topics in Education (1-5, max. 15)**

Offered: AWSpS.

[View course details in MyPlan: B EDUC 491](#)

**B EDUC 493 Environmental Education (3) NSc**

Analyze various environmental programs and prepare an individualized project. Learn to apply ecological concepts in the classroom and learn how to teach about various environmental education programs.

[View course details in MyPlan: B EDUC 493](#)

**B EDUC 495 Applied Experience in Educational Studies (2-5, max. 6)**

The Applied Experience is designed to integrate the knowledge and skills cultivated in Educational Studies coursework, an experience in an educational setting, and collaborative self-reflection on the challenges and opportunities of education in diverse settings. Course overlaps with: EDC&I 450. Prerequisite: B EDUC 399, which may be taken concurrently. Credit/no-credit only. Offered: AWSpS.

[View course details in MyPlan: B EDUC 495](#)

**B EDUC 498 Educational Studies Research (5)**

This course focuses on the theory and application of research in educational studies. It explores purposes and constructs of educational research, implications, standpoint and role of researcher, and considers tensions and benefits of conducting research in educational settings. Course participants will contribute to School of Educational Studies faculty research efforts. Prerequisite: B EDUC 300. Credit/no-credit only. Offered: Sp.

[View course details in MyPlan: B EDUC 498](#)



**B EDUC 499 Capstone Project (2)**

Fulfills the second part of a two-course series designed to complete the final version of the Capstone Electronic Portfolio for coursework in the School of Educational Studies towards undergraduate degree completion. This course focuses on further development of this critically reflective learning electronic portfolio and enhancement of writing through feedback from peers and the instructor. Prerequisite: B EDUC 399 and B EDUC 495, which may be taken concurrently. Credit/no-credit only. Offered: A/WSp.

[View course details in MyPlan: B EDUC 499](#)

**B EDUC 500 Foundations of Critical Race Theory in Higher Education (5)**

Provides an overview of critical race theory as applied within education-related fields, including a focus on historical origins, aligned movements, key tenets, and applications across K-12 and higher education. Offered: W.

[View course details in MyPlan: B EDUC 500](#)

**B EDUC 501 Inquiry in Education (5)**

Introduces tools for looking closely at classrooms and professional practice. Explores a professional question through gathering information, collegial discussion with their peers, and readings that offer multiple perspectives. Offered: A.

[View course details in MyPlan: B EDUC 501](#)

**B EDUC 502 Identity and Reflective Practice (5)**

Examines key concepts related to identity, reflection, and reflective practice. Supports autoethnographic and reflective writing to foster understanding

of personal identity and examination of social, cultural, political and economic forces that influence educational philosophy, practice, and ethics. Offered: A.

[View course details in MyPlan: B EDUC 502](#)

**B EDUC 503 History and Politics of Teaching (3)**

Explores historical, political, and social issues that affect classrooms and schools, as well as the nature of historical and political analysis.

[View course details in MyPlan: B EDUC 503](#)

**B EDUC 504 Enacting Agency for Social Justice (5)**

Focuses on building a social justice ethos through praxis. Examines a variety of models and methods embodying social justice principles within formal and informal educational settings. Develops a knowledge base of how our individual and collective agency can be leveraged to dismantle oppressive structures, while centering the voices of minoritized communities through dialogue, and anti-oppressive organizing. Offered: Sp.

[View course details in MyPlan: B EDUC 504](#)

**B EDUC 507 Reviewing the Literature (3)**

Explores how to locate, analyze, and synthesize professional literature on a topic and how to assemble the resources necessary to write a review of that literature. Supports critical literature review application of knowledge product for program completion dossier.

[View course details in MyPlan: B EDUC 507](#)

**B EDUC 508 Early Literacy Development and Instruction (3)**

Builds an understanding of how young children (ages 4-8) develop literate behaviors, and how teachers can support this development. Explores emergent literacy behaviors, oral language development, building a literate identity, phonemic awareness, decoding, reading comprehension, spelling, and writing.

[View course details in MyPlan: B EDUC 508](#)

### **B EDUC 510 Literacy Instruction for Diverse Learners (5)**

Helps teachers meet the educational and linguistic needs of students with diverse needs or limited English language skills. Emphasizes instructional strategies consistent with a variety of approaches to curriculum adaptation and second-language learning. Examines strategies for classroom adaptation.

[View course details in MyPlan: B EDUC 510](#)

### **B EDUC 511 Reading Practicum: Responsive Small Group Instruction (5)**

Examines theory, research, and practice in relation to elements of responsive reading instruction including assessment, word identification, fluency, comprehension, vocabulary, and ownership. Applies learning to practice through small group reading instruction for elementary-grade children at local, school-based summer reading program. Offered: S.

[View course details in MyPlan: B EDUC 511](#)

### **B EDUC 512 Social Justice Education: Oppression, Resistance, and Liberation (5)**

Builds on a foundational understanding of the roots and manifestations of structural injustices in society, and explores a

variety of educational philosophies and approaches which work toward resistance and liberation. Considers what resistance and liberation might look like when systems of structural inequities are entrenched in every aspect of human life. Offered: A.

[View course details in MyPlan: B EDUC 512](#)

### **B EDUC 515 Racism in Higher Education (5)**

Participants apply critical race theory to examine the roots of white supremacy and racism in higher education, while exploring the role of higher education in normalizing local and global oppressive structures across social, political, and economic systems. Offered: W.

[View course details in MyPlan: B EDUC 515](#)

### **B EDUC 516 Teaching Diverse Students (3)**

[View course details in MyPlan: B EDUC 516](#)

### **B EDUC 517 Working with Struggling Readers Grades 3-8 (3)**

Develops the strategies and understandings necessary for effective assessment and instruction of struggling readers in grades 3-8. Focuses on classroom-based assessments and their benefits for informing individual or whole class reading instruction.

[View course details in MyPlan: B EDUC 517](#)

### **B EDUC 518 Observing and Describing Children and Their Work (3)**

Focuses on observation and description of children and their work. Learn skills of observation as well as a process of systematic collaborative inquiry that validates teachers' knowledge of their students while also generating new

knowledge. Study the work of teacher researchers who base their work on thoughtful observations of children.

[View course details in MyPlan: B EDUC 518](#)

**B EDUC 519 Classroom Discourse (3)**

Examines how classroom talk creates and conveys multiple and complex notions of self, roles, status, learning, and subject matter. Addresses what discourse is present in classrooms and how can it be best used to facilitate teaching and learning.

[View course details in MyPlan: B EDUC 519](#)

**B EDUC 520 Current Issues in Higher Education (5)**

Applies a critical race theory lens to examine contemporary issues in higher education, with a particular focus on intersectionality and interest convergence within local higher education systems. Offered: Sp.

[View course details in MyPlan: B EDUC 520](#)

**B EDUC 521 Using Multicultural Literature in the Classroom (3)**

The dimensions of multicultural education serve as a framework for educators to review and compile bibliographies of books and compile bibliographies of books that can be used with students in the classroom. Discusses books for children and adults. Discussion and reflection on concepts such as essentialism and representation. Selection and evaluation of books to infuse multicultural content into the curriculum.

[View course details in MyPlan: B EDUC 521](#)

**B EDUC 522 Education and the American Dream (3)**

Considers tensions inherent in the deep American belief that individuals can reach unlimited potential through success in school. Looks at ways in which the American educational system has been created within American beliefs in equal opportunity based on merit, yet remains an institution that sorts individuals for very unequal futures.

Offered: A.

[View course details in MyPlan: B EDUC 522](#)

**B EDUC 523 Improving Human Relations in Schools (3)**

Addresses issues related to teaching in a pluralistic society. Explores the historical foundations of intergroup education, theories supporting the human relations approach and teaching strategies, materials, and assessment that can be used to improve human relations.

[View course details in MyPlan: B EDUC 523](#)

**B EDUC 525 Applied Critical Race Theory as Systems Change (5)**

Focuses on the application of critical race theory as a lever for implementing systems change efforts across higher education. Students elevate applied systems change projects within chosen higher education institutions. Offered: S.

[View course details in MyPlan: B EDUC 525](#)

**B EDUC 527 Educational Theorists and Reformers (3, max. 6)**

Provides an in-depth study of the work of prominent educators whose contributions have significantly impacted understandings of the nature of learning, teaching, and schooling.

[View course details in MyPlan: B EDUC 527](#)

**B EDUC 529 Community-Based Fieldwork (2)**

Designed for educators committed to building and enhancing equitable collaborations with minoritized youth and communities in advancing educational justice. Offering a critique of the deficit perspectives underlying traditional approaches to community partnerships, this course situates youth and community voices, experiential knowledge, and agency as central to advancing enduring, justice-centered collaborations. Credit/no-credit only. Offered: S.

[View course details in MyPlan: B EDUC 529](#)

**B EDUC 530 Current Issues: Integrated Curriculum (3-5, max. 10)**

[View course details in MyPlan: B EDUC 530](#)

**B EDUC 531 Current Issues in Teaching (1-6, max. 25)**

Examines current issues confront classroom teachers: new assessment methods, classroom management, collaborative learning, Washington State Essential Academic Learning Requirements, national standards in mathematics and science.

[View course details in MyPlan: B EDUC 531](#)

**B EDUC 532 Discourse in the Mathematics and Science Classroom (3)**

Examines essential questions regarding classroom discourse and how it relates to teaching practice and student learning in K-12 mathematics and science classrooms.

Questions include: what is classroom discourse; how does it relate to learning math and science; what issues can be

investigated through the study of discourse in math and science classrooms. Offered: A.

[View course details in MyPlan: B EDUC 532](#)

**B EDUC 533 Computers in the Classroom: Issues and Uses (3)**

Examines the dynamics of instruction and interaction in classrooms while preparing students for worlds that do not yet exist. Essential questions include issues of equity, disengagement, and the quality of learning and knowing in a diverse and complex society. Uses current technology to enhance computer skills, create and evaluate quality learning experiences, and explore issues of equal access for all.

[View course details in MyPlan: B EDUC 533](#)

**B EDUC 534 Current Issues in Literacy Research (3)**

Explores current research examining issues of literacy development and instruction. Considers research design, data analysis, study findings, and classroom implications from a critical practitioner-oriented perspective.

[View course details in MyPlan: B EDUC 534](#)

**B EDUC 535 Writing Across the Curriculum (3)**

Explores instructional strategies designed to guide students in acquiring and developing writing skills across the curriculum. Emphasizes preparing materials to use in single subject-area teaching as well as developing as a writer to effectively model and scaffold writing instruction.

[View course details in MyPlan: B EDUC 535](#)

**B EDUC 536 Teacher Leadership: Renewing, Revitalizing, Reframing (3)**

Develops and promotes in teachers the knowledge, skills and "conditions of the heart" necessary to be a teacher leader. Based on the premise that teachers need to be active participants in the formation of a future that positively impacts the lives of students and professional community of schools.

[View course details in MyPlan: B EDUC 536](#)

**B EDUC 537 Assessment (3)**

Analyzes the development, use, and interpretation of classroom-based assessments, including student self-assessment. Explores concepts of validity, reliability, and appropriate use in relationship to both classroom-based and commercial assessments. Critiques use of assessment in relation to goals of equity, educational quality, and accountability.

[View course details in MyPlan: B EDUC 537](#)

**B EDUC 538 Adolescent Literacy (3)**

Examines current issues, research, and innovations in adolescent literacy research and practice. Considers the issues of motivation, comprehension, vocabulary, and multiple literacies including technology and home-school connections. Examines articles by research and teacher leaders in the field.

[View course details in MyPlan: B EDUC 538](#)

**B EDUC 539 Literacy Coaching (3)**

Examines research and practice focused on literacy coaching in terms of mentoring, peer collaboration, and teacher leadership development. Emphasizes literacy content and pedagogical content knowledge, theories

of teacher change, and models of effective professional development.

[View course details in MyPlan: B EDUC 539](#)

**B EDUC 540 Principles of Inclusion: Students and Families (5)**

Focuses on issues, principles, practices, and legal responsibilities to student identified for special education and English language learners. Specific attention is given to culturally- and developmentally-aware policies and practices inclusive of students and their families. Offered: Sp.

[View course details in MyPlan: B EDUC 540](#)

**B EDUC 541 Second Language Acquisition, Bilingual Education, and the Structure of English (5)**

Focuses on theories in second language acquisition, bilingual education, and the structure of English. Topics include research, practice, and connections between language, literacy, cultural traditions, identity, and education in preparation for teaching ELLs in general education of classes specifically for ELLs. Offered: W.

[View course details in MyPlan: B EDUC 541](#)

**B EDUC 542 Curriculum, Instruction, and Assessment in English for Speakers of Other Languages (5)**

Participants develop curriculum, instruction, and assessment for speakers of other languages learning in English at any level. Emphasizes support of language and content development in general education classrooms. Required course in ELL endorsement program. Prerequisite: B EDUC 541. Offered: A.

[View course details in MyPlan: B EDUC 542](#)

**B EDUC 543 Practicum for Teaching English Speakers of Other Languages (5)**

Site-based experience teaching students acquiring English. Includes coaching by certified ELL teacher. Focuses on practice of curriculum, instruction, assessment, and advocating in support of students acquiring English. Prerequisite: B EDUC 542 Credit/no-credit only. Offered: WSp.

[View course details in MyPlan: B EDUC 543](#)

**B EDUC 544 Leadership, Advocacy, and Program Assessment in ESOL (5)**

Explores historical and political contexts of bilingual education in U.S. including legislation, inclusive principles, theory, and research. Focuses on addressing cognitive academic, social-cultural, and language needs of ESOLs. Examines language assessment tools, tests, and other factors for determining placement in language-support programs. Offered: Sp.

[View course details in MyPlan: B EDUC 544](#)

**B EDUC 547 Transformative Curriculum Leadership (5)**

Explores strategies and efforts for individual capacity and collaborative problem solving for leadership in schools and communities to bring about progressive curriculum transformation. Investigates forms of transformative curriculum for equity, social justice, multiculturalism, peace, and ecojustice.

[View course details in MyPlan: B EDUC 547](#)

**B EDUC 550 Critical Pedagogy (5)**

Explores power in educational contexts

with respect to knowledge production, instructional practice, and the purposes of education. Offered: W.

[View course details in MyPlan: B EDUC 550](#)

**B EDUC 552 Curriculum, Instruction, and Assessment in Middle and Secondary Science I (5)**

Participants develop curriculum, instruction, and assessment based on theories of teaching and learning in science and inclusive of all students. Attention given to content-based use of technology, working across disciplines, teaching ELL's, students with special needs, and co-teaching models. Includes direct work with adolescents. Prerequisite: B EDUC 556; B EDUC 557. Offered: Sp.

[View course details in MyPlan: B EDUC 552](#)

**B EDUC 553 Curriculum, Instruction, and Assessment in Secondary English, Social Studies, and History (5)**

Participants develop curriculum, instruction, and assessment based on theories of teaching and learning in science and inclusive of all students. Attention given to content-based use of technology, working across disciplines, teaching ELL's, students with special needs, and co-teaching models. Includes direct work with adolescents.

[View course details in MyPlan: B EDUC 553](#)

**B EDUC 554 Curriculum, Instruction, and Assessment in Middle Grades and Secondary Science (5)**

Learn to teach science in a way that makes the content both rigorous and accessible. Develop an understanding of how the world of the student and the worlds of science intersect.



Participate in best practices of science teaching and reflect on these practices.

Offered: A.

[View course details in MyPlan: B EDUC 554](#)

**B EDUC 555 Building Partnerships: Home, School, and Community (5)**

Examines the forms of collaboration, contention, and controversy in the relationship between schools, the families of students, and local communities from historical, sociological, and political perspectives.

[View course details in MyPlan: B EDUC 555](#)

**B EDUC 556 Adolescent Development (5)**

Provides an in-depth examination of specific theories, concepts, and methods related to adolescence. Explores a wide range of topics including: cognitive development, moral development, identity formation, gender role, social relationships, and the effects of culture and schooling on adolescent development. Includes a community-based learning component. Offered: A.

[View course details in MyPlan: B EDUC 556](#)

**B EDUC 557 Curriculum Studies (5)**

Introduces the field of curriculum studies including curriculum theory and interdisciplinary study of the educational experience. Explores dominant ideas and alternative practices. Focuses on how curriculum and schools are manifestations of culture and how historical and contemporary premises about curriculum influence the culture of classrooms and schools. Offered: A.

[View course details in MyPlan: B EDUC 557](#)

**B EDUC 558 Curriculum, Instruction, and Assessment in Secondary Social Studies and History (5)**

Explores standards and critical areas of social studies and history. Discusses how to design learning objectives, plan for instruction, use resources, evaluate student learning, and teach social studies and history as integrated and interdisciplinary subjects. Offered: A.

[View course details in MyPlan: B EDUC 558](#)

**B EDUC 559 Curriculum, Instruction, and Assessment in Secondary and Middle Level Mathematics I (5)**

Participants develops curriculum, instruction, and assessment based on theories of teaching and learning in science and inclusive of all students. Attention given to content-based use of technology, working across disciplines, teaching ELL's, students with special needs, and co-teaching models. Includes direct work with adolescents.

Prerequisite: B EDUC 556; B EDUC 557.  
Offered: Sp.

[View course details in MyPlan: B EDUC 559](#)

**B EDUC 560 Curriculum, Instruction, and Assessment in Secondary Science and Mathematics II (5)**

Emphasizes the complexity of teaching and learning science and mathematics. Works closely with expert teachers to develop and teach a unit of instruction. Gains practice in designing, conducting, and reflecting on formative and summative assessments in the school setting. Offered: A.

[View course details in MyPlan: B EDUC 560](#)



**B EDUC 561 Education and Gender (3)**

[View course details in MyPlan: B EDUC 561](#)

**B EDUC 562 Multicultural Education: Race, Class, and Gender (3)**

[View course details in MyPlan: B EDUC 562](#)

**B EDUC 563 Curriculum, Instruction, and Assessment in Secondary English Methods I and II (5-, max. 10)**

Helps prospective teachers of English become more thoughtful about the aims, theories, and research methods for teaching English in secondary schools. Encourages reflective thought in the development of materials and plans for implementing secondary English lessons and units that can facilitate student learning. Offered: A.

[View course details in MyPlan: B EDUC 563](#)

**B EDUC 564 Field Experience in Secondary Schools (3-6, max. 6)**

Provides field experiences to reflect on teaching and learning in the secondary schools. Overlap with discipline specific methods course. Offered: A.

[View course details in MyPlan: B EDUC 564](#)

**B EDUC 565 Student Teaching (10)**

Students assume all facets of the teaching role in a full-time placement. Prerequisite: satisfactory completion of required secondary endorsement course work. Offered: W.

[View course details in MyPlan: B EDUC 565](#)

**B EDUC 566 Connected Teaching and Learning (3)**

Explores ways in which new digital media enables us learn via connection, creation, and collaboration. Students will learn

pedagogical strategies that integrate digital platforms while also critiquing the proliferation of digital tools within and outside of school. Offered: W.

[View course details in MyPlan: B EDUC 566](#)

**B EDUC 567 Telling Our Stories As Teachers: Digital Storytelling as Reflective Practice (5)**

Uses multi-media tools to weave the complex voices, images, and energy of classrooms to create digital stories as teachers. Through, software tutorials, work-shopping of writing, peer review of emerging projects, and production time, students learn more about themselves as teachers while also learning about technologies that can be used in classrooms. Offered: S.

[View course details in MyPlan: B EDUC 567](#)

**B EDUC 568 Critical Digital and Media Literacy for Children and Youth (3)**

This course will deepen critical media and digital literacies while supporting work with children and youth in a highly mediated culture. Offered: Sp.

[View course details in MyPlan: B EDUC 568](#)

**B EDUC 569 Educational Policy, School Politics and Teacher Power (3)**

Teachers work in a complex web of political relationships, contested values, and competing ideas in schools. Exercises help participants understand teachers' (K-12) and policymakers' roles in school politics and develop frameworks from which to base the responsible exercise of autonomy in schools.

[View course details in MyPlan: B EDUC 569](#)

**B EDUC 570 Problems in Qualitative Research Methodology (3-5)**

Examines a specific qualitative research methodology on a rotating basis. Examples of different methodologies may include action research, archival studies, biography, case study, classroom observation, ethnography, feminist studies, grounded theory, historiography, narrative studies, phenomenological studies, policy research, and sociolinguistics.

[View course details in MyPlan: B EDUC 570](#)

**B EDUC 573 Fostering Early Numeracy (3)**

Focuses on K-3 students' mathematical thinking, emphasizing number and operations in base ten. Draws on most current frameworks and documents to address content and pedagogy that support students' conceptual understanding of, and fluency with, number. Incorporates study of classroom routines and formats that support early numeracy.

[View course details in MyPlan: B EDUC 573](#)

**B EDUC 576 New Literacies for Digital Learning (5)**

Examines "literacy" in a time of global digital communication, collaboration, and creation. Includes both critical and theoretical readings on the rapid shifts in digital culture and hands-on experience with becoming a networked digital learner. Readings contextualize equity in digital learning in civic life, youth culture and commercial endeavors. Offered: A.

[View course details in MyPlan: B EDUC 576](#)

**B EDUC 577 Curriculum Development (5)**

Explores various models of curriculum development including established practices and alternative paradigms. Provides opportunities to analyze and critique current and historical models of curriculum planning and to examine the pedagogical, social, and political influences upon curriculum development. Offered: W.

[View course details in MyPlan: B EDUC 577](#)

**B EDUC 579 The Power and Beauty of Mathematics (3)**

Examines how mathematics helps us discover the rules and structures that underlie patterns and regularities in our world. Illustrates how an integrated curriculum combined with inquiry-based methodology can be used to explore some of the mathematical foundations on which the world rests.

[View course details in MyPlan: B EDUC 579](#)

**B EDUC 580 Critical Education Policy Analysis (5)**

K-12 education has become a sprawling institutional complex that includes formal schooling, governmental policymakers, major foundations, non-profit organizations, teachers' unions, parent organizations, and large for-profit corporations. Education has become a battleground where these forces both shape - and are shaped by - policies made at the federal, state, and local levels. This course examines the struggle over educational policy. Offered: Sp.

[View course details in MyPlan: B EDUC 580](#)

**B EDUC 587 Science, School Knowledge, and Contemporary Social Issues (3)**

Explores the impact of science on society as well as the vision for the teaching of science currently being advocated by those involved with science education reform. Discusses contemporary social issues, such as the ethical dilemmas presented by scientific advancements and science education reform issues.

[View course details in MyPlan: B EDUC 587](#)

**B EDUC 591 Special Topics in Education (1-5, max. 10)**

[View course details in MyPlan: B EDUC 591](#)

**B EDUC 592 Independent Study (1-6, max. 12)**

Faculty-supervised readings and research in areas of special interest for individual students.

[View course details in MyPlan: B EDUC 592](#)

**B EDUC 593 Graduate Certificate in Digital Teaching and Learning Capstone (1)**

Supports development of a Capstone Portfolio demonstrating reflection and accomplishment of goals related to digital teaching and learning.

Prerequisite: B EDUC 476 or B EDUC 576; B EDUC 566; and B EDUC 568; recommended: must have completed all requirements for the Graduate Certificate in Digital Teaching and Learning. Credit/no-credit only.

Offered: AWSpS.

[View course details in MyPlan: B EDUC 593](#)

**B EDUC 594 Completion Dossier (2)**

Supports development of culminating portfolio demonstrating accomplishment

of program goals for academic learning and improvement of professional practice. Credit/no-credit only.

Offered: AWSpS.

[View course details in MyPlan: B EDUC 594](#)

**B EDUC 595 Professional Portfolio (3-5, max. 10)**

Provides an opportunity for students to reflect on learning and professional growth through the construction of a culminating portfolio. Serves to document and deepen understanding of the competencies gained as a result of participation in the program. Credit/no-credit only.

[View course details in MyPlan: B EDUC 595](#)

**B EDUC 596 Professional Paper (2-5, max. 10)**

Complete a professional paper under the advisement of a faculty member in the program following submission and approval of a description of the proposed paper. Extends over two quarters and includes a public presentation of the completed work. Credit/no-credit only.

[View course details in MyPlan: B EDUC 596](#)

**B EDUC 597 Practitioner Focused Research (3)**

Examines how change in classrooms can be fostered by practitioner research projects. Provides an opportunity to carry out the steps of a site-based research project: examine literature; develop research questions or testable hypothesis; and generate methodology for carrying out investigation as a practitioner.

Prerequisite: B EDUC 501. Credit/no-credit only.

[View course details in MyPlan: B EDUC 597](#)

**B EDUC 598 Project Implementation ([2-5]-, max. 15)**

Second course in a three-course sequence of a culminating project focused on the implementation of a project designed to create change in an educational setting. Credit/no-credit only.

[View course details in MyPlan: B EDUC 598](#)

**B EDUC 599 Culminating Project (2-5, max. 15)**

Third course in a three-course sequence of a culminating project focused on an analysis, synthesis, and final write-up of a project implementation experience. Credit/no-credit only.

[View course details in MyPlan: B EDUC 599](#)

**LEADERSHIP DEVELOPMENT FOR EDUCATORS**

**LEDE 510 Personal Leadership for Schools (2-6, max. 8)**

Helps principal candidate develop the personal qualities and commitments associated with successful school leadership. Focuses on leadership theories, professional knowledge and ethics, and strategies for continued learning in professional practice.

[View course details in MyPlan: LEDE 510](#)

**LEDE 520 Leadership for Curriculum and Teaching (2-6, max. 8)**

Helps principal preparation candidates expand knowledge for assisting other teachers with curriculum, instruction, and student engagement with learning. Focuses on knowledge of exemplary practice and documentation of impact of

teaching and learning in schools.

[View course details in MyPlan: LEDE 520](#)

**LEDE 530 Leading Schools as Responsive Public Institutions ([2-6]-, max. 8)**

Helps principal candidates build knowledge for developing and stewarding a schools' vision and goals so that they are just, sustainable, and responsive to legal, political, professional, and local interests. Focuses on legal, political, and professional contexts of school leadership and builds skills for communication about school goals and needs.

[View course details in MyPlan: LEDE 530](#)

**LEDE 540 Leading Schools as Continuously Renewing Organizations ([2-6]-, max. 8)**

Helps principal candidates lead an effective and continually improving organization. Builds understanding of school managerial responsibilities as well as more complex tasks of assessing school needs and developing theories of action that focus daily work on desired school outcomes.

[View course details in MyPlan: LEDE 540](#)

**LEDE 550 Leading Inclusive School Communities ([2-6]-, max. 8)**

Helps principal candidates strengthen relationships, steward norms, establish programs, and lead conversations that foster collaborative decisions and collective action among the school's many constituencies. Builds understanding of the ways that social capital, student and family diversity, and family involvement influence student learning and can be influenced by principle leadership.

[View course details in MyPlan: LEDE 550](#)

**LEDE 560 Leadership for Student Services ([2-6]-, max. 8)**

Helps principal candidates develop knowledge and skills for school-level delivery of supports for students with exceptionalities, including creating a conducive climate for learning, identifying exceptional learning needs, and providing services needed to supplement instruction.

[View course details in MyPlan: LEDE 560](#)

**LEDE 591 Topics in Educational Leadership (1-5, max. 15)**

Examines topics in educational leadership with particular attention to evolving leadership demands associated with advanced in law, public policy, educational research, and administrative practice.

[View course details in MyPlan: LEDE 591](#)

**INTERACTIVE MEDIA DESIGN****B IMD 330 Quantitative Methods in Interactive Media (5) RSN**

Emphasizes mathematical concepts and principles related to the design, production, and analysis of media applications. Areas include ethics, probability theory, statistics, data visualization, research approaches, media-specific metrics, strategies, project management/budget, on-line survey techniques, and results presentation. Offered: A.

[View course details in MyPlan: B IMD 330](#)

**B IMD 350 Designing Media Experiences - MX (5)**

Looks at the design of media experiences including the visual, haptic/kinetic, and cognitive aspects of humans as they interact with a variety of forms of media. Prerequisite: B IMD 330. Offered: W.

[View course details in MyPlan: B IMD 350](#)

**B IMD 351 Studio Elements I: Introduction (5)**

Provides a survey of media design principles and technologies including characteristics of the studio process, fundamental project management and design methodologies, creativity, understanding audience, and explores user-centered design concepts. Projects linked to a series of introductory concept modules. Offered: A.

[View course details in MyPlan: B IMD 351](#)

**B IMD 352 Studio Elements II: Essentials (5)**

Second of three studio elements courses that provides core theory and methods related to dynamic web applications and integration with databases, photography, film production, audio techniques, and animation/storyboarding. Prerequisite: B IMD 351. Offered: W.

[View course details in MyPlan: B IMD 352](#)

**B IMD 353 Studio Elements III (5)**

Third of three studio elements courses providing core theory and methods related to advanced storyboarding, media pre-production, web technologies/base architecture, video/audio integration, and other related areas critical to interactive media. Students complete projects and begin planning for their integrative project. Prerequisite: B IMD 352. Offered: Sp.

[View course details in MyPlan: B IMD 353](#)

**B IMD 362 Studio Elements II: Practicum (5)**

Requires students to design and develop interactive media projects using design and production concept modules in an applied setting. Corequisite: B IMD 352; prerequisite: B IMD 351. Offered: W.

[View course details in MyPlan: B IMD 362](#)

**B IMD 363 Studio Elements III:****Practicum (5)**

Students design and develop interactive media projects using concept modules in an applied setting. Prepares students for senior-level integrative studio and specialty-area project. Prerequisite: B IMD 353, which must be taken concurrently; B IMD 362. Offered: Sp.

[View course details in MyPlan: B IMD 363](#)

**B IMD 390 Special Topics in Interactive Media Design (5, max. 10)**

Provides an opportunity to study a special topic on interactive media design. Offered: AWSpS.

[View course details in MyPlan: B IMD 390](#)

**B IMD 401 Study Abroad: Interactive Media Design (1-5, max. 15)**

Upper-division courses related to interactive media design, for which there are not direct University of Washington Bothell equivalents, taken through a University of Washington study abroad program.

[View course details in MyPlan: B IMD 401](#)

**B IMD 440 Systems of Digital Media Architecture (5)**

Examines the components, technologies, and tools commonly used for multi-tier interactive digital media systems. Covers the design, implementation, deployment, and operational considerations for these systems such as infrastructure, software architectures, communication protocols, cloud-based systems, staging environments, usage and quality metrics, and supporting tools. Prerequisite: B IMD 352; B IMD 362.

[View course details in MyPlan: B IMD 440](#)

**B IMD 460 Media Production****Techniques (5)**

Utilizes various interactive media formats and enable students to create video or

animation projects and apply their video and animation materials. Evaluates processes and audience reception.

[View course details in MyPlan: B IMD 460](#)

**B IMD 481 Integrative Studio I: Design (5)**

Provides a series of design topics covering forming high-performing and innovative teams; analyzing audience characteristics such as accessibility, diversity, and global reach concerns; evaluating desirability, viability, feasibility, and sustainability; and developing comprehensive design and management artifacts for pitching and producing projects. Prerequisite: B IMD 353. Offered: A.

[View course details in MyPlan: B IMD 481](#)

**B IMD 482 Integrative Studio II: Production (5)**

Discusses contemporary concepts and methods associated with the creation of media and domain-specific contexts. Also addresses improving team skills related to decision-making, conflict, and negotiation. Prerequisite: B IMD 481.

[View course details in MyPlan: B IMD 482](#)

**B IMD 483 Integrative Studio: Portfolio (5)**

Incorporates retrospection and reflection that allows student to discuss their accomplishments and to facilitate their work to the public, and write project documentation that promotes project sustainability. Prerequisite: B IMD 482.

[View course details in MyPlan: B IMD 483](#)

**B IMD 490 Special Topics (2-5, max. 10)**

Special course offerings designed to respond to faculty and student interests and needs in interactive media design. Offered: AWSpS.

[View course details in MyPlan: B IMD 490](#)



### **B IMD 491 Integrative Studio Practicum I (5)**

Assesses and applies multiple models of interactive media design in iterative development and integrative projects, especially in relation to an integrative project that capitalizes on the student's specialty area. Prerequisite: B IMD 363; B IMD 481, which must be taken concurrently. Offered: A.

[View course details in MyPlan: B IMD 491](#)

### **B IMD 492 Integrative Studio II: Practicum (5)**

Provides application of theories and concepts related to interactive media production. Includes use of new media tools and methods that advance the development of an integrative project. Prerequisite: B IMD 491; B IMD 482, which may be taken concurrently.

[View course details in MyPlan: B IMD 492](#)

### **B IMD 493 Integrative Studio III Practicum (5)**

Provides opportunities to develop and execute relevant quality assurance studies and advance their engagement on-site with community partners who have a vested interest in their project. Structured so that students build viable links between the practicum experience and transition to work. Prerequisite: minimum grade of 2.0 in B IMD 492; B IMD 483, which may be taken concurrently.

[View course details in MyPlan: B IMD 493](#)

### **B IMD 495 Interaction Design Studio (2-5, max. 15)**

Individualized course of study in interactive media design including: user-centered design principles and aesthetic theory, creation of digital prototypes, and reflection of the design process. Students work on individual/team projects in a

studio environment. Non-IMD majors only.

Prerequisite: minimum grade of 2.0 in either B IMD 250 or CSS 480.

[View course details in MyPlan: B IMD 495](#)

### **B IMD 498 Independent Study/Research (1-5, max. 15)**

Individual study by arrangement with instructor. Offered: AWSpS.

[View course details in MyPlan: B IMD 498](#)

### **B IMD 499 Directed Study/Research (1-5, max. 15)**

Design and implementation of a directed study or research project as specified in a contract with a faculty member.

Offered: AWSpS.

[View course details in MyPlan: B IMD 499](#)

## **INTERDISCIPLINARY ARTS AND SCIENCES**

### **AMERICAN ETHNIC STUDIES**

#### **BISAES 305 Power, Dissent, and American Culture (5) SSc/A&H, DIV**

Focuses on the relationships between power, inequality, resistance, and difference in the United States. Examines the concept of America through intersecting categories of race, gender, sexuality, class, place, citizenship, slavery, nationalism, empire, immigration, and social change. Uses diverse sources to study culture, politics, and history.

[View course details in MyPlan: BISAES 305](#)

#### **BISAES 364 Public Memory and Dissent in American Culture (5) SSc/A&H**

Examines in detail one (or more) case of social, political, legal, and/or cultural conflict, focusing on how it has been remembered, reconstructed, and reimagined, both textually and



institutionally. Stresses diverse interpretive and methodological approaches within American Studies.

[View course details in MyPlan: BISAES 364](#)

**BISAES 367 Exploring American Culture: Race, Ethnicity, and Immigration (5) A&H/SSc, DIV**

Examines how contested discourses of racial, ethnic, and national difference have shaped ideas about citizenship and "American" identities. Focuses on the relationship between these discourses and social, economic, and political practices and policies. Stresses diverse interpretive approaches within American Studies.

[View course details in MyPlan: BISAES 367](#)

**BISAES 369 American Culture and Mass Media (5) SSc**

Combines an introduction to analytical methods for understanding mass media with the critical study of American cultural practices and structures. Applies analytical tools to a multimedia production.

[View course details in MyPlan: BISAES 369](#)

**BISAES 465 Advanced Seminar in American Ethnic Studies (5, max. 10) A&H/SSc**

Advanced interdisciplinary study of race and ethnicity in a U.S. context. Examines the relationship between historical experiences and cultural expressions of racialized communities in the US. Focuses on examples of how social and cultural practices engage and transform racial formations and their intersections, confront structures of power, and further struggles for social justice. Prerequisite: either B EDUC

255/BIS 255, BIS 256, BIS 257, BIS 258, or BISAES 305.

[View course details in MyPlan: BISAES 465](#)

**CREATIVE WRITING**

**BCWRIT 500 Writing Workshop: Between Prose and Poetry (5)**

Focuses on the cross over between prose and poetry in multiple genres. Considers the prevalence of narrative and alternatives to narrative. Offered: AWSp.

[View course details in MyPlan: BCWRIT 500](#)

**BCWRIT 501 Writing Workshop: Between Fact and Imagination (5)**

Examines the relationships between fact and imagination in fiction, non-fiction, and poetry writing. Offered: AWSp.

[View course details in MyPlan: BCWRIT 501](#)

**BCWRIT 502 Writing Workshop: Processes of Thinking and Memory (5)**

Engages the primary processes of thinking and memory as they are affected by diverse writing practices and media applications. Offered: AWSp.

[View course details in MyPlan: BCWRIT 502](#)

**BCWRIT 510 Poetics Seminar: Cultural Change and Writing (5)**

Engages the subject of poetics as writing theory and practice. Focuses on cultural, social, and technological change as these create new challenges and possibilities for creative writing.

Offered: AWSp.

[View course details in MyPlan: BCWRIT 510](#)

**BCWRIT 511 Poetics Seminar: Writers' Research (5)**

Addresses how writers utilize research in their writing and inquires into different kind of research that can be

pursued: textual, ethnographic, and performance-based.

Offered: AWSpS.

[View course details in MyPlan: BCWRIT 511](#)

**BCWRIT 512 Poetics Seminar: Art, Technology, and Practice (5)**

Explores relationships among art, technology, and creative practice.

Examines connections among diverse art forms, inquiring into their social, philosophical, and aesthetic dimensions.

Offered: AWSpS.

[View course details in MyPlan: BCWRIT 512](#)

**BCWRIT 517 Teaching Practicum (3-5)**

Practicum in which students gain theoretical and practical experience in teaching within community groups and organizations, in elementary and secondary schools, or in community colleges and universities.

[View course details in MyPlan: BCWRIT 517](#)

**BCWRIT 520 Creative Writing and Poetics Internship (2-5, max. 5)**

Students conduct an internship within an organization in order to develop and extend their writing expertise. Topics and sites vary with student interest.

[View course details in MyPlan: BCWRIT 520](#)

**BCWRIT 530 Community-Based Practicum (2-5)**

Students initiate, plan, carry through, and evaluate a literary or arts event or series of events for a specific community or arts venue. Topics and sites vary with student interest.

[View course details in MyPlan: BCWRIT 530](#)

**BCWRIT 587 Topics in Creative Practice (5)**

Focuses on one or more art of disciplinary practices and their applications for creative writing.

[View course details in MyPlan: BCWRIT 587](#)

**BCWRIT 597 Directed Readings (2-10, max. 10)**

Intensive reading in literature, literary and art criticism, critical theory, or poetics.

[View course details in MyPlan: BCWRIT 597](#)

**BCWRIT 598 Directed Research (2-5, max. 15)**

Focused inquiry into specific research ideas, issues, or topics and elected analytical and creative methods for pursuing these.

[View course details in MyPlan: BCWRIT 598](#)

**BCWRIT 599 Thesis Practicum (1-5, max. 6)**

Provides students with career and creative development opportunities and practice in accordance with individualized plans, including but not limited to presenting work-in-progress at salons and readings; submitting work to conferences, residencies, and publications; and interning at arts, education, or media organizations.

[View course details in MyPlan: BCWRIT 599](#)

**BCWRIT 700 Master's Thesis ([1-5]-, max. 20)**

Includes completion of a creative thesis in one of the following areas: poetry, fiction, non-fiction, or cross genre as well as a poetics essay or artist's statement. Students may elect to engage multiple media or performance venues in partial completion of their thesis. Prerequisite: BCWRIT 500; BCWRIT 501; BCWRIT 502;

BCWRIT 510; BCWRIT 511; and BCWRIT 512. Offered: AWSpS.

[View course details in MyPlan: BCWRIT 700](#)

## CULTURAL STUDIES

### **BCULST 500 Formations of Cultural Studies (5)**

Focuses on historical and contemporary forms of cultural studies inquiry, with an emphasis on the local and global questions and problems that shape that inquiry. Offered: A.

[View course details in MyPlan: BCULST 500](#)

### **BCULST 501 Cultural Studies as Collaboration (5)**

Focuses on interactions of ethnographic, textual, and performance-based research methods, with special emphasis on participatory action research strategies. Combines theoretical considerations and experimental learning. Prerequisite: BCLST 500. Offered: Sp.

[View course details in MyPlan: BCULST 501](#)

### **BCULST 502 Cultural Studies Research Practices (5)**

Focuses on interactions of ethnographic, textual, and performance-based research methods, with special emphasis on participatory action research strategies. Offered: W.

[View course details in MyPlan: BCULST 502](#)

### **BCULST 510 Engaging Cultural Studies (5)**

Focuses on the design, development, and piloting of students' individual or collaborative capstone projects and the development of their program portfolio. Initiates the first phase of the capstone project. Prerequisite: BCULST 502. Offered: AWSp.

[View course details in MyPlan: BCULST 510](#)

### **BCULST 511 Portfolio and Professional Development (1)**

Focuses on the development of individual or collaborative capstone projects, with faculty-facilitated workshops and students' own independent writing and research. Prerequisite: BCULST 510.

Offered: AWSp.

[View course details in MyPlan: BCULST 511](#)

### **BCULST 512 Cultural Studies and its Publics (10)**

Focuses on the completion and public presentation of the students' individual or collaborative capstone projects, including the annual MA symposium and the completion of the individual student's program portfolio. Prerequisite: BCULST 511. Offered: AWSp.

[View course details in MyPlan: BCULST 512](#)

### **BCULST 520 Internship (2-5, max. 10)**

Internship with a local organization, agency, or arts company that incorporates a "field-based" component into learning. Includes a cultural studies project that benefits the organization and has academic merit. Prerequisite: BCULST 500. Offered: AWSpS.

[View course details in MyPlan: BCULST 520](#)

### **BCULST 570 Prisons, Politics, and Activism (5)**

Focuses on prisons as a site through which to explore critically the intersections of punishment, policies, institutions, identities, and social movements.

[View course details in MyPlan: BCULST 570](#)

**BCULST 580 Approaches to Ethnographic Research (5)**

Investigates and evaluates the theoretical and methodological foundations on ethnography. Provides hands-on experiences in ethnographic methods, and development and assessment of ethnographic research proposals.

Offered: AWP.

[View course details in MyPlan: BCULST 580](#)

**BCULST 581 Approaches to Textual Research (5)**

Advanced investigation of the theory and practice of textual research methods. Identifies the different components of textual research and explores their interrelation. Prerequisite: BCULST 500 or permission of instructor. Offered: AWP.

[View course details in MyPlan: BCULST 581](#)

**BCULST 582 Approaches to Performance-Based Research Methods (5)**

Focuses on how a specific performance approach, such as dance, movement, theatre, storytelling, mixed media, or performing ethnography, acts as a site of research in relation to a particular topic. Examines how to implement performance-based approaches and assess their significance. Prerequisite: BCULST 500 or permission of instructor. Offered: AWP.

[View course details in MyPlan: BCULST 582](#)

**BCULST 583 Topics in Public History and Culture (5)**

Explores theories and practices of public history and culture. Offered: AWP.

[View course details in MyPlan: BCULST 583](#)

**BCULST 584 Topics in Media Culture (5, max. 15)**

Explores issues in media culture, such as the connections between media and social movements, from cultural studies perspectives. Offered: AWP.

[View course details in MyPlan: BCULST 584](#)

**BCULST 585 Topics in Cultural Activism and Advocacy (5)**

Explores theory, practice, and dilemmas relating to cultural advocacy, understood as object, site, instrument, or basis of social action. Offered: AWP.

[View course details in MyPlan: BCULST 585](#)

**BCULST 586 Topics in Arts and Cultural Policy (5, max. 10)**

Explores historical and contemporary issues in arts and policy. Includes examination of the roles played by governmental, for-profit, and not-for-profit organizations in shaping artistic and cultural practices and arenas. Topics and approaches vary with instructor.

[View course details in MyPlan: BCULST 586](#)

**BCULST 587 Topics in Cultural and Arts Practice (5)**

Investigates issues in cultural and arts practice in diverse settings.

Offered: AWP.

[View course details in MyPlan: BCULST 587](#)

**BCULST 588 Topics in Culture and Diversity (5, max. 15)**

Investigates the intersections between culture and diversity and focuses on the encoding and transmission of knowledge through a variety of cultural practices. Uses ethnographic, historiographical, textual, and performance based methods to move from the forms themselves to

community sites of memory and identity.

Offered: AWSpS.

[View course details in MyPlan: BCULST 588](#)

### **BCULST 589 Topics in Global Cultural Studies (5, max. 15)**

Links a specific area of study, such as hip hop, YouTube, or garbage, to global cultural studies and the methodologies of visual, material, textual, or arts-based research. Offered: AWSpS.

[View course details in MyPlan: BCULST 589](#)

### **BCULST 591 Research Colloquium (1-2, max. 6)**

Provides an opportunity for graduate students and faculty members to exchange research ideas, present findings, discuss analytical methods and tools, and evaluate the implications of the presented research. Credit/no-credit only. Offered: jointly with BPOLST 591; AWSpS.

[View course details in MyPlan: BCULST 591](#)

### **BCULST 592 Topics in Cultural Studies Research (2-5, max. 10)**

Allows for the investigation of special topics in cultural studies research. Offered: AWSpS.

[View course details in MyPlan: BCULST 592](#)

### **BCULST 593 Topics in Cultural Studies (3-5, max. 15)**

Explores in depth specific historical, political, or social aspects of cultural practice, such as digital humanities, the culture and the environment, or arts as cultural studies, and links this analysis to the varied processes of producing these types of cultural work. Offered: AWSpS.

[View course details in MyPlan: BCULST 593](#)

### **BCULST 594 Research Design (5)**

Extends an understanding of research design principles, developing further capacities in research design, especially in relation to sites

that necessitate sensitivity to emergent cultural practices and the evolving nature of partnerships. Provides opportunities for research design in response to requests from the community.

Offered: AWSpS.

[View course details in MyPlan: BCULST 594](#)

### **BCULST 595 Cultural Studies Skills Workshop (1-3, max. 9)**

Provides the opportunity to develop applied skills in an area relevant to professional careers in social, cultural, and arts fields. Workshops emphasize hands-on problem solving, case studies, and actual practice.

[View course details in MyPlan: BCULST 595](#)

### **BCULST 596 Study Abroad (5-15, max. 15)**

Study abroad opportunity that incorporates a global learning component into cultural studies. Offered: AWSpS.

[View course details in MyPlan: BCULST 596](#)

### **BCULST 598 Directed Research (1-5, max. 15)**

Develops research ideas, analytical methods and tools, or the cultural studies implications of research in specific directions that are not covered in the standard MACS offerings. Prepares for a cultural studies/community project.

Offered: AWSpS.

[View course details in MyPlan: BCULST 598](#)

**BCULST 599 Capstone Research (1-5, max. 10)**

Provides intensive one-on-one research support for the capstone project.

Students and their capstone advisors establish customized meeting/collaboration scheduled according to individual needs. Prerequisite: BCULST 502. Offered: AWSpS.

[View course details in MyPlan: BCULST 599](#)

**CULTURE, LITERATURE, AND THE ARTS****BISCLA 201 Exploring Culture, Literature, and the Arts (5) A&H**

Explores how the humanities, including culture, literature, and the arts, enables people to live rich, fulfilling lives. Humanities, like art, music, performance, literature, philosophy, and history, are important and crucial for appreciating who we are as individuals, cultures, and civilizations. Examines the evolution of the humanities from classical periods to the present, and how humanities form the core of an interdisciplinary education.

[View course details in MyPlan: BISCLA 201](#)

**BISCLA 380 Arts in Context (5, max. 15) A&H/SSc**

Considers literary, visual, performing art forms and traditions set within their specific political, historical, social, religious, or philosophical, and aesthetic contexts. Encourages students to explore original sources and scholarly research, building understanding and awareness of visual, literary, and kinetic analysis and interpretation.

[View course details in MyPlan: BISCLA 380](#)

**BISCLA 384 Literary and Popular Genres (5, max. 10) A&H**

Examines the conventions that define genres and their historical evolution.

Focuses on one or two genres taken from the traditional modes of lyric poetry, tragedy and comedy, and epic, or from the popular forms of gothic romance, detective and mystery stories, and journalistic fiction.

[View course details in MyPlan: BISCLA 384](#)

**DATA ANALYTICS AND VISUALIZATION****B DATA 200 Introduction to Data Studies (5) RSN**

Introduces students to an understanding of foundational concepts, overview technical practices of data analysis and computational approaches as well as prepares them to navigate the sea of information. Learners will explore topics including data types, data structure, basic descriptive statistics, data visualization, machine learning, and communication. Course overlaps with: CSE 180; INFO 180; and STAT 180. Offered: AWSp.

[View course details in MyPlan: B DATA 200](#)

**B DATA 232 Introduction to Data Visualization (5) NSc, RSN**

Introduces descriptive statistics and visual representations of quantitative data. Examines data sets using graphing and statistical software packages. Demonstrates how to present data in ways that are accurate, effective, and visually appealing.

[View course details in MyPlan: B DATA 232](#)

**B DATA 411 Network Analysis and Visualization (5) RSN**



Network analysis is a set of mathematical and statistical tools for studying simple and complex relationships. This course covers a variety of such tools, including graph theory, small worlds, hubs, communities, and network models. The techniques covered in this course are widely applicable, including the fields of data science, social and natural sciences, humanities, public health, education, business, and communications. Prerequisite: B DATA 232.

[View course details in MyPlan: B DATA 411](#)

## **EARTH SYSTEM SCIENCE**

### **BEARTH 153 Introduction to Geology (5) NSc**

Survey of the physical systems that give the earth its form. Emphasizes the dynamic nature of interior and surface processes on the earth and stressing the value of geological forms in understanding of the past and predicting future events. Course overlaps with: ESS 101. Offered: AWSp.

[View course details in MyPlan: BEARTH 153](#)

### **BEARTH 154 Introduction to Oceanography (5) NSc**

Case studies of research on the oceans, deep-sea exploration, climate change, and human impacts on marine life. Considers societal factors affecting progress in marine science, changing popular attitudes toward the oceans, and key current policy implications of marine science. Course equivalent to: OCEAN 101. Course overlaps with: T GEOS 241. Offered: AWSp.

[View course details in MyPlan: BEARTH 154](#)

### **BEARTH 155 Introduction to Climate Science (5) SSc/NSc**

Introduces climate science and global climate change. Topics include the scientific method, earth history, global biogeochemical cycles, population and energy consumption, and greenhouse gas emissions; fundamental climate science, energy conservation, alternative energy; climate and the media; and climate policy. Offered: AWSpS.

[View course details in MyPlan: BEARTH 155](#)

### **BEARTH 201 Mapping the Earth System (5) NSc**

Focuses on issues of environmental health and environmental change in a local or regional earth system as a means to investigate the interconnected biologic, geologic, hydrologic and social systems of that region. Course overlaps with: ESS 201.

[View course details in MyPlan: BEARTH 201](#)

### **BEARTH 202 Modeling Global Systems (5) NSc**

Introduces computer-based modelling as a tool to represent, investigate and understand Earth's interconnected systems. Prerequisite: B MATH 122.

[View course details in MyPlan: BEARTH 202](#)

### **BEARTH 300 Environmental Systems Thinking (5)**

Introduces students to the Schools of Interdisciplinary Arts and Sciences and STEM, interdisciplinary inquiry, reflective learning, and the creation of a learning portfolio. Pedagogies emphasize critical reading, writing development, research question formation, and peer collaboration. Thematic focus on the characteristics and applications of



systems thinking in analyzing complex socio-ecological phenomena. Course overlaps with: BIS 300.

[View course details in MyPlan: BEARTH 300](#)

### **BEARTH 310 Fundamentals of Weather and Climate (5) NSc**

Comprehensive introduction to the science of the atmosphere and climate systems including: composition and structure of the atmosphere; atmospheric physics; thermodynamic processes; solar and terrestrial radiation; atmospheric dynamics and large-scale circulation; and climate processes and dynamics. Prerequisite: a minimum grade of 2.0 in either MATH 124, STMATH 124, B MATH 144, or STMATH 114; and a minimum grade of 2.0 in either B PHYS 114, PHYS 114, B PHYS 121, or PHYS 121.

[View course details in MyPlan: BEARTH 310](#)

### **BEARTH 317 Soils in the Environment (5) NSc**

Introduces the types of soils analyses necessary to understand the physical and chemical state of soils. Includes an introduction to soils in general, and local soils in particular. Prerequisite: either BEARTH 153, BEARTH 154, BEARTH 155, BEARTH 201, B PHYS 101, BIS 242, or BIS 243.

[View course details in MyPlan: BEARTH 317](#)

### **BEARTH 318 Hydrogeology (5) NSc, RSN**

Examines details and mechanisms of the natural processes associated with the hydrologic cycle. Explores rivers, groundwater, and watershed management issues within Washington State.

[View course details in MyPlan: BEARTH 318](#)

### **BEARTH 320 Impacts of Climate Change (5) NSc/SSc**

Surveys climate change implications for natural and human systems, both globally and locally. Topics include natural science, human health, and policy issues; climate system processes, air/water quality, ecosystem services, human health, extreme weather, flooding, snow pack, stream flow, vulnerability assessment, adaptation, and mitigation strategies. Offered: A.

[View course details in MyPlan: BEARTH 320](#)

### **BEARTH 321 Geomorphology (5) NSc**

Provides an overview of the science and geomorphology, emphasizing field observations, data collection, and data analyses associated with geomorphological methods. Examines how landforms evolve, how landforms and abiotic processes influence ecosystems, and how human activities are impacting all of the above. Course overlaps with: ESS 326.

[View course details in MyPlan: BEARTH 321](#)

### **BEARTH 341 Natural Hazards and Human Disasters (5) NSc/SSc**

Investigates the distribution and impacts of natural hazards and what controls the magnitude and frequency of these events. Examines how cultural and social factors influence the hazard vulnerability of populations. Offered: W.

[View course details in MyPlan: BEARTH 341](#)

## **ENVIRONMENTAL SCIENCE**

### **BES 301 Science Methods and Practice (5) NSc, RSN**

Overview of the scientific method,

emphasizing the development of testable hypotheses, scientific writing and analysis.

[View course details in MyPlan: BES 301](#)

### **BES 303 Environmental Monitoring Practicum (5) NSc, RSN**

Provides an introduction to the principles and methods of environmental monitoring and analysis. Field and laboratory studies provides experience with monitoring equipment and rigorous sampling techniques; enhance understanding of the range and variability of environmental parameters; and develop abilities in the quantitative analysis, interpretation, and presentation of data.

[View course details in MyPlan: BES 303](#)

### **BES 311 Environmental Chemistry (5) NSc, RSN**

Uses fundamental chemical principles to examine fate, reactivity and transport of environmental pollutants. Emphasis given to atmospheric pollution, chemistry of natural and polluted waters, soil chemistry, chemistry of organic and inorganic toxins. Prerequisite: B CHEM 143.

[View course details in MyPlan: BES 311](#)

### **BES 312 Ecology (5) NSc**

Introduces major concepts of ecology and relates these concepts to current environmental issues. Topics include the relationship between organisms and the physical environment, evolutionary processes, the structure and function of ecosystems, population biology, forest management, pesticide use, and global warming. Recommended: B BIO 180 or BIOL 180.

[View course details in MyPlan: BES 312](#)

### **BES 316 Ecological Methods (5) NSc**

Introduces students to methods used in

the analysis of ecological systems and their processes. Employs data analysis tools, graphic presentation, and scientific writing in the presentation of results from laboratory and field studies. Includes lectures, laboratory work, and field investigations. Prerequisite: BES 312 or BIS 390

[View course details in MyPlan: BES 316](#)

### **BES 330 Limnology (5) NSc**

Explores the interaction among physical, chemical, and ecological systems in lakes with a focus anthropogenic change in local and regional lakes. Entails collaborative fieldwork component in water quality. Course overlaps with: CEE 462; FISH 473/BIOL 473; FISH 474/BIOL 474/CEE 463; and TESC 435. Prerequisite: B CHEM 143 and B CHEM 144.

[View course details in MyPlan: BES 330](#)

### **BES 362 Introduction to Restoration Ecology (5) SSc/NSc**

Introduces ecological restoration of damaged ecosystems. Develops a broad understanding of restoration ecology, including diverse ecological aspects of the practice of restoration, conceptual and philosophical issues underlying the field, and social and political factors that influence restoration outcomes. Includes field work, lectures, readings, and discussion.

[View course details in MyPlan: BES 362](#)

### **BES 385 Biodiversity Conservation (5) NSc**

Exploration of the threats to and conservation of biodiversity and its impact on planetary health, cultures, and societies. Emphasis is placed on understanding the limits and promise of conservation approaches within the social, political and economic context of conservation problems, and on the

diversity of careers within environmental sciences.

[View course details in MyPlan: BES 385](#)

**BES 397 Special Topics in Environmental Science (3-5, max. 15)**

Unique course offerings designed to respond to faculty and student interests. Possible topics may include economic and environmental issues, air pollution, water quality, ecological restoration, global warming, or conservation biology.

[View course details in MyPlan: BES 397](#)

**BES 398 Directed Study in Environmental Science (1-5, max. 15)**

Opportunity for directed group or individual research on a topic mutually agreed upon by instructor and student.

[View course details in MyPlan: BES 398](#)

**BES 415 Advanced Environmental Measurements Laboratory (5)**

Analysis of air, water, and soil samples using advanced methods. Instrumental methods include: atomic absorption spectroscopy and liquid chromatography. Prerequisite: BES 311, BES 315.

[View course details in MyPlan: BES 415](#)

**BES 440 Remote Sensing of the Environment (5) NSc, RSN**

Studies digital image processing and aerial photography interpretation within the context of Geographic Information Systems and Science (GISci). Focuses primarily on the use of satellite imagery and aerial photography to study the environment.

[View course details in MyPlan: BES 440](#)

**BES 460 Water Quality (5) NSc, RSN**

Examines the chemical and physical processes that influence the fate of nutrients and contaminants in natural surface, ground, and soil waters. Addresses basic environmental

chemistry in natural waters and soils, potentially important inputs, transformations and movement, and the environmental impacts of nutrients and contaminants.

[View course details in MyPlan: BES 460](#)

**BES 486 Watershed Ecology and Management (5) NSc**

Overview of the ecology and management of watersheds. Explores physical, biological, and ecological components of watersheds and their interrelationships. Examines human and natural impacts on watersheds, and planning and management through theory and case studies. Prerequisite: either BIS 390 or BES 312.

[View course details in MyPlan: BES 486](#)

**BES 488 Wetland Ecology (5) NSc**

Examines wetland types and their distribution as well as wetland functions for habitat and human resources. Emphasizes the ecology and adaptations of wetland plants and their interaction with soils and biogeochemical processes. Discusses human impacts, wetland regulation, and management approaches. Required field trips. Prerequisite: BES 312.

[View course details in MyPlan: BES 488](#)

**BES 489 Pacific Northwest Ecosystems (5) NSc**

Examines major ecosystems of the Pacific Northwest to understand the structure, function, and location of these characteristic ecosystems in our region. Investigates the intersection of ecological knowledge, environmental policy and management strategies in selected ecosystems.

[View course details in MyPlan: BES 489](#)

**BES 491 Undergraduate Research in Environmental Science (5, max. 10)**

Capstone course. Independent research projects in an area of environmental science, based on mutual agreement with the instructor. Prerequisite: BES 311; BES 312.

[View course details in MyPlan: BES 491](#)

### **BES 492 Capstone Research in Environmental Science I (3)**

The first course of a two-quarter capstone sequence. Students plan and develop a detailed proposal for their capstone environmental science project.

[View course details in MyPlan: BES 492](#)

### **BES 493 Capstone Research in Environmental Science II (7)**

Second course of a two-quarter capstone sequence. Completion of projects planned in the previous quarter.

Prerequisite: BES 492.

[View course details in MyPlan: BES 493](#)

### **BES 497 Special Topics in Environmental Science (3-5, max. 15)**

Topics may include economic and environmental issues, air pollution, water quality, ecological restoration, global warming, conservation biology or other topics.

[View course details in MyPlan: BES 497](#)

### **BES 498 Independent Research in Environmental Science (1-5, max. 15)**

Individual advanced research conducted under the direction of one or more instructors.

[View course details in MyPlan: BES 498](#)

## **GENDER, WOMEN, AND SEXUALITY STUDIES**

### **BISGWS 301 Critical Gender and Sexuality Studies (5) SSc**

Explores how sex, gender and sexuality studies has emerged. Examines intersections of gender and sexuality with race, ethnicity, dis/ability, class and

nation in order to understand the key terms guiding inquiry in gender and sexuality studies. Course overlaps with: GWSS 200.

[View course details in MyPlan: BISGWS 301](#)

### **BISGWS 302 Histories and Movements of Gender and Sexuality (5) SSc, DIV**

Studies a variety of women's, feminist, and gender and sexuality justice movements around the world. Topics may include: women in armed revolutionary movements; queer activism; embodied protests; civil rights and anti-racism movements; labor activism; and feminist movements.

[View course details in MyPlan: BISGWS 302](#)

### **BISGWS 303 Approaches to Feminist Inquiry (5) SSc, DIV**

Explores approaches to knowledge (epistemologies) and investigative practices (methodologies). Analyzes how feminist theories are translated into cultural practices. Addresses the intersections and tensions within and between feminist theories, including how and where feminist scholars understand and problematize power relations.

[View course details in MyPlan: BISGWS 303](#)

## **GLOBAL STUDIES**

### **BISGST 303 History and Globalization (5) SSc**

Provides a historical perspective on current debates about globalization. Approaches may vary with instructor.

[View course details in MyPlan: BISGST 303](#)

### **BISGST 324 International Political Economy (5) SSc, RSN**

The study of interrelations between international politics and economics.

Addresses the Bretton Woods institutions, differing political conceptions of international economic relations, trade, trade restrictions, trade agreements, global financial flows, migration, and exchange rates. Methods emphasize institutional analysis, historical analysis, accounting frameworks, and formal economic models.

[View course details in MyPlan: BISGST 324](#)

**BISGST 397 Topics in Global Studies (5, max. 15) SSc**

Examines a topic, theme, problem, or area of the world in order to provide a deeper understanding of an aspect of Global Studies.

[View course details in MyPlan: BISGST 397](#)

**BISGST 497 Advanced Topics in Global Studies (5, max. 15) SSc**

Advanced study of a specific topic, problem, or area of the world in order to provide a deeper understanding of an aspect of Global Studies.

[View course details in MyPlan: BISGST 497](#)

**INTERDISCIPLINARY STUDIES**

**BIS 111 Digital Thinking (5) RSN**

Introduces the fundamental concepts behind computing and computational thinking including logical reasoning; problem solving, data representation; abstraction; complexity management; computers and network operations; effective web searches; ethics; and legal and social aspects of information technology through the creation of popular digital artifacts such as web pages, animations, and video games. Course overlaps with: CSE 110. Offered:

jointly with CSS 101; AWSp.

[View course details in MyPlan: BIS 111](#)

**BIS 115 Digital Cultures (5) SSc**

Explores technology as a lived experience and discusses how digital media has transformed social relations, the economy, and the politics of scale.

[View course details in MyPlan: BIS 115](#)

**BIS 121 Introduction to Drawing (5)**

**A&H**

Builds basic drawing skills, develops understanding of primary concepts which relate to drawing and develops an understanding of the grammar or syntax of two-dimensional language. Students move beyond their current knowledge and abilities and link new skills, concepts, and understandings to creative expressing. Course equivalent to: ART 190. Offered: AWSp.

[View course details in MyPlan: BIS 121](#)

**BIS 131 Introduction to Arts Practice (5)**

**A&H**

Includes active exploration of processes through which artists discover and translate ideas, feelings, and concerns into various forms of objects. Uses a wide variety of methods and approaches, from traditional to technological, to promote artistic expression. Promotes discussions and critiques to lead to a better understanding of the creative process. Offered: AWSp.

[View course details in MyPlan: BIS 131](#)

**BIS 132 Introduction to Photography (5)**

**A&H**

Introduces photography as an art form and artistic medium. Focuses on camera operation and capturing images with full creative control. Encourages students to explore the visual language of photography; learn about contemporary and past photographers; communicate in



the visual medium; and look at photographic works with a critical eye.

Course equivalent to: ART 140.

[View course details in MyPlan: BIS 132](#)

**BIS 133 Introduction to Acting (5) A&H**

Introduces the fundamentals of theatre performance through partnered scenes, character and script analysis, acting theory, and physical, vocal, focus, awareness, improv, and creativity-building exercises.

[View course details in MyPlan: BIS 133](#)

**BIS 134 Introduction to Dance (5) A&H**

Introduces basic techniques and critical frameworks for the practice of dance as a method of artistic research and community building, with an emphasis on collaboration, improvisation, and storytelling.

Interdisciplinary connections are emphasized within dance to include performance, cultural studies, critical race and ethnic studies, women's and gender studies.

[View course details in MyPlan: BIS 134](#)

**BIS 135 Introduction to Painting (5) A&H**

An exploration of visual skills, materials, and conceptual possibilities for water-based painting, including its purposes and potential for image, concept, and communication. Students incorporate interdisciplinary, personal, and cultural interests into their images and develop their skills through work, peer reviews, and written artist statements.

[View course details in MyPlan: BIS 135](#)

**BIS 136 Introduction to Art History (5) A&H**

Introduces various themes, periods, styles and ideas of art. The emphasis will be on familiarizing students with major concepts, interpreting art works within their various historical and

political contexts. Topics may include Ancient Art, Medieval Art, Western Art, Renaissance, Modern, and others.

[View course details in MyPlan: BIS 136](#)

**BIS 137 Why Art Matters (5) A&H**

Explores the profound impact of art on individuals and society. Aims to unlock creativity and provide students with an opportunity to discover art forms they may not have realized they enjoy.

Explores the historical, cultural, and emotional dimensions of various art forms, students will gain a deeper understanding of how art influences and reflects our contemporary world.

[View course details in MyPlan: BIS 137](#)

**BIS 140 Numbers in News Media (5) RSN**

Introduces strategies for thinking critically about numbers, graphs, and/or data visualizations presented in news media.

[View course details in MyPlan: BIS 140](#)

**BIS 141 Natural History and Environmental Science (5) NSc**

Introduces the study of the natural world through the approaches and tools of both traditional natural historians and modern scientific inquiry. Emphasizes the application of these approaches to studying nearby natural areas and using education principles

to communication and interpret nature.

[View course details in MyPlan: BIS 141](#)

**BIS 161 Introduction to Film Narrative (5) A&H**

Surveys the historical, biological, and cultural basis for film narrative and provides students with a critical understanding of its components and variations to enable them to create an original film treatment. Combines readings and critical viewings of films.

Offered: AW.

[View course details in MyPlan: BIS 161](#)

**BIS 162 Race, Gender, and Sexuality through Film and Television (5) A&H, DIV**

Examines representations of race, gender, and sexuality in films and television. Analyzes influence of media representations on cultural attitudes and vice-versa.

[View course details in MyPlan: BIS 162](#)

**BIS 163 The Lives of Objects (5) A&H**

Introduces students to the field of art and visual culture through everyday - and not so everyday - objects. Beginning with their own belongings, students explore the ways objects make meaning, hold knowledge, and bear witness. Students will understand how do we live with objects, how do we understand the pleasure we take in them and how are objects embedded in histories of empire and how do they offer resources for healing.

[View course details in MyPlan: BIS 163](#)

**BIS 164 Introduction to World Literature (5) A&H, DIV**

Introduces students to texts from diverse literary traditions. Explores major themes and debates within World Literature. Interrogates how World Literature is defined, translated, and received by a global audience.

[View course details in MyPlan: BIS 164](#)

**BIS 165 Introduction to Ethnic Studies (5) SSc, DIV**

Focuses on differences of power, perspective, and privilege of racial and ethnic groups within and beyond the United States. Explores opportunities and strategies for alliance and coalition historically and into the present. Stresses diverse

interpretive and methodological approaches. Course equivalent to: AES 151.

[View course details in MyPlan: BIS 165](#)

**BIS 166 Memory, History, and Literature in the United States (5) A&H, DIV**

Explores a selection of texts by marginalized writers produced during particular historical periods and/or by particular ethnic groups in the United States. Emphasizes how writers respond to and/or intervene in unequal power relations across U.S. history and how stories shape and reflect our own identities and place in the world.

[View course details in MyPlan: BIS 166](#)

**BIS 167 People's History of the United States (5) SSc, DIV**

Focusing on the experiences of indigenous people, Black Americans, and various waves of different immigrant populations, history of United States through colonization and immigration from its origins to the present, with special attention to changing constructions of race and ethnicity and shifting understandings of concepts of liberty in social movements and identity formations. Course equivalent to: HSTAA 105.

[View course details in MyPlan: BIS 167](#)

**BIS 170 Introduction to Psychology (5) SSc**

Surveys major areas of psychological science. Core topics include human social behavior, personality, psychological disorders and treatment, learning, memory, human development, biological influences, and research methods. Related topics may include sensation, perception, states of consciousness, thinking, intelligence, language, motivation, emotion,



stress and health, cross-cultural psychology, and applied psychology. Course equivalent to: PSYCH 101 and TPSYCH 101. Offered: AWSpS.

[View course details in MyPlan: BIS 170](#)

### **BIS 174 American Lives (5) A&H/SSc**

Studies the biographies of Americans who made significant contributions during a particular era in American history. These biographies provide a platform for examining social, political and economic developments, as well as how those developments shaped American attitudes, identities, and institutions. Offered: W.

[View course details in MyPlan: BIS 174](#)

### **BIS 175 Introduction to American Government (5) SSc**

Examines the major institutions and processes of American government, including civil liberties and rights, federalism, Congress, the presidency, the judiciary, executive branch, political parties and elections, interest groups, and civic engagement. Course equivalent to: POL S 202 and TPOL S 202.

Offered: AWSp.

[View course details in MyPlan: BIS 175](#)

### **BIS 176 Introduction to Analyzing Media (5) SSc/A&H**

Introduces the fundamentals of analyzing various forms of media and with key terms and theories used in the study and practice of media production. We will examine analog and networked/digital forms of media, examining the ways that media formats, production and circulation contexts, and sites of encounter shape how we make sense of the media we encounter.

[View course details in MyPlan: BIS 176](#)

### **BIS 177 Introduction to Making Media (5) A&H**

Examines historical trends and traditions of media making through hands-on media production activities. Explores histories and traditions of media making with hands on productions. Activities will allow us to examine the media production process to consider the relationship between the methods, techniques, and approaches to how media has been produced.

[View course details in MyPlan: BIS 177](#)

### **BIS 178 Introduction to Media and Communication (5) SSc**

Introduces a general overview of theories and practices on human communication, surveying basic structures, processes and effects of communication in interpersonal, social and public contexts, such as conversation, argumentation, identity management, technologies, persuasion, mass media, health, family and organizational communication. Course overlaps with: COM 200.

[View course details in MyPlan: BIS 178](#)

### **BIS 179 Introduction to Journalism (5) SSc**

Identify, compare, and analyze news stories across mediums for a mass media audience. Situate news journalism within frameworks of political economy and democracy. Explore basic principles and practices of contemporary news journalism. Identify key skills used for reporting, editing, and producing news journalism. Evaluate news journalism's critical historical moments and ethical controversies.

[View course details in MyPlan: BIS 179](#)

### **BIS 180 Introduction to Human Geography (5) SSc**

Introduces approaches, concepts, and

topics from human geography. Addresses subjects including population and demography, culture, race and ethnicity, political organization, economics and industry, agriculture, patterns of human settlement, human-environment interactions, and more. Course equivalent to: GEOG 100 and T GEOG 101.

[View course details in MyPlan: BIS 180](#)

### **BIS 181 Introduction to Sociology**

#### **(5) SSc, DIV**

Explores the fundamental sociological principles and seeks to describe individuals in both groups and societal contexts. Familiarizes students with sociological theory and research methods and applies these to the historical and contemporary inequities associated with social structure, class, race, ethnicity, class, gender, sexual orientation, ability, religion, and age. Course equivalent to: T SOC 165. Course overlaps with: SOC 110. Offered: AW.

[View course details in MyPlan: BIS 181](#)

### **BIS 183 Introduction to the Middle East**

#### **(5) SSc**

Introduces the cultures, politics, and histories of the region known as the "Middle East." Examines the emergence of nation-states and the lasting influences of colonial projects and their modern manifestations. Develops critical analytical frameworks to move away from facile reductions of the region as primordially chaotic to understand the history, present, and future of a diverse area in nuanced, responsible ways.

[View course details in MyPlan: BIS 183](#)

### **BIS 185 Art and Climate Change (5) A&H/NSc**

Focuses on the intersection of art and science and how the nexus of these

disciplines inspires thinking in novel ways about complex scientific information, meets societal challenges and envisions another possible world. Bridging art and science makes visible the interdependency of science and critical issues of race, gender and power.

[View course details in MyPlan: BIS 185](#)

### **BIS 193 Introduction to Philosophy**

#### **(5) SSc**

Major philosophical questions relating to such matters as the existence of God, the foundations of knowledge, the nature of reality, and the nature of morality. Approach may be either historical or topical. Course equivalent to: PHIL 100 and T PHIL 101. Offered: Sp.

[View course details in MyPlan: BIS 193](#)

### **BIS 200 Introduction to Microeconomics (5) SSc, RSN**

Analysis of markets: consumer demand, production, exchange, the price system, resource allocation, government intervention. Course equivalent to: ECON 200; TBECN 220; and TECON 200.

Offered: jointly with B BUS 220; AWSpS.

[View course details in MyPlan: BIS 200](#)

### **BIS 201 Introduction to Macroeconomics (5) SSc, RSN**

Analysis of the aggregate economy: national income, inflation, business fluctuations, unemployment, monetary system, federal budget, international trade and finance. Course equivalent to: ECON 201; TBECN 221; and TECON 201. Prerequisite: B BUS 220/BIS 200 or ECON 200. Offered: jointly with B BUS 221; AWSpS.

[View course details in MyPlan: BIS 201](#)

### **BIS 203 Economics of Gender (5) SSc, RSN, DIV**

Introduces the insights of economic analysis into gender, with a global

comparative framework. Topics include household divisions of labor, paid and unpaid carework, labor market inequality, and the gendered consequences of macro policy.

[View course details in MyPlan: BIS 203](#)

**BIS 205 Technologies of Expression (5) A&H/SSc**

Explores fundamental technologies of expression such as the book, film, and the computer and their implications for social and individual identity-formation, cultural critique, and art-making.

Examines how media functions to shape human identity.

[View course details in MyPlan: BIS 205](#)

**BIS 206 Engaging Literary Arts (5, max. 15) A&H**

Foregrounds questions about literary arts: What are the purposes of literary arts? What approaches might we use to understand them? How do they relate to the societies and cultures in which they are located? May focus on individual writers, movements, historical periods, genres, or topics.

[View course details in MyPlan: BIS 206](#)

**BIS 207 Shakespeare & Film (5) A&H**

Provides tools to understand and analyze Shakespeare's written plays and their film adaptations.

[View course details in MyPlan: BIS 207](#)

**BIS 208 Experimenting Through the Arts (5, max. 15) A&H**

Explores the relationship between creative arts and research. May focus on performance, visual, or literary arts as well as diverse media. Research may include study of artistic forms as well as specific topics.

[View course details in MyPlan: BIS 208](#)

**BIS 209 Engaging Visual and Media Arts (5, max. 15) A&H**

Foregrounds questions about visual arts: What are the purposes of the visual arts? What approaches might we use to understand them? How do they relate to the societies and cultures in which they are located? May focus on individual writers, movements, historical periods, genres or topics.

[View course details in MyPlan: BIS 209](#)

**BIS 212 Engaging Performing Arts (5, max. 15) A&H**

Foregrounds questions about performing arts: What are the purposes of the performing arts? What approaches might we use to understand them? How do they relate to the societies and cultures in which they are located? May focus on individual performers, movements, historical periods, genres, or topics.

[View course details in MyPlan: BIS 212](#)

**BIS 215 Understanding Statistics (5) RSN**

Introduces basic statistical concepts in the social and natural sciences including variance and distribution, descriptive statistics, inferential statistics, correlation, and hypothesis testing. Concepts learned throughout the quarter will continuously build on one another, adding complexity as the quarter progresses. This course will use a combination of conceptual understanding, mathematical computation, and conceptual application. Course equivalent to: B HLTH 215 and B MATH 215. Course overlaps with: B BUS 215; B EDUC 295; STAT 220; and TMATH 110.

[View course details in MyPlan: BIS 215](#)

**BIS 216 Introduction to Cultural Studies (5) SSc/A&H**

Introduces cultural studies as an

interdisciplinary field and practice. Explores multiple histories of the field with an emphasis on current issues and developments. Focuses on culture as a site of political and social debate and struggle. Course equivalent to: ENGL 207.

[View course details in MyPlan: BIS 216](#)

**BIS 217 Introduction to Debate (5) SSc**

Introduces the practice or argumentation and debate. Focuses on how to compose an argument, construct a case, methods of attack and defense, effective communication strategies, and variations in debate style. Course overlaps with: TPOL S 210.

[View course details in MyPlan: BIS 217](#)

**BIS 218 The Power of Maps (5) SSc**

Introduces maps, cartography, and geographic visualization, with an emphasis on digital and GIS maps on the web. Addresses maps and human understanding, map abstraction and generalization, and key map elements.

[View course details in MyPlan: BIS 218](#)

**BIS 219 The Politics of Sex Education (5) SSc**

Examines the history and politics of sex education, reproduction, and sexual health in the United States, with cross national/regional comparisons. Explores how various cultural and ideological positions bring about different concepts of sexuality, the body, rights, personhood, and social and global responsibility.

[View course details in MyPlan: BIS 219](#)

**BIS 220 Developmental Psychology (5) SSc**

Overview of the physical, cognitive, emotional, and social aspects of human development. Facilitates a greater understanding of children, adolescents,

and adults as they develop and change over time in specific cultural contexts.

[View course details in MyPlan: BIS 220](#)

**BIS 222 Introduction to Human Sexuality (5) SSc, DIV**

Explores biological, psychological, and sociological theory and research on human sexuality and diversity.

Also, examines social institutions that shape cultural norms and influence sexual health and well-being with attention to power, policies, and distribution of resources. Course equivalent to: PSYCH 210. Course overlaps with: TPSYCH 202.

[View course details in MyPlan: BIS 222](#)

**BIS 223 Introduction to Feminist Film Studies (5) A&H, DIV**

Introduces methods, conceptual frameworks, and debates which shape the field of feminist film studies. Explores films across a diversity of genres.

Analyzes images, representations, narratives, and themes to understand shifting cultural understandings of gender identity and its intersectional identities (class, disability, nationality, race, religion, sex category, and sexuality).

[View course details in MyPlan: BIS 223](#)

**BIS 224 Introduction to Feminist Studies (5) SSc, DIV**

Introduces feminism as it developed over the last two centuries. Investigates theories of gender and power, including the sources of and solutions to gender inequality, and how gendered identities have been produced, questioned, and critiqued.

[View course details in MyPlan: BIS 224](#)

**BIS 225 Social Psychology (5) SSc**

Analyzes contemporary research in social psychology and how that research informs social issues including

conformity, propaganda, prejudice, attraction, and aggression. Focuses on a person's relationship with other people, how he or she influences them and is influenced by them. Course overlaps with: PSYCH 245.

[View course details in MyPlan: BIS 225](#)

**BIS 226 Foundations of U.S. Social Service (5) SSc**

Introduces the field of social services in the U.S., including its organization, forms of professional practice, and historical development. Focuses on social welfare: theory, court decisions, case studies, and policy. Considers competing assumptions about and approaches to solving social problems.

[View course details in MyPlan: BIS 226](#)

**BIS 227 Radical Women in the Global South (5) SSc, DIV**

Uses an intersectional lens to analyze both the roles of the gender norms in women's experience with misogyny, and the creative ways that women, girls, and femmes challenge and resist the gender based repression. These women, girls, and femmes are seen as both radical (as change makers) and rad (as in awesome) women that students will learn throughout the course.

[View course details in MyPlan: BIS 227](#)

**BIS 231 Linear**

**Algebra With Applications (5) NSc, RSN**

Introduction to linear algebra (i.e., concepts, tools, and operations related to matrices and vectors) with emphasis on interdisciplinary applications. Provides an introduction to the mathematical concepts, arguments, and proofs that occur in linear algebra. Course overlaps with: STMATH 208; MATH 208; and TMATH 208. Prerequisite: either STMATH 114, STMATH

124, or MATH 124.

[View course details in MyPlan: BIS 231](#)

**BIS 233 Social Media in Context (5) A&H/SSc**

Examines critical issues in contemporary social media histories, discourse, and practice. Develops new media literacies that enables students to navigate, critique, and actively participate in the development of new media forms.

[View course details in MyPlan: BIS 233](#)

**BIS 234 Media, Culture, and Capitalism (5) SSc**

Examines the processes and issues surrounding media production, representation, effects and regulation in the U.S. popular and mass media culture. Analyze the factors that contribute to U.S. media industry's global dominance. Explore media and communication scholarship from various traditions.

[View course details in MyPlan: BIS 234](#)

**BIS 235 Critical Media Literacy (5) SSc**

Explores how contemporary media communicate and produce meaning with the goal of developing students' abilities to engage critically with their various media environments. Examines, interprets, and evaluates technologically mediated communications in order to critically assess their social, cultural, and political meanings and implications. Course overlaps with: TCOM 101 and TCOM 340.

[View course details in MyPlan: BIS 235](#)

**BIS 236 Introduction to Interactive Media (5) SSc/A&H**

Explores the role of interactive media in shaping society and culture.

[View course details in MyPlan: BIS 236](#)

**BIS 237 Public Speaking and Communication (5) A&H/SSc**

Introduces students to a range of approaches to effective public speaking in professional and personal environments. Emphasizes the use of reflective practice in evaluating and improving arguments with attention to evidence, audience, and social context.

[View course details in MyPlan: BIS 237](#)

**BIS 238 Language, Identity, Culture, and Power (5) SSc, DIV**

Explores the relationship between language, identity and power by examining social, cultural and historical perspectives on language and identity in the United States.

[View course details in MyPlan: BIS 238](#)

**BIS 241 Nature in the Northwest (5) NSc**

Examines local and regional ecosystems and their interaction with human communities. Applies approaches from the environmental sciences and the practice of natural history to develop an understanding of ecosystem functions, organisms, and their relationships.

[View course details in MyPlan: BIS 241](#)

**BIS 242 Environmental Geography (5) SSc/NSc**

Investigates the interactions of a dynamic planet and society. Analyzes geographic variability and the human consequences of environmental phenomena such as climate, natural resources, natural hazards, and infectious diseases. Emphasizes the application of geographic tools and methods.

[View course details in MyPlan: BIS 242](#)

**BIS 243 Introduction to Environmental Issues (5) SSc/NSc**

Introduction to the major environmental challenges confronting society, and the science of understanding and addressing those challenges. Provides an overview of major issues such as global climate

change, biodiversity loss, and sustainability; as well as in-depth understanding of specific issues.

[View course details in MyPlan: BIS 243](#)

**BIS 244 Wetlands Discovery (2-3) NSc**

Provides an experimental introduction to environmental science, education, and policy through an exploration of wetland ecosystems. Explores how humans interact with wetlands ecosystems. Stresses active learning in relation to the campus Wetlands.

[View course details in MyPlan: BIS 244](#)

**BIS 245 Environment and Humanities (5) A&H/SSc**

Examines complex and historically situated ways that humans imagine, represent, and inhabit more-than-human worlds. Focuses on close reading and interpretation skills by analyzing cultural texts such as fiction, nature writing, poetry, and the visual arts. Traces interdisciplinary relations between literary history, environmental studies, and critical theory.

[View course details in MyPlan: BIS 245](#)

**BIS 246 Introduction to Sustainability (5) SSc**

Provides a framework to explore the various meanings, justifications, possibilities, and contentious nature of both sustainability and sustainable development. Differentiates between these terms as buzzwords, philosophical ideals, political movements, and ethical lenses for analysis, policy, and management of human actions. Course overlaps with: TEST 200.

[View course details in MyPlan: BIS 246](#)

**BIS 249 Introduction to Labor Studies (5) SSc**

Examines the role of labor in a historical



and contemporary context. Explores the rise of the labor movements, including the formation of unions as well as other forms of organizing in the informal sector. Highlights the importance of labor movements as well as intersecting social justice movements (racial, sexual, gender, immigrant rights, ecological justice) for understanding historical patterns and contemporary issues in labor rights. Course equivalent to: POL S 249/HSTCMP 249/SOC 266. Course overlaps with: T EGL 266.

[View course details in MyPlan: BIS 249](#)

**BIS 252 Politics of Science (5) SSc, DIV**  
Explores the cultural politics of scientific practice with particular attention to toxic exposure, biomedical research, genetic science, and constructs of race and gender. Investigates how social and scientific "truths" are negotiated through normative understandings of the body. Considers the powerful role of doubt and uncertainty in scientific knowledge production.

[View course details in MyPlan: BIS 252](#)

**BIS 255 Critical Diversity Studies (5) SSc, DIV**

Introduces theories, concepts, research, and policies that provide a foundation for exploring connections between diversity and equity and for recognizing ways in which these connections are relevant to individuals, institutions, and the world. Offered: jointly with B EDUC 255; Sp.

[View course details in MyPlan: BIS 255](#)

**BIS 256 Introduction to African American Studies (5) SSc, DIV**

Introduces the history, culture, and politics of people of African descent in inside and outside the United States.

[View course details in MyPlan: BIS 256](#)

**BIS 257 Introduction to Asian American Studies (5) SSc, DIV**

Introduces the histories, cultures, and politics of Asian Americans. Draws from history, literature, humanities, philosophies, the arts, film, and related areas of inquiry to examine power and politics in the Asian American experience. Course overlaps with: AAS 101 and T SOC 270.

[View course details in MyPlan: BIS 257](#)

**BIS 258 Introduction to United States Latina/Latino Studies (5) SSc, DIV**

Introduces the history, culture, and politics of people of Latin descent in local and global context. Draws from history, literature, humanities, philosophy, the arts, film, and related areas of inquiry.

[View course details in MyPlan: BIS 258](#)

**BIS 261 Introduction to Film Studies (5) A&H**

Provides an introduction to cinema as an artistic medium, as a source of entertainment, as a platform for cultural critique, and as a cluster of social institutions with significant political and economic power. Course equivalent to: CMS 270 and T FILM 201.

[View course details in MyPlan: BIS 261](#)

**BIS 264 Africa on Film (5) A&H/SSc**

Introduces historical and contemporary issues facing the continent of Africa through an examination of films dealing with African themes. Addresses the strengths and weaknesses of how African issues are depicted within and outside the continent.

[View course details in MyPlan: BIS 264](#)

**BIS 266 United States History to 1865 (5) SSc**

Examines key events and problems in U.S. history from European-Native American contact to the end of the Civil



War. Focuses on the practice of "doing history" by applying historical thinking skills to a wide range of primary documents.

[View course details in MyPlan: BIS 266](#)

**BIS 267 United States History from 1865 (5) SSc**

Examines key events and problems in U.S. history from the Civil War to the recent past. Focuses on the practice of "doing history" by applying historical thinking skills to a wide range of primary documents.

[View course details in MyPlan: BIS 267](#)

**BIS 268 Problems in World History to 1500 (5) SSc**

Surveys problems in world history up to 1500. Offered: WSp.

[View course details in MyPlan: BIS 268](#)

**BIS 269 Problems in World History after 1500 (5) SSc**

Surveys problems in world history from 1500 to present. Course equivalent to: T HIST 151.

[View course details in MyPlan: BIS 269](#)

**BIS 270 Abnormal Psychology (5) SSc**

General instruction to the study and treatment of psychopathology. Covers research on and theories about definitions and "causes" of psychological problems from a variety of perspectives. Addresses some of the major classes of mental health problems, such as mood and anxiety disorders, their causes and treatment.

[View course details in MyPlan: BIS 270](#)

**BIS 279 Introduction to Law & Society (5) SSc**

Introduces students to the mutually influential relationship between law and society. Examines how law shapes the everyday world, how that shaping is experienced differently, and how people

can and do shape law. Course materials combine theory with historical and contemporary examples to accomplish a broadened and contextualized understanding of the relationship between law and society. Course equivalent to: LSJ 200.

[View course details in MyPlan: BIS 279](#)

**BIS 280 U.S. Political Processes (5) SSc**

Studies interaction between U.S. governmental institutions at all levels and civil society. Examines a variety of theoretical viewpoints and the relationships between private and public institutions, behaviors, and traditions.

[View course details in MyPlan: BIS 280](#)

**BIS 282 Introduction to Globalization (5) SSc, DIV**

Provides an introduction to the debates over globalization. Focuses on the growth and intensification of global ties. Addresses the resulting inequalities and tensions, as well as the new opportunities for cultural and political exchange. Critically examines contemporary global processes in order to explore their impacts on our lives. Course equivalent to: GEOG 123. Course overlaps with: TPOL S 123.

[View course details in MyPlan: BIS 282](#)

**BIS 284 International Relations (5) SSc**

Surveys basic themes in international relations within the context of diplomatic history and American foreign policy. Emphasizes basic motivational drives of world politics, including national interests, ideology, morality, and nationalism. Discussion of war, diplomacy, American foreign policy, and international organization sheds light on the perennial struggle for power among nations, the security dilemma and instruments of global cooperation.

Course overlaps with: JSIS B 200.

[View course details in MyPlan: BIS 284](#)

**BIS 285 Seminar in Biology (3, max. 9) SSc/NSc**

Supervised readings and group discussion on a specific area of biology. Topics vary with instructor. Offered: jointly with B BIO 285.

[View course details in MyPlan: BIS 285](#)

**BIS 290 Interdisciplinary Writing Seminar (5)**

Focuses on writing critical analyses of scholarly and creative texts in the arts and sciences. Emphasizes close reading, critical thinking, and the writing as a process of inquiry. Prepares students for upper-division writing tasks. Course overlaps with: ENGL 281 and TWRT 211. Prerequisite: B WRIT 135 or ENGL 141. Offered: AWWSp.

[View course details in MyPlan: BIS 290](#)

**BIS 293 Special Topics (2-5, max. 15)**

Examines different subjects or problems from an interdisciplinary framework.

[View course details in MyPlan: BIS 293](#)

**BIS 300 Interdisciplinary Inquiry (5)**

Introduction to advanced work in interdisciplinary studies centered on broadly based questions and problems. Stresses the skills necessary to engage in upper-division research and learning in the School of Interdisciplinary Arts and Sciences. Course overlaps with: BEARTH 300. Offered: AWWSpS.

[View course details in MyPlan: BIS 300](#)

**BIS 301 Narrative Forms (5) A&H**

Examines the form, function, and textual conventions of such narrative forms as (auto) biography, personal experience narratives, short stories, and novels. Explores literary language useful for discussing narratives, how narratives work for their readers/listeners, and what

interpretive tools readers/listeners bring to narratives.

[View course details in MyPlan: BIS 301](#)

**BIS 302 Issues in Mathematics Across Cultures (5, max. 10) SSc**

Examines the role of mathematics in informing and shaping human understanding of the world. Explores contemporary and historical issues in the development and application of mathematical theories and philosophies. Focus varies with instructor and may include ethnomathematics, women in mathematics, media representations of the mathematical sciences, and mathematics and warfare.

[View course details in MyPlan: BIS 302](#)

**BIS 304 Introduction to Political Economy and the Environment (5) SSc**

Studies an interdisciplinary approach to political economy and the environment. Focuses on the theoretical and historical basis of modern economic ideas and the history of industrial development, examining the interaction between politics, market formation, notions of value, and the natural world. Explores the promises and limitations of markets to justify, allocate resources, and the sustainability of capitalism.

[View course details in MyPlan: BIS 304](#)

**BIS 305 Issues in Social and Political Philosophy (5, max. 10) SSc**

A philosophical investigation of conceptual and normative issues associated with one of several broad domains of social and political thought: human rights, the varieties of human conflict, and war and peace. Examines both classical and recent texts. Brings theoretical perspectives to bear on contemporary issues.

[View course details in MyPlan: BIS 305](#)

**BIS 306 Marine Diversity and Conservation (5) NSc/SSc**

Explores marine biodiversity. Basic concepts in evolution, development, ecology, and conservation are introduced through inquiry-guided exercises based in the marine environment. Examines human impacts on marine environments and subsequent consequences for human health and welfare.

[View course details in MyPlan: BIS 306](#)

**BIS 307 Environmental Justice (5) SSc**

Explores issues of social equity associated with environmental hazards, risks, and benefits. Examines the ways social structures, environmental decision-making procedures, and scientific and technological practices distribute the burden of environmental problems, as well as community response through political action and cultural production.

[View course details in MyPlan: BIS 307](#)

**BIS 310 Women, Culture, and Development (5) SSc, DIV**

Facilitates a critical understanding of the social, cultural, political, and economic positions of women in the developing world. Addresses colonialism and post-colonialism, feminist theories of development, and practices of globalization.

[View course details in MyPlan: BIS 310](#)

**BIS 312 Approaches to Social Research (5) SSc**

Deals with the why and how of social research. Covers two main themes: the epistemology of social science and the logic of research design. Students learn to assess the strengths of various methodologies, evaluate research results, and initiate future inquiries

of their own. Recommended: BIS 215.

[View course details in MyPlan: BIS 312](#)

**BIS 313 Issues in Media Studies (5, max. 15) A&H/SSc**

Examines a variety of issues involved in understanding different forms of media and their impact on our lives, in contexts spanning from local to global, using a wide range of theoretical, disciplinary, and methodological approaches.

[View course details in MyPlan: BIS 313](#)

**BIS 314 Topics in Geography (5, max. 10) SSc**

Topics/areas of study may include: cultural geography, physical geography, geography of globalization.

[View course details in MyPlan: BIS 314](#)

**BIS 316 Topics in Psychology (5, max. 15) SSc**

Examination of a specific topic in order to provide a deeper understanding of a particular aspect of psychology. Topics may include the history of psychology; human memory; dreaming; cognitive psychology.

[View course details in MyPlan: BIS 316](#)

**BIS 317 Language, Society, and Cultural Knowledge (5) A&H/SSc**

Explores the determining role of language in human communication, culture and worldview; and the implications of language structure and content to forms of communicative interaction. Review and critique of theories of language as a social phenomena.

[View course details in MyPlan: BIS 317](#)

**BIS 318 Global Scholars: Foundations & Preparation (3) SSc, DIV**

Introduces students in the Global Scholars Program to issues of power, difference and identity in global learning and intercultural communication. Students examine their life experience in

relation to global citizenship and develop tools for navigating issues of power and privilege. Offered: Sp.

[View course details in MyPlan: BIS 318](#)

**BIS 319 Public Arts and Ecological Restoration (5) NSc/A&H**

Explores the intersection of public art and ecological restoration. Examines how the natural environment informs human identity and how humans have transformed the environment. Provides an understanding of environmental challenges related to artistic representations of nature and some of the possible opportunities for solving them.

[View course details in MyPlan: BIS 319](#)

**BIS 321 Race, Sport, and Culture (5) SSc, DIV**

Introduces a cultural studies and ethnic studies approach to race and the politics of sport with a particular focus on the figure of the athlete as a site of struggle and possibility. Approaches sport through popular culture and scholarship as an important site for the reproduction and contestation of race, gender, sexuality, labor, identity, belonging, and value in both the US and global contexts.

[View course details in MyPlan: BIS 321](#)

**BIS 322 Topics in Performance Studies (5, max. 15) A&H**

Examination of a specific topic in order to provide a deeper understanding of a particular aspect of the study of performance. Topics may include transnationalism and performance; eco-performance, community performance; African and Asian theatre. Topics and approaches may vary with instructor.

[View course details in MyPlan: BIS 322](#)

**BIS 323 History of Photography (5) A&H/SSc**

Examines the history of world photography with an emphasis on European, North American, and Latin American photography. Course overlaps with: T ARTS 335. Offered: AS.

[View course details in MyPlan: BIS 323](#)

**BIS 324 Gender, Human Rights, and Global Cinema (5) SSc/A&H, DIV**

Examines cinematic narratives of human rights violations across the world, with a special focus on gender. Students will examine films in major filmmaking centers globally. Central to our discussions will be an application of interdisciplinary and critical perspectives on gender, human rights, social justice, postcoloniality, migrancy, borders, and race.

[View course details in MyPlan: BIS 324](#)

**BIS 325 Japanese Popular Culture in History (5) A&H/SSc**

Explores topics of Japanese art practices from different social and historical contexts. Surveys Japanese culture through the lens of literature, theater, cinema, anime, manga, and the relevance of these art practices in popular global and U.S. society.

[View course details in MyPlan: BIS 325](#)

**BIS 326 Race, Space, and Segregation (5) SSc**

Explores intersections between race, human space (i.e, perceived, conceived, and lived), and segregation through law, policies, and other institutional practices. Focuses primarily on US locations/cases in historical and comparative perspectives. Topics include spatial control during settler colonization and slavery, Jim Crow segregation, ghettoization, the border, and environmental racism.

[View course details in MyPlan: BIS 326](#)

**BIS 327 History of U.S. Labor Institutions (5) SSc**

Examines the evolution of the institutions that have shaped labor. Discusses indentured servitude, slavery, apprenticeship, schooling, wage labor, unions, and the laws that surround each of these institutions.

[View course details in MyPlan: BIS 327](#)

**BIS 328 Diversity, Leadership, and Engagement (5) SSc, DIV**

Explores theories and practices of diversity, leadership, and engagement. Provides opportunity for leadership development and academic reflection in relation to initiatives in which students work on questions of diversity and campus or community engagement. Recommended: B EDUC 255/BIS 255. Offered: jointly with B EDUC 328.

[View course details in MyPlan: BIS 328](#)

**BIS 329 Topics in Mathematics Across the Curriculum (5, max. 10)**

Examines mathematical theories and concepts within their historical and cultural contexts. Topics vary with instructor and may include mathematical symmetries, the organization and modeling of space, cryptology, mathematical models of social decision making, and/or theories of change and strategy.

[View course details in MyPlan: BIS 329](#)

**BIS 331 Journalism and Media History (5) SSc/A&H**

Explores collaboratively and individually the social forces, political institutions, and cultural productions in U.S. journalism and media history. May use podcasts, literary texts, archives, film, photographs, comics, newspapers, oral histories, documentaries, and government documents to see how

journalism changes over time. Produces historical research using primary and secondary sources.

[View course details in MyPlan: BIS 331](#)

**BIS 332 Global Digital Industries (5) SSc**

Provides critical understandings about global digital industries as political, economic and cultural institutions. Taking a political economy approach, the course foregrounds the power dynamics, social relations and policy controversies that enable and constrain the practices in digital production, distribution, consumption and regulation across national borders. Course overlaps with: JSIS B 449.

[View course details in MyPlan: BIS 332](#)

**BIS 333 Life Online: Interpreting the Internet (5) SSc/A&H**

Explores aspects of everyday lives that are mediated by internet networks and communication. Imagines the social, educational, political, economic, and emotional worlds without the internet and emphasizes the application of critical theory to digital media practice.

[View course details in MyPlan: BIS 333](#)

**BIS 335 Human Rights in America (5) SSc, DIV**

Study of the literature of civil liberties, civil rights, and human rights in the United States. Examines the way writers try to justify specific rights and to communicate the need for social change in American society. Recommended: a previous course in human rights, political science, or law and society

[View course details in MyPlan: BIS 335](#)

**BIS 336 History of Mass Incarceration in the United States (5) SSc, DIV**

Explores the rise of mass incarceration across economic, legal, political, and



social terrains. The class situates mass incarceration in a longer history of American approaches to punishment and includes a focus on how these issues have manifest in Washington state.

Course overlaps with: LSJ 478.

[View course details in MyPlan: BIS 336](#)

**BIS 338 Political Institutions and Processes (5) SSc**

Studies the nature, structure, and functions of political institutions.

Develops a theoretical and empirical analysis of both formal (state and government) and informal (non-state) institutions and actors:

[View course details in MyPlan: BIS 338](#)

**BIS 339 Issues in Global Cultural Studies (5, max. 15)**

Examination of various topics and approaches to the study of culture in a global context. May include the study art, literature, theater, cultural history, music history/ethnomusicology, and/or cultural anthropology/geography. Topics and approaches may vary with instructor.

[View course details in MyPlan: BIS 339](#)

**BIS 340 Approaches to Cultural Research (5) A&H/SSc**

Examines different approaches to understanding the production and consumption of culture and cultural practices. Invites students to evaluate cultural research, to experience with different research methodologies, and to carry out research assignments. Explores ethnographic, textual, and arts-based methods.

[View course details in MyPlan: BIS 340](#)

**BIS 341 Topics in the Study of Culture (5, max. 15)**

Examines the study of cultural forms, artifacts, and practices. May include art, art history, literature, theater, music

history, ethnomusicology, dance, and/or religion. Topics and approaches may vary with instructor.

[View course details in MyPlan: BIS 341](#)

**BIS 342 Geographic Information Systems (5) SSc**

Examines the concepts and methods of geographic information systems (GIS) and related elements of spatial analysis and representation. Through projects and lab exercises, student gain basic proficiency in the use of GIS and an interdisciplinary understanding of the applications of GIS.

[View course details in MyPlan: BIS 342](#)

**BIS 343 Geographic Visualization (5) SSc, RSN**

Focuses on different geovisualization techniques to represent physical, social, and cultural phenomena associated with spatial data and designing maps. Addresses GIS programs and explores how geovisualization can be applied to various research and policy areas. Course overlaps with: GEOG 360 and T GIS 460.

[View course details in MyPlan: BIS 343](#)

**BIS 344 Intermediate Geographic Analysis and Applications (5) NSc, RSN**

Provides intermediate level training in Geographic Information Systems (GIS) for the analysis of environmental and spatial data. Emphasizes on the applications of raster and vector modeling to map and analyze geo-spatial phenomena, and proposes solutions to environmental problems. Course overlaps with: ESS 420 and T GIS 311. Prerequisite: BIS 342 or BIS 343.

[View course details in MyPlan: BIS 344](#)

**BIS 345 American Environmental Thought (5) SSc**

Explores the development of current ideas about nature and the relationship between humans and the natural world, as expressed in literature and other cultural forms. Emphasizes historical, cultural, philosophical, and global dimensions of American environmental thought, along with implications for human interactions with the environment.

[View course details in MyPlan: BIS 345](#)

**BIS 346 Topics in Environmental Policy (5, max. 10)**

Explores specific topics in environmental policy in an interdisciplinary context, combining considerations of politics, policy, economics, and science. Emphasizes quantitative analysis and scientific method.

[View course details in MyPlan: BIS 346](#)

**BIS 347 History of American Documentary Films (5) A&H/SSc**

Exploration of the important technological and cinematic innovations of non-fiction films within their cultural contexts, and examination of theoretical issues such as objectivity and the blurred line between fact and fiction. Stresses the skills necessary for the critical evaluation and interpretation of documentary films.

[View course details in MyPlan: BIS 347](#)

**BIS 348 Industrial and Organizational Psychology (5) SSc**

Explores the field of industrial and organizational psychology. Examines the theories and research involved in the scientific study of people working in formal organizations, and the practice of industrial and organizational psychology, applying theories and research to enhance the well-being and effectiveness of organizations and the people working

in them. Recommended: BIS 170.

[View course details in MyPlan: BIS 348](#)

**BIS 349 Personality Psychology (5) SSc**

Introduces the field of personality psychology and the scientific study of psychological individuality. Addresses three key approaches to personality; basic traits; motives, goals, schemas, and tasks; and broad and culturally shaped life stories that provide identity, purpose, and meaning. Integrates classical personality theories and contemporary research in the field. Cannot be taken if credit received for either PSYCH 203 or PSYCH 303.

[View course details in MyPlan: BIS 349](#)

**BIS 351 Topics in American Culture (5, max. 15) A&H**

Explores a particular topic in American culture that highlights the methodological tools needed to integrate the interpretation of cultural texts, including literature, film, music, and art, with their historical contexts.

[View course details in MyPlan: BIS 351](#)

**BIS 352 Mapping Communities (5) SSc**

Uses mapping and other methods to examine the concept of community. Explores the intersections of life in urban areas including perception and interaction with built environments, political and economic relationships, and social and cultural ties.

[View course details in MyPlan: BIS 352](#)

**BIS 353 Human Rights in Theory and Practice (5) SSc**

Introduces political, economic, legal, and cultural aspects of the theory and practice of human rights. Students will explore, critique, and develop theories of human rights.

[View course details in MyPlan: BIS 353](#)



**BIS 355 Social Theory (5) SSc**

Studies traditions, key ideas, histories, and contexts of social theory. Considers relationships between individuals and society in terms of social structure and power. Topics may include relationships between ideas of property and social inequality, liberty and state sanctioned violence, rights and the distribution of resources, etc.

[View course details in MyPlan: BIS 355](#)

**BIS 356 Ethics and the Environment (5) SSc**

Examination of the "environmental crisis" and associated social conflicts, tracing them to their philosophical roots.

Focuses on the facts of the current situation, on classic and recent readings from the environmental literature, and on ethical responses to current issues.

[View course details in MyPlan: BIS 356](#)

**BIS 359 Principles and Controversies of Sustainability (5) SSc**

Focuses on the challenges, principles, and controversies of sustainability. Analyzes the sustainability issues, identifying the values underlying societal actions and conflicting perspectives, and considers the ecological, ethical, and human well-being ramifications of following different sustainability proposals and cultural trajectories.

[View course details in MyPlan: BIS 359](#)

**BIS 360 Pollinator Diversity and Conservation (5) NSc**

Examines the critical roles that animal pollinators play in maintaining biodiversity and healthy agricultural systems. Focuses on the study of plant-pollinator relationships, the threats facing pollinators and efforts to conserve, protect and restore

pollinators and their habitats. Requires field work and close observation of native bees and honeybees in an outdoor setting.

[View course details in MyPlan: BIS 360](#)

**BIS 361 Studies in American Literature (5, max. 10) A&H**

Examines important literary movements and literary genres with attention to their historical context. Emphasizes issues of race, class, and gender.

[View course details in MyPlan: BIS 361](#)

**BIS 363 Politics and Popular Music (5) A&H**

Explores the role that music has played and continues to play in political action and the contestation over political power. Focuses on key national and international political movements and examines the songs, music genres, and artists that have played important roles in those movements. Course overlaps with: AFRAM 337.

[View course details in MyPlan: BIS 363](#)

**BIS 364 Realities and Representations of Adolescent Development (5) SSc**

Uses research and theories from adolescent psychology to learn about adolescent development and critically evaluate the ways adolescents are depicted in society.

[View course details in MyPlan: BIS 364](#)

**BIS 365 Institutions and Social Change (5) SSc**

Explores the patterns of power that create our social world and how those patterns can be challenged or modified. Examines cultural, institutional, and interpersonal ways that people gain, challenge, and are affected by power and considers how and whether to bring about social change.

[View course details in MyPlan: BIS 365](#)

**BIS 366 The Family in U.S. Society****(5) SSc**

Examines the historical development of the family, and the theoretical underpinnings of family relationships. Discusses current trends and changes in the family and family life.

[View course details in MyPlan: BIS 366](#)

**BIS 367 Ethics and Society (5) SSc**

Examination of major ethical alternatives (egoism, utilitarianism, hedonism, virtue ethics, relativism, emotivism) along with competing visions of the good society (libertarian, communitarian, feminist). Analyzes several contemporary problems, such as legal moralism, affirmative action, euthanasia, capital punishment, corporate responsibility.

[View course details in MyPlan: BIS 367](#)

**BIS 368 Asian American Psychology (5) SSc, DIV**

Explores the psychological experiences of Asian Americans in the U.S. at individual, interpersonal, and institutional levels. Includes discussions on Asian American immigration, ethnicity, the model minority myth, racism, family dynamics, intersectional identities (e.g., gender, sexuality), mental health, and clinical- and community-based practices that facilitate healing. Course overlaps with: PSYCH 461 and TPSYCH 461. Recommended: either BIS 170, PSYCH 101, or TPSYCH 101.

[View course details in MyPlan: BIS 368](#)

**BIS 369 Indigenous Psychology and Health (5) DIV**

Explores cultural constructions of personhood, health, and healing in different professional mental health and indigenous community practices for promoting wellness and ameliorating debilitating distress.

Requires careful reading and written analyses of peer-reviewed journal articles describing mental health interventions in indigenous communities.

[View course details in MyPlan: BIS 369](#)

**BIS 370 Nineteenth-Century American Literature (5) A&H**

Examination of significant writers and literary developments within nineteenth-century American culture and society. Addresses issues surrounding the formation of an American literary canon. Stresses themes and methods for advanced literary interpretation within American Studies.

[View course details in MyPlan: BIS 370](#)

**BIS 371 Twentieth-Century American Literature (5) A&H**

Examination of significant writers and literary developments within twentieth-century American culture and society. Addresses issues surrounding the formation of an American literary canon. Stresses themes and methods for advanced literary interpretation within American Studies.

[View course details in MyPlan: BIS 371](#)

**BIS 372 Representation, Colonialism, and the Tropical World (5) A&H, DIV**

Examines representations of the tropical world across a range of visual culture forms, including photography, and film. Also, focuses on ideas and images that have become synonymous with the tropics--sublime landscapes, excessive sexuality, contagion and disease--and their entanglement with colonial projects. Students will engage dominant representations as well as subaltern texts that seek to rework or undo those images.

[View course details in MyPlan: BIS 372](#)

**BIS 373 Caribbean Film and Popular Culture (5) SSc/A&H**

Examines and deconstructs common tropes about the Caribbean and how ideas that emerged during the periods of colonialism continue to resurface in contemporary media coverage of the region. Analyzes film representations of Caribbean race, class, gender and sexual identities, Caribbean cosmologies and practices of faith, and Caribbean festivals and forms of performance.

[View course details in MyPlan: BIS 373](#)

**BIS 374 Middle East Politics (5) SSc**

Examines major socio-economic and political themes in the Middle East from colonialism to the present. Topics may include: emergence of republics/monarchies, gender and patriarch in the Middle East, Arab Nationalism, Palestinian-Israeli conflict, politics of oil, and political Islam.

[View course details in MyPlan: BIS 374](#)

**BIS 375 Contemporary "Muslim" Artists (5) A&H**

Engages post-colonial texts and critical artworks that will help to inform, stimulate and complicate the dialogue on contemporary Islamic art. Studies ways in which "Muslim" artists have applied multiple lenses to their performance practices and in what specific ways these artists respond to crisis and other social issues. Interrogates the specific use of the "Muslim" label as an identifier.

[View course details in MyPlan: BIS 375](#)

**BIS 377 British Literature and the Gothic Novel (5) A&H**

Traces the emergence, rise, and continuing popularity of the British gothic novel. Reading texts that span from the 18th to the 21st centuries, this class focuses on why figures such as the

monster, the vampire, and the incarcerated woman gathered such social force as to become recognizable literary tropes and how they express both the fears of and challenges to society. Emphasis on Britain's imperial project.

[View course details in MyPlan: BIS 377](#)

**BIS 378 The Language of Poetry (5) A&H**

Study of how poetic meanings are formed and interpreted. Explores different forms of poetry within diverse cultures and historical times.

[View course details in MyPlan: BIS 378](#)

**BIS 379 American Ethnic Literatures (5) SSc/A&H, DIV**

Studies multiple ethnic literatures within American culture and society. Addresses issues surrounding the formation of an American literary canon. Stresses themes and methods for literary interpretation within American Studies.

[View course details in MyPlan: BIS 379](#)

**BIS 380 Bioethics (5) SSc**

Explores concepts and questions in the field of bioethics and addresses key debates from different philosophical, social, and cultural perspectives.

[View course details in MyPlan: BIS 380](#)

**BIS 381 The History of Life (5) NSc/SSc, RSN**

Explores the principles of evolution by examining the fossil record, focusing on how past events shaped today's biodiversity. Engages with contemporary controversies regarding scientific literacy.

[View course details in MyPlan: BIS 381](#)

**BIS 384 Health, Medicine, and Society (5) SSc**

Examines health, disease, and healing as social phenomena. Explores the nature and experience of illness through the study of patients, communities,

healthcare providers, and medical systems in different cultural, social, political, and economic contexts.

[View course details in MyPlan: BIS 384](#)

**BIS 386 Climate Change Adaptation Policy (5) SSc**

Examines various ecosystem and infrastructure-based approaches to climate change adaptation, assesses the policies and norms that influence why certain adaptations are considered, and explores the actions to reduce vulnerability to climate change impacts.

[View course details in MyPlan: BIS 386](#)

**BIS 387 Women and American Literature (5, max. 10) A&H**

Study of women writers and the ways women have been portrayed in literary texts. Focuses on certain themes, such as selves and subjectivities, or on writers from specific historical, economic, ethnic, or racial backgrounds.

[View course details in MyPlan: BIS 387](#)

**BIS 388 Literature in Translation (5) A&H**

Examines global literatures written in languages other than English in translation. Emphasizes cross-cultural perspectives and theories. Encourages students to think critically about both the politics and practice of reading translated texts.

[View course details in MyPlan: BIS 388](#)

**BIS 389 American Indian Literature (5) A&H/SSc**

A survey of both traditional and contemporary American Indian Literary genre; oral and written modes of expression, including oral narratives, autobiography, oratory, traditional and contemporary poetry, fiction.

[View course details in MyPlan: BIS 389](#)

**BIS 391 Environmental History of the Pacific Northwest Bioregion (5) SSc**

Examines the history of the relationships between humans and their environments in the Pacific Northwest, from the time of earliest human inhabitants to the present, with particular reference to current environmental and resource issues.

[View course details in MyPlan: BIS 391](#)

**BIS 392 Water and Sustainability (5) NSc/SSc**

Provides an understanding of past and present water challenges and some of the possible opportunities for solving them. What is the state of water in the United States and how did we get to this point? Examines the future prospects for wisely using water resources.

[View course details in MyPlan: BIS 392](#)

**BIS 393 Special Topics (3-5, max. 15)**

Various topics designed to respond to faculty and student interests and needs.

[View course details in MyPlan: BIS 393](#)

**BIS 394 Comparative Economic Development (5) SSc**

Introduces a variety of issues affecting Third World economies in a framework that emphasizes their particular and varied post-colonial histories. Draws on economic theory, cultural and economic anthropology, literature, and other sources to understand institutions and sources of change in these economies.

[View course details in MyPlan: BIS 394](#)

**BIS 395 Environmental Change in Washington State (5) NSc/SSc**

Examines issues in science, society, technology, and policy that impact the future of natural ecosystems and their relationship to human communities in Washington State. Issues include climate change, urban sprawl, environmental

policies, management of natural resources, and loss of agricultural lands.

[View course details in MyPlan: BIS 395](#)

**BIS 398 Directed Study/Research (1-5, max. 15)**

Opportunity for directed group or individual research on a topic/theme mutually agreed upon by instructor and student.

[View course details in MyPlan: BIS 398](#)

**BIS 399 Portfolio and Career Development (2, max. 6) SSc**

Explores connections among academic portfolios, IAS Learning Objectives, and personal and professional goals. Offered: WSp.

[View course details in MyPlan: BIS 399](#)

**BIS 403 Washington D.C. Seminar on Human Rights (5)**

Examines human rights as a philosophical concept, an historical movement, and a contemporary political phenomenon, both in its inherently international scope and in its distinctly U.S. expression in congressional and executive-branch processes. Uses expert guest speakers, both on campus and in Washington, D.C., as major learning resources, along with readings and written assignments.

[View course details in MyPlan: BIS 403](#)

**BIS 405 Environmental Education (5) NSc**

Analyze various environmental programs and prepare an individualized project. Learn to apply ecological concepts in the classroom and learn how to teach about various environmental education programs.

[View course details in MyPlan: BIS 405](#)

**BIS 406 Urban Planning and Geography (5) SSc**

Examines historical and modern

conceptualizations of "urban", covering topics such as urban systems, urban forms, urban ecologies, urban planning, and urbanism. Investigates the integration of built forms; human interactions; and the environmental, social, political, and economic aspects of urban places.

[View course details in MyPlan: BIS 406](#)

**BIS 407 Children's Literature and Reader Response Criticism (5) A&H**

Studies children's literature and its use in classrooms. Explores theories of reader response and the design of response-based activities.

[View course details in MyPlan: BIS 407](#)

**BIS 408 Critical Physical Geography (5) NSc, DIV**

Explores environmental issues by applying knowledge of biophysical and technological systems with an understanding of social power structures and critical theory. Emphasizes the use of interdisciplinary physical and social methods to solve complex environmental problems.

[View course details in MyPlan: BIS 408](#)

**BIS 410 Topics in Qualitative Inquiry (5, max. 15) SSc**

Provides a background for understanding qualitative inquiry. Focuses on ethnographic inquiry and interpretative cultural analysis. Discusses forms of data collection such as observation, participant observation, and interviewing. Also stresses strategies for data analysis and for handling qualitative data.

[View course details in MyPlan: BIS 410](#)

**BIS 414 Topics in Human Rights (5, max. 10) SSc**

Explores a critical issue of human rights theory and practice and its intersection

with the other fields of thought and disciplines. Topics may include such issues as the rights of children, workers, or women; or the relationship of human rights to democracy, globalization, and the arts.

[View course details in MyPlan: BIS 414](#)

**BIS 415 Public Policy and Law (5) SSc**

Examines the different histories of and processes by which law and public policy create rules that govern a society. Discusses the nature and influence of law and policy in our society via a sociological perspective.

[View course details in MyPlan: BIS 415](#)

**BIS 416 U.S. Constitutional Law (5) SSc**

Examines how the U.S. Constitution helps to shape the foundations of the political process and, for better or worse, the structure of political debate and protest in the modern United States. The class will engage with many fundamental areas of constitutional law, including voting rights, executive power, free speech, equal protection and civil rights, federalism, the right to privacy, and due process.

[View course details in MyPlan: BIS 416](#)

**BIS 418 Global Scholars: Global Citizenship in Context (5) SSc, DIV**

Explores questions of power, privilege, difference, and identity and how they play out in hands-on international-facing experiences. Students in the Global Scholars Program will reflect on and make sense of their global learning experiences in the context of larger social, political, economic and cultural processes. Prerequisite: BIS 318.

[View course details in MyPlan: BIS 418](#)

**BIS 420 Colonizing History in Sub-Saharan Africa (5) SSc**

Considers the history of colonization

in Africa and the writing of that history, dealing with debates around post-colonial theory. Provides a better understanding of how relationships between Sub-Saharan Africa and other parts of the world have developed, and how we have come to understand those relationships.

[View course details in MyPlan: BIS 420](#)

**BIS 421 Technology Policy (5) SSc**

Examines the role of public policy in managing the tradeoffs between benefits and risks of new technology. Discusses how to evaluate U.S. technology policies against the standards of democracy, economic efficiency, and social justice. Course overlaps with: JSIS B 255.

[View course details in MyPlan: BIS 421](#)

**BIS 422 Clinical Psychology (5) SSc**

Explores the intellectual, emotional, biological, psychological, and behavioral aspects of human functioning. Topics include maladjustment and adjustment, discomfort, disability, and adaption. Specifically addresses assessment and diagnosis; theory and strategies of intervention; ethics and standard, research methods; and training and specializations. Prerequisite: BIS 270.

[View course details in MyPlan: BIS 422](#)

**BIS 424 Pacific Northwest History (5) SSc**

Explores the region known as the Pacific Northwest (primarily the land now occupied by the American states of Washington, Oregon, and Idaho) from approximately the 17th century to the late 20th century. Course equivalent to: T HIST 444. Course overlaps with: HSTAA 432.

[View course details in MyPlan: BIS 424](#)

**BIS 425 Topics in U.S. Social and Political History (5, max. 15) SSc**



Intensive examination of a particular topic on American institutions, ideologies, movements, and social conditions.

[View course details in MyPlan: BIS 425](#)

**BIS 431 Issues in Sexual Politics and Cultures (5, max. 10) SSc**

Examines the ways that sexual beliefs, practices, identities, and behaviors are connected to various cultural, economic, political, and historical forces. Ideally builds on students' previous critical study of sex and sexuality, either at the UW or elsewhere. Specific focus and topic varies with instructor.

[View course details in MyPlan: BIS 431](#)

**BIS 433 Gender, Work, and Family (5) SSc, DIV**

Examines the interlocking institutions of gender, work, and family. Explores the impact of changing patterns of work on the lives of men and women and the effect of changes in work and occupations on demography and family patterns.

[View course details in MyPlan: BIS 433](#)

**BIS 438 Prevention and Promotion (5) SSc**

Examines prevention and promotion, the two fundamental intervention approaches of community psychology. Explores the strategies employed for each, and the array of phenomena, or variables, they address. Focuses on applications at the small group, community, and socio-cultural levels of analysis. Prerequisite: BISCP 343 or BISPSY 343.

[View course details in MyPlan: BIS 438](#)

**BIS 441 Global Labor Markets (5) SSc**

Explores the history, theory, and institutions that affect labor's position in an increasingly globalized labor market.

Fosters critical inquiry upon the globalization of labor markets and makes connections between global markets and local employment conditions.

Prerequisite: B CUSP 200.

[View course details in MyPlan: BIS 441](#)

**BIS 442 Advanced GIS Analysis and Applications (5, max. 15) SSc**

Provides advanced training in Geographic Information Systems and other geospatial applications for display and analysis of environmental and socio-economic data.

Prerequisite: either BIS 342 or BIS 343.

[View course details in MyPlan: BIS 442](#)

**BIS 443 Educational Policy and the American Economy (5) SSc**

Examines relationships between the economy and our educational and training infrastructure: What are we doing and what should our educational policy be?

[View course details in MyPlan: BIS 443](#)

**BIS 445 Meanings and Realities of Inequality (5) SSc, DIV**

A socioeconomic investigation into the meanings and realities of inequality using a variety of theoretical frameworks and empirical research. Focuses on the determinants of economic mobility and social status. Addresses discrimination, poverty, welfare, and education.

[View course details in MyPlan: BIS 445](#)

**BIS 447 Topics in Quantitative Inquiry (5, max. 15) NSc, RSN**

Examines methods for quantitative data analysis. Uses current software packages to model data. Topics vary with instructor and may include probability, surveys, regression techniques, forecasting and time series, decision-making, or spatial analysis and data maps.

[View course details in MyPlan: BIS 447](#)



**BIS 448 Social Policy (5) SSc**

Addresses the need for and purposes of US social policy by linking policy interventions and advocacy to social welfare. Examines causes and policy solutions to social welfare issues such as poverty, income, public assistance, food and housing, mental health and substance abuse, child welfare, and social security.

[View course details in MyPlan: BIS 448](#)

**BIS 449 Advanced Topics in Psychology (5, max. 15) SSc**

Advanced study of selected theoretical and research topics of contemporary interest in psychology.

[View course details in MyPlan: BIS 449](#)

**BIS 450 Decolonizing Psychology (5) SSc**

Introduces students to Decoloniality as a framework for psychology to interrupt systems of power that have inherently reproduced oppressions at multiple levels. Students will collectively analyze and reflect on the ways that colonialism has influenced psychology and strategies to decolonize it. Topics include positionality, research ethics and politics, indigenous ways of knowing, disciplinary divestments and decolonial pedagogy.

[View course details in MyPlan: BIS 450](#)

**BIS 455 Literature and Sexuality (5, max. 10) SSc/A&H**

Advanced study of the changing definitions and discourses of sexuality in the nineteenth and twentieth centuries and their relationship to literary representations. Stresses historical, psychoanalytic, and literary perspectives.

[View course details in MyPlan: BIS 455](#)

**BIS 456 Climate Anxiety, Grief and Resilience (5) SSc**

Examines the emotional and mental health impacts of climate change and the role of affect more generally in environmental discourse and education. Emphasizes the psychological burdens of our climate crisis on different groups, including people of color and front line communities, scientists, students, indigenous communities, activists, and survivors of climate disasters.

[View course details in MyPlan: BIS 456](#)

**BIS 458 Energy, the Environment and Society (5) SSc**

Discusses energy production, distribution, and consumption in modern society. Topics include basic scientific, technological, economic, political and environmental issues and questions raised by the utilization of traditional and alternative energy sources.

[View course details in MyPlan: BIS 458](#)

**BIS 459 Conservation and Sustainable Development (5) SSc/NSc**

Examines the connections between human welfare and diverse and healthy ecosystems. Considers tensions among economic development, poverty eradication, and biodiversity conservation. Examines efforts to create sustainable development solutions to easing poverty and protecting biodiversity.

[View course details in MyPlan: BIS 459](#)

**BIS 464 Topics in Advanced Cinema Studies (5, max. 15) A&H**

Builds on the analytical and methodological skills gained in 300-level cinema studies courses. Focuses on specific topics which examine cinematic texts and institutions and their complex interrelationships within modern culture.

[View course details in MyPlan: BIS 464](#)

**BIS 466 Human Rights and Resistance (5) SSc**

Examines how cultural practice interacts with the modern human rights movement, exploring how cultural production such as music, literature, theater, or the visual arts can promote the human rights regime as it resists challenges to justices and human dignity.

[View course details in MyPlan: BIS 466](#)

**BIS 468 Human Rights and Sustainable Development (5) SSc**

Examines social aspects of a human right to sustainable development including education, democratic participation, the rule of law, human capabilities and functioning, nationality, religion, and a right to a safe environment.

[View course details in MyPlan: BIS 468](#)

**BIS 470 Art, Politics, and Social Change (5) A&H/SSc**

Explores explicit and implicit linages among arts, activism, and social transformation at various scales.

[View course details in MyPlan: BIS 470](#)

**BIS 475 Americans in Europe (5) A&H, DIV**

This four-week study abroad course in France and Spain focuses on a diverse group of cultural workers to explore the meanings and practices of gender, race, (trans)nationalism, empire, and belonging that emerge in encounters between "Americans" and "Europe." Offered: S.

[View course details in MyPlan: BIS 475](#)

**BIS 480 International Study Abroad (2-5, max. 20)**

Combines study at UW-Bothell with seminars and field trips organized by the Interdisciplinary Arts and Sciences faculty or the faculties of host institutions

in foreign countries. Topics include politics, political economy, public policy, business, and literature, and the arts.

[View course details in MyPlan: BIS 480](#)

**BIS 481 Modernism, Postmodernism, and American Literature (5) A&H**

An investigation into the multiple descriptions and definitions of Modernism and Postmodernism through the study of such twentieth-century writers as Eliot, Pound, Willi Stevens, Moore, Stein, Ashbery, Creeley, Antin, Hemingway, Dos Passos, Faulkner, Ellison, Barnes, Bowles, Paley, Morrison, and Silko.

[View course details in MyPlan: BIS 481](#)

**BIS 483 Community Organizing (5) SSc**

Provides a theoretical and practical approach to community organizing. Students examine the phases of the organizing process including assessment, research, action/mobilization, and reflection. Students undertake the process of organizing through a community-based learning and research project. Recommended: either BISC 343, BISPSY 343, BISSEB 304, or BISSTA 304.

[View course details in MyPlan: BIS 483](#)

**BIS 485 Topics in Cultural Studies (3-5, max. 15)**

Explores in depth specific historical, political, or social aspects of cultural practice. Links this analysis to an examination of the processes involved in doing various forms of cultural work.

[View course details in MyPlan: BIS 485](#)

**BIS 486 Studies in Women and Literature (5, max. 10) A&H**

Advanced study concentrating on individual or a group of related women writers with attention to such subjects as women and language, feminist literary

criticism, and canon formation.

[View course details in MyPlan: BIS 486](#)

**BIS 487 Topics in American Literature (5, max. 10) A&H**

Advanced study in American literature concentrating on individual writers, literary movements, specific critical approaches to literature, or literary canons and their critics.

[View course details in MyPlan: BIS 487](#)

**BIS 488 Topics in British Literature (5, max. 10) A&H**

Advanced study of significant authors, issues and movements in English literature. Topics include Shakespeare and the idea of tragedy, Virginia Woolf as artist and cultural critic, and canon formation and the Romantic movement.

[View course details in MyPlan: BIS 488](#)

**BIS 490 Advanced Seminar (5, max. 10)**

Research seminar focused on special topics in interdisciplinary arts and sciences. Includes reflection on the practice of research and its importance for students' career and life goals.

[View course details in MyPlan: BIS 490](#)

**BIS 491 Topics in Policy Studies (3-5, max. 15)**

Explores in depth a specific topic in policy analysis and implementation. Topics include environmental policy, educational policy, cultural and arts practices, labor policy, and health care policy.

[View course details in MyPlan: BIS 491](#)

**BIS 492 Senior Thesis (5-, max. 10)**

A significant independent research project planned and carried out by the student under the direction of two or more faculty on a significant scholarly topic selected by the student in

consultation with thesis advisor.

[View course details in MyPlan: BIS 492](#)

**BIS 493 Special Topics (3-5, max. 15)**

Advanced course offerings designed to respond to faculty and student interests and needs. Topics include French Impressionism, social movements in late nineteenth-century Japan, international business and the changing European economic structure.

[View course details in MyPlan: BIS 493](#)

**BIS 495 Internship (2-6)**

Credit/no-credit only.

[View course details in MyPlan: BIS 495](#)

**BIS 497 Political Internship in State Government (5, max. 20)**

Students serving in approved internship program with state government agencies. Course overlaps with: POL S 497 and TPOL S 497.

[View course details in MyPlan: BIS 497](#)

**BIS 498 Undergraduate Research (1-5, max. 15)**

Individual advanced research on topics conducted under the direction of one or more instructors.

[View course details in MyPlan: BIS 498](#)

**BIS 499 Portfolio Capstone (5)**

Focuses on developing a learning and professional portfolio, advancing skills of critical thinking and interdisciplinary synthesis, and honing writing and presentation capacities for appropriate audiences. Stresses collaboration with other graduating students. Prerequisite: BIS 300 or BEARTH 300. Offered: AWSp.

[View course details in MyPlan: BIS 499](#)

**IAS INTERDISCIPLINARY ARTS**

**BISIA 207 Introduction to Creative Writing: Words, Stories, Dialogues (5) A&H**

Inquires into basic elements of creative writing that occur in multiple genres

and media. Studies and practices writing in a workshop atmosphere.

[View course details in MyPlan: BISIA 207](#)

**BISIA 219 Introduction to Interdisciplinary Arts (5) A&H**

Introduces the relationships between the study of and the making of art. Explores connections and intersections among written, visual, and performance arts and engages their intellectual, social, creative, and aesthetic dimensions.

Emphasizes creative engagement and critical dialogue as central components to contemporary interdisciplinary arts.

[View course details in MyPlan: BISIA 219](#)

**BISIA 230 Performing Arts Techniques (1-5, max. 10) A&H**

Develops intermediate art skills and applications with emphasis on performing arts.

[View course details in MyPlan: BISIA 230](#)

**BISIA 240 Visual and Media Arts Techniques (1-5, max. 10) A&H**

Develops intermediate art skills and applications, with an emphasis on visual and media arts.

[View course details in MyPlan: BISIA 240](#)

**BISIA 244 Time-Based Media Art (5) A&H**

Introduces students to digital media art production with video, sound, and imagery techniques. Time-based media refers to art that is dependent on technology and has a durational dimension. Engagement and use of video editing software as a primary means for creating art work and developing video pieces and projects.

[View course details in MyPlan: BISIA 244](#)

**BISIA 250 Photography as Art (5) A&H**

Explores photography as an artistic medium. Creates a context for understanding photography as a form of

contemporary art, including expressive and interpretive strategies for taking and making pictures.

[View course details in MyPlan: BISIA 250](#)

**BISIA 283 Interdisciplinary Art Techniques (1-5, max. 10) A&H**

Develops intermediate skills and applications in one or more studio arts in order to enhance students' abilities as performers, arts creators, or educators.

[View course details in MyPlan: BISIA 283](#)

**BISIA 310 Creative Writing: Poetry (5) A&H**

Intensive study of the theories and practices of writing poetry.

[View course details in MyPlan: BISIA 310](#)

**BISIA 311 Creative Writing: Prose (5) A&H**

Intensive study of the modes and means of composing creative, non-fictional prose.

[View course details in MyPlan: BISIA 311](#)

**BISIA 319 Interdisciplinary Arts (5) A&H**

Investigates relationships between the study and making of art. Explores connections among written, visual, and performance arts and engages their intellectual, social, and aesthetic dimensions.

[View course details in MyPlan: BISIA 319](#)

**BISIA 330 Performing Arts Workshop (5, max. 15) A&H**

Draws on collaboration and ensemble improvisation to inspire critical reflection, with methods including theater, dance, live and recorded music, poetry, storytelling, social media and video. Explores performance-making as a research practice that engages communities, connecting personal experience to current issues of social justice, equity and diversity

[View course details in MyPlan: BISIA 330](#)

**BISIA 340 Visual and Media Arts****Workshop (1-5, max. 10) A&H**

Interdisciplinary arts workshop with an emphasis on visual and media arts.

Focuses on the development and critique of creative projects in a practice-oriented setting.

[View course details in MyPlan: BISIA 340](#)

**BISIA 344 Video Art (5) A&H**

Explores the use of video as a contemporary art form. Focuses on the development and critique of creative projects in a practice-oriented setting.

Course overlaps with: DXARTS 450.

[View course details in MyPlan: BISIA 344](#)

**BISIA 350 Photography and Digital Art (5) A&H**

Explores the use of photography and 2D digital imaging as contemporary art forms in a practice-based arts workshop. Emphasizes creative and conceptual engagement.

[View course details in MyPlan: BISIA 350](#)

**BISIA 383 Interdisciplinary Arts Workshop (1-5, max. 15) A&H**

Interdisciplinary arts workshop with an emphasis on building relationships among multiple arts forms. Focuses on the development of creative projects in a practice-oriented setting.

[View course details in MyPlan: BISIA 383](#)

**BISIA 399 Art and Design Digital Portfolio (5) A&H**

Prepares students to build and curate their online presence as artists, designers, creatives, and makers - from designing a digital portfolio website to telling the stories behind their work and what matters to them as artists. Students will leave the class with a professional portfolio website suitable for sharing with potential employers, clients, arts

organizations, and more.

[View course details in MyPlan: BISIA 399](#)

**BISIA 401 Literary and Arts Journal Editorial Board (2-5, max. 20)**

Provides opportunity to learn about publishing a literary journal by publishing the UWB Literary Journal. Students gain skills in communication, assessing and editing literary texts, layout design, technology for creating and disseminating multi-media work, project management, and teamwork.

[View course details in MyPlan: BISIA 401](#)

**BISIA 410 Advanced Creative Writing Workshop (1-5, max. 15) A&H**

[View course details in MyPlan: BISIA 410](#)

**BISIA 440 Advanced Visual and Media Arts Workshop (1-5, max. 15) A&H**

Focuses on the development of creative and conceptual projects in a practice-oriented setting.

[View course details in MyPlan: BISIA 440](#)

**BISIA 444 Video Installation Art (5) A&H**

This advanced studio art course explores video art in the context of contemporary site and spatially-based works, extending ideas into practice. We will explore various techniques such as video, sound, performance, installation, and anchor these in the history, theory, and practice of the various media. Topics in the class will include: multi-channel video installation, sound and space, performance and ubiquitous technologies. Prerequisite: either BISIA 240, BISIA 244, BISIA 344, or BISMCS 240.

[View course details in MyPlan: BISIA 444](#)

**BISIA 450 Image and Imagination (5) A&H**

Explores image-based arts in a contemporary context in an advanced



arts workshop. Emphasizes the development of creative and conceptual projects in a practice-oriented setting.

[View course details in MyPlan: BISIA 450](#)

**BISIA 483 Advanced Interdisciplinary Arts Workshop (1-5, max. 15) A&H**

Advanced interdisciplinary arts workshop with an emphasis on synthesizing multiple art forms. Focuses on the development of creative and conceptual projects in a practice-oriented setting.

[View course details in MyPlan: BISIA 483](#)

**BISIA 484 Arts Learning in the Community (5-10, max. 10)**

Develops a theoretical and practical understanding of arts-practices in relation to a selected community context. Engages in a specific project at an educational, social service, or arts organization, or in an arts-project that works across communities.

[View course details in MyPlan: BISIA 484](#)

**INTERDISCIPLINARY STUDY SKILLS**

**BISSKL 250 Career Exploration (2)**

Explores issues, topics, and tasks related to personal, educational, and career choices. Addresses educational and career planning, personal characteristics and individual preferences, life and work values and interests, decision making, goal setting, and job/career search preparations. Credit/no-credit only.

[View course details in MyPlan: BISSKL 250](#)

**BISSKL 351 Community-Based Learning (2-5, max. 15)**

Independent study conducted in organizations in our communities, complementing a designated course.

[View course details in MyPlan: BISSKL 351](#)

**BISSKL 375 Academic Research and Writing Seminar (2)**

Using a research project from another course students refine writing skills and expand skills in accessing, identifying, and critically evaluating information. Must be concurrently enrolled in another IAS course. Credit/no-credit only.

[View course details in MyPlan: BISSKL 375](#)

**BISSKL 402 Peer Facilitation (2-5, max. 10)**

Provides direct experience in teaching and facilitation. Students gain in-depth background on subject material along with training in teaching techniques and facilitation approaches. Credit/no-credit only.

[View course details in MyPlan: BISSKL 402](#)

**LAW, ECONOMICS, AND PUBLIC POLICY**

**BISLEP 301 Law, Economics, and Public Policy (5) SSc**

Examines the relationships among the fields of law, economics, politics, and public policy, with particular attention to problems of social, economic, and political change. Uses examples from various areas of public policy, including social, environmental, and education policy. Course overlaps with: TECON 350. Prerequisite: ECON 200, B CUSP 200, BIS 200, or BBUS 220.

[View course details in MyPlan: BISLEP 301](#)

**BISLEP 302 Policy Analysis (5) SSc**

Provides an introduction to the approaches and methods used in analysis of laws and policy utilizing case studies, statistics, and demographic evidence. Draws on contribution from microeconomics, statistics, political analysis, and social demography to examine trade-offs made in public policy

design and implementation as well as impacts of implemented policies.

[View course details in MyPlan: BISLEP 302](#)

**BISLEP 397 Topics in Law, Economics, and Public Policy (5, max. 15) SSc**

Examines a topic, theme, or problem at the intersection of law, economics, and public policy.

[View course details in MyPlan: BISLEP 397](#)

**BISLEP 497 Advanced Topics in Law, Economics, and Public Policy (5, max. 15) SSc**

Advanced study of a specific topic, theme, or problem at the intersection of law, economics, and public policy.

[View course details in MyPlan: BISLEP 497](#)

## MEDIA & COMMUNICATION STUDIES

**BISMCS 234 Media and Communication Techniques (1-5, max. 10) A&H**

Develops beginning to intermediate skills and techniques in one or more forms of communication practice and media production.

[View course details in MyPlan: BISMCS 234](#)

**BISMCS 240 Working with Video (5) A&H**

Introduction to conceptual foundation and principles of video production. Develops beginning to intermediate skills in video production.

[View course details in MyPlan: BISMCS 240](#)

**BISMCS 260 Working with Audio (5) A&H**

Introduction to the conceptual foundation and principles of audio production. Develops beginning to intermediate skills in audio production.

[View course details in MyPlan: BISMCS 260](#)

**BISMCS 279 Journalism Writing (5)**

Develops basic writing, reporting, and editing practices for newspaper or magazine publication. Journalism writing produced individually or collaboratively may include photography cutlines, blog posts, investigative projects, feature stories, social media content, and other non-fiction works. Covers meta-issues and cultural context, including ethics, law, history, ownership, critique, and wire-service style.

Recommended: BIS 179.

[View course details in MyPlan: BISMCS 279](#)

**BISMCS 333 Media and Communication Studies (5) A&H/SSc**

Emphasizes the skills of critical media analysis and creative media production. Addresses media representations and the importance of media in structuring contemporary society. Prerequisite: either BIS 176, BIS 177, BIS 178, BIS 179, or COM 200.

[View course details in MyPlan: BISMCS 333](#)

**BISMCS 343 Media Production Workshop (1-5, max. 15) A&H**

Provides hands-on experience in communicative practice and the production of media. Combines production and theory.

[View course details in MyPlan: BISMCS 343](#)

**BISMCS 402 Community Media Practice (2-5, max. 20) A&H**

Provides an opportunity to undertake practice-based work in community media organizing and media production. Students gain skills initiating and maintaining community-based efforts in



the context of media. They also gain experience using relevant media hardware and software, developing programming ideas, and recording, editing, and distributing media content.

[View course details in MyPlan: BISMCS 402](#)

**BISMCS 471 Advanced Topics in Media and Communication Studies (5, max. 15)**

Advanced study of a topic in media and communication that includes a practice component.

[View course details in MyPlan: BISMCS 471](#)

**BISMCS 472 Advanced Media Production Workshop (1-5, max. 15) A&H**

Provides focused study and production in a specific area of media arts and practice.

[View course details in MyPlan: BISMCS 472](#)

**BISMCS 473 Visual Communication (5) A&H/SSc**

Examines the everyday world of images, image-making, design, and visual culture. Introduces students to different visual methodologies, modes, and sites of contemporary visual production.

[View course details in MyPlan: BISMCS 473](#)

**POLICY STUDIES**

**BPOLST 492 Topics in Policy Research (3-5, max. 10)**

Explores topics in policy research to prepare students planning to enter a graduate level policy program. Topics may include: quantitative research methods, qualitative research methods, or research writing for the social sciences.

[View course details in MyPlan: BPOLST 492](#)

**BPOLST 501 Public Finance and Budgeting (5)**

Analysis of government expenditures and revenues. Uses economic theory to examine key public policies in areas such as health, education, and labor.

Emphasizes policy rationales and impacts regarding efficiency and equity. Develops accounting concepts necessary for budgeting analysis. Offered: Sp.

[View course details in MyPlan: BPOLST 501](#)

**BPOLST 502 Statistics for Policy Studies (5-)**

Surveys important aspects of social science research for academic and practical investigation. Focuses on gaining an understanding of research and statistical analyses and their relationship to policy

concerns. Prerequisite: minimum grade of 2.7 in BPOLST 500. Offered: W.

[View course details in MyPlan: BPOLST 502](#)

**BPOLST 503 Policy Analysis (-5)**

Focuses on methods and approaches used in policy analysis and program evaluation. Examines and applies interdisciplinary approaches and methods for evaluating policy impacts and outcomes, including cost-benefit analysis, randomized field experiments, quasi-experimental assessment, and participatory assessment.

[View course details in MyPlan: BPOLST 503](#)

**BPOLST 505 Leadership and Organizations (5)**

Explores the human interactional dimension of organizational culture, behavior, and outcomes. Special

attention is devoted to how individual and group dynamics frame the options open to leaders, managers, and employees in public, private, and non-profit organizations, and how leaders and managers shape the culture and behavior of organizations. Offered: W.

[View course details in MyPlan: BPOLST 505](#)

### **BPOLST 506 Capstone Research (5-)**

Depending of work experience, participate in an internship or field research in a private, public, or non-profit organization to investigate a policy problem. Conduct primary or secondary research, collecting data, and selecting theoretical perspectives. Represents the first stage of the Capstone project. Offered: A.

[View course details in MyPlan: BPOLST 506](#)

### **BPOLST 509 Proseminar for Policy Studies (1/2, max. 5)**

Network with alumni and faculty in the MAPS program, professionals active in the field, and other UW faculty in order to inform the MAPS experience and explore policy perspectives from multiple points of view. Students will engage in workshops designed to deepen their skills in applied policy ethics, conflict resolution, policy writing and public speaking. Credit/no-credit only. Offered: AWSpS.

[View course details in MyPlan: BPOLST 509](#)

### **BPOLST 510 Statistics Fundamentals for Policy Studies (5)**

Intensive two-week, pre-fall course providing foundations in statistical methods. Covers statistical notation, population, sampling distribution and standard normal distributions, graphs

and tables, inferential statistics, descriptive statistics and correlations. Prepares students for advanced linear methods. May include weekend meetings. Credit/no-credit only.

[View course details in MyPlan: BPOLST 510](#)

### **BPOLST 511 Policy Process and Policy Analysis (5)**

Focuses on public policy processes and introduces common methods of policy analysis. Examines rationales for public policy and how policies are articulated and negotiated; formulation of policies; selection of policy instruments; policy implementation; cost-benefit analysis and deliberative policy analysis approaches. Offered: A.

[View course details in MyPlan: BPOLST 511](#)

### **BPOLST 513 Practicum in Policy Studies (5)**

Begins capstone research sequence. Students explore issues of policy interest by connecting and building relationships with community stakeholders that influence and are affected by those issues. Students develop community engagement skills by completing a community-based learning project and reflect on the ethical, practical, and theoretical implications of community engagement. Offered: W.

[View course details in MyPlan: BPOLST 513](#)

### **BPOLST 514 Management and Program Evaluation (5)**

Provides an overview of the major literatures in organization theory and management. Focuses on developing managerial skills: supervising subordinates, building a team, mapping stakeholders, and problem-spotting, with

special attention to program evaluation methods and approaches, including logic models, participatory approaches, and quantitative methods.

Prerequisite: minimum grade of 2.7 in BPOLST 500, BPOLST 502, and BPOLST 503.

[View course details in MyPlan: BPOLST 514](#)

**BPOLST 515 Capstone ([1-8]-, max. 11)**

Integrates students' learning experience in the program. They demonstrate their ability to apply the tools of policy research, analysis, and engagement to a contemporary policy issue. It follows the Practicum and builds on promising questions and collaborations. Students work in close partnership with their faculty Capstone Advisor.

Offered: AWWSpS.

[View course details in MyPlan: BPOLST 515](#)

**BPOLST 520 Policy Internship (2-5, max. 10)**

Student arranged internship with a local organization or agency that incorporates a "field-based" component into their learning. Includes a policy project that benefits the organization and has academic merit. Prerequisite: BPOLST 500; BPOLST 502. Credit/no-credit only.

Offered: AWWSpS.

[View course details in MyPlan: BPOLST 520](#)

**BPOLST 571 Policy Ethics (5)**

Examines the complex relationships between policy and ethics. These relationships are grounded in moral and political theories about the behavior of state and non-state actors.

Offered: AWWSp.

[View course details in MyPlan: BPOLST 571](#)

**BPOLST 576 Education Policy and Politics (5)**

Covers the historical development of U.S. K-12 education policy, with particular focus on contemporary education policy issues and debates, such as standards, tests, accountability, and school choice. Addresses the process and politics through which education policy is made at the federal, state, and district levels.

[View course details in MyPlan: BPOLST 576](#)

**BPOLST 581 Issues in Human Rights Policy (5, max. 10)**

Explores the theories and practices of implementing the international human rights regime as government policy. Students engage in issues of normativity in policy formation and the pathways by which certain norms become domestic and global standards.

[View course details in MyPlan: BPOLST 581](#)

**BPOLST 582 Issues in Technology Policy (5, max. 10)**

Explores how science and technology contribute to economic growth and human development, and how political processes shape and manage that impact. Examines historical and contemporary issues.

[View course details in MyPlan: BPOLST 582](#)

**BPOLST 583 Issues in Environmental Policy (5, max. 10)**

Analyzes current policy issues in the complex and every changing arena of environmental policy.

[View course details in MyPlan: BPOLST 583](#)

**BPOLST 584 Issues in Labor and Human Resources (5, max. 10)**

Examines issues in the changing arena of

labor and human resource policy.

[View course details in MyPlan: BPOLST 584](#)

**BPOLST 585 Issues in Health Policy (5, max. 10)**

Examines relevant current issues in the changing arena of health policy including managed care, public health and safety, and the ethical dimensions of medical research and practice.

[View course details in MyPlan: BPOLST 585](#)

**BPOLST 586 Issues in Education Policy (5, max. 10)**

Examines issues in education policy in local and global contexts.

[View course details in MyPlan: BPOLST 586](#)

**BPOLST 591 Research Colloquium (1-2, max. 6)**

Provides an opportunity for graduate students and faculty members to exchange research ideas, present findings, discuss analytical methods and tools, and evaluate the implications of the presented research. Credit/no-credit only. Offered: jointly with BCULST 591; AWSp.

[View course details in MyPlan: BPOLST 591](#)

**BPOLST 592 Topics in Policy Research (3-5, max. 10)**

Develops advanced technical skills in policy research methods. Topics may include various qualitative and quantitative methods of research.

[View course details in MyPlan: BPOLST 592](#)

**BPOLST 593 Topics in Policy Studies (3-5, max. 10)**

Examines the changing arena of policy. Topics are relevant to current issues and may include the following: policy and

gender; transportation policy in Puget Sound; policies of aging; and environmental policy.

[View course details in MyPlan: BPOLST 593](#)

**BPOLST 594 Research Design (5)**

Provides grounding in research designs, such as experimental, longitudinal, cross-sectional, case-study, and action research design. Helps professionals design and evaluate research proposals and be astute consumers of published research. Develops research proposals that can be submitted for institutional review at UW. Offered: Sp.

[View course details in MyPlan: BPOLST 594](#)

**BPOLST 595 Policy Studies Skills Workshop (1-3, max. 9)**

Provides the opportunity to develop applied skills commonly required of managers and analysts in the public and non-profit sectors. Workshops emphasize hands-on learning and actual practice.

[View course details in MyPlan: BPOLST 595](#)

**BPOLST 598 Directed Research (1-5, max. 15)**

Individual advanced research on policy topics conducted under the direction of one or more instructors.

[View course details in MyPlan: BPOLST 598](#)

## PSYCHOLOGY

**BISPSY 337 Risk and Resilience (5) SSc**

Provides an overview of the psychological study of development in the context of adversity. Studies pathways that lead to maladjustment and processes that lead to positive adjustment, and considers social policy and preventative programs.

[View course details in MyPlan: BISPSY 337](#)

**BISPSY 343 Community Psychology (5) SSc**

Examines the historical foundations, theory, methods, and practice that constitute the interdisciplinary field of community psychology. Students build upon an existing empirical knowledge base, including effective modes of community intervention, and examine the relevance of community psychology for addressing social problem.

Recommended: BIS 170.

[View course details in MyPlan: BISPSY 343](#)

**BISPSY 348 Cultural Psychology (5) SSc**

Addresses the ways that cultural traditions and social practices both reflect and transform psychological experience. Examines both new theoretical and empirical work in cultural psychology and the intellectual roots of cultural psychology. Explores the implications of a cultural perspective for the larger projects/concerns of the field of psychology.

[View course details in MyPlan: BISPSY 348](#)

**BISPSY 350 Intergroup Relations (5) SSc**

Acquaints students with the various theoretical perspectives and problems in understanding the development, maintenance, and reduction of conflict between social groups. Considers how one's own position in the social hierarchy influences intergroup responses, along with the emotions that may be experienced on behalf of one's group. Social change strategies and the effects of social policies designed to bring about social change will be examined. Course

overlaps with: TPSYCH 345.

Recommended: either BIS 225 or equivalent.

[View course details in MyPlan: BISPSY 350](#)

**BISPSY 489 Projects in Psychology (5) SSc**

Provides students the opportunity to apply concepts from the core course in the psychology program to a relevant organizational setting, to engage in a meaningful Community-Based intervention and/or research project, and to critically reflect on the community project as it is conceived and carried out. Prerequisite: either BISPSY 337, BISPSY 343, BISPSY 348, or BISPSY 350.

[View course details in MyPlan: BISPSY 489](#)

**IAS SCIENCE, TECHNOLOGY, AND SOCIETY**

**BISSTS 231 Genes, Genomes and Heredity (5) SSc/NSc**

Explores basic concepts of heredity, including DNA structure and function, Mendel's rules of inheritance, and human genetic diseases. Goals include understanding current issues in the field, including genetic screening and testing, DNA fingerprinting and forensic analysis, the genetic basis of cancer, and genetically modified organisms. Offered: jointly with B BIO 231.

[View course details in MyPlan: BISSTS 231](#)

**BISSTS 232 Embryos, Genes and Reproductive Technology (5) SSc/NSc**

Explores human reproduction, embryonic development, and genetic technology. Explores the increasing use of technology used in reproduction and related issues (e.g. in vitro fertilization, genetic selection of embryos, cloning, stem cells). Offered:

jointly with B BIO 232.

[View course details in MyPlan: BISSTS 232](#)

### **BISSTS 307 Science, Technology, and Society (5) SSc**

Presents concepts and theories used to investigate the creation, application, and governance of science and technology. Addresses the nature of scientific and technological knowledge, social construction of science and technology, democracy and science, and public understanding.

[View course details in MyPlan: BISSTS 307](#)

### **BISSTS 355 History of Science and Technology (5) SSc**

Introduces the historical development of science and technology and their interaction with social, cultural, and political forces across time and space.

[View course details in MyPlan: BISSTS 355](#)

### **BISSTS 397 Topics in Science, Technology, and Society (5, max. 15) SSc**

Examines a topic, theme, or problem at the intersection of science, technology, and society.

[View course details in MyPlan: BISSTS 397](#)

### **BISSTS 420 Race, Gender, Science, and Medicine (5) SSc, DIV**

Focuses on the interplay between science, technology, and medicine on the one hand, and race, gender, and sexuality on the other. Discusses how cultural ideas about race, gender, and sexuality influence knowledge and knowledge production as well as how scientific claims and technological developments influence cultural understandings of race, gender, and

sexuality.

[View course details in MyPlan: BISSTS 420](#)

### **BISSTS 497 Advanced Topics in Science, Technology, and Society (5, max. 15) SSc**

Advanced study of a specific topic, or problem at the intersection of science, technology, and society.

[View course details in MyPlan: BISSTS 497](#)

## **NURSING AND HEALTH STUDIES**

### **HEALTH**

#### **B HLTH 179 Interpersonal Communication (5) SSc**

Provides an overview of the theoretical and practical concerns in the study and practice of communication within interpersonal encounters. Emphasizes how to analyze communicative behavior and practice applied strategies for improving communication skills in the context of interpersonal settings of work, family, friendship, and romance.

[View course details in MyPlan: B HLTH 179](#)

#### **B HLTH 196 Preparing to Work in Partnerships with Communities (5) SSc**

Provides an introduction to participatory and asset-oriented approaches to forming community partnerships. Students learn concepts and skills necessary for successfully engaging in community building, including: the importance of self-reflection; personal skill assessment; cultural humility; issues regarding power and privilege; reciprocity; and core principles inherent in community-based participatory approaches.



[View course details in MyPlan: B HLTH 196](#)

**B HLTH 197 Selected Preparatory Topics in Health (5, max. 10) SSc**

Provides students with basic preparatory knowledge in a health-related topic. Covers fundamental concepts and principles to prepare students with a better understanding of human health and well-being.

[View course details in MyPlan: B HLTH 197](#)

**B HLTH 198 Introduction to Physical Activity, Nutrition, and Health (5) SSc**

Provides an introduction to physical activity fitness, nutrition, and health. Emphasizes theoretical foundations, practical applications, and skill development to promote and sustain personal well-being and health.

[View course details in MyPlan: B HLTH 198](#)

**B HLTH 199 Understanding Global Health Through Film (5) SSc/A&H**

Introduces the growing field of global health, using films to highlight the diverse experiences of illness and health care across the world.

[View course details in MyPlan: B HLTH 199](#)

**B HLTH 200 Lifespan Development (5) SSc**

Focuses on quantitative and qualitative growth and developmental changes across the lifespan from conception to end of life. Emphasizes influence of changes on health and how developmental theory and research guide health promotional efforts. Uses contextual perspective to analyze how interactions between biology and environment contribute to developmental outcomes.

[View course details in MyPlan: B HLTH 200](#)

**B HLTH 201 Introduction to Global Health (5) SSc**

Introduction to global health for students of all backgrounds and disciplines. Focuses on how health is measured around the world, and how socioecological forces shape health experiences and outcomes. Surveys topics of global health research and practice, and invites students to independently analyze global health issues in specific geographic contexts. Course overlaps with: G H 101/GEOG 180/JSIS B 180 and T HLTH 285.

[View course details in MyPlan: B HLTH 201](#)

**B HLTH 216 Culture/Ethnicity and Religions Influence on Food Choices (5) SSc**

Multiple factors contribute to the nutritional status of individuals. Among these factors are culture and religion. Understanding the meanings people place on food and the role food holds in some people's value and belief systems is necessary to provide holistic care.

[View course details in MyPlan: B HLTH 216](#)

**B HLTH 217 Nutrition and the Older Adult (5) NSc**

Explores factors necessary to maintain and enhance the nutritional needs of independently living older adults.

[View course details in MyPlan: B HLTH 217](#)

**B HLTH 218 Nutritional Science (5) NSc**

Introduces key concepts of nutritional science: biochemistry, anatomy and physiology, diet analysis, and scientific principles of investigation. Students



explore components of a healthy diet in the context of health and wellness, self-discovery, research analysis, and current issues. Course overlaps with: NUTR 200.

[View course details in MyPlan: B HLTH 218](#)

### **B HLTH 219 Lifespan Nutrition (5) NSc**

Examines the fundamentals of nutrition for different life stages including pregnancy, infancy, childhood adolescence, adulthood, and old age. Covers topics applicable to needs at each stage, Students conduct a personal dietary assessment and analyze the application of nutrition at the self, family, and community levels.

[View course details in MyPlan: B HLTH 219](#)

### **B HLTH 220 Community Nutrition (5) SSc**

Investigates the role of nutrition in promoting, maintain, and improving health in the community. Students study the role of various indicators of a healthy community; social determinants of health, legislation, food access, and community design. Students outreach with local nutrition and wellness partners.

[View course details in MyPlan: B HLTH 220](#)

### **B HLTH 221 Dimensions of Personal Health and Wellness (5) SSc**

Introduces students to a holistic view of health and covers the eight dimensions of wellness. Emphasizes personal health and how socio-ecological and cultural factors influence individual behavior and overall health status. Explore strategies that improve lifetime wellness.

[View course details in MyPlan: B HLTH 221](#)

### **B HLTH 222 Latina/o Health and Culture: Issues, Beliefs, Practices, and Local Perspectives (5) SSc**

Examines health issues in the Latina/o community through the lens of health research, arts and other cultural expressions, community organization stakeholders, and fieldwork. Focuses on the diverse experiences with health care and healing systems of this rapidly growing US community.

[View course details in MyPlan: B HLTH 222](#)

### **B HLTH 223 Feminist Approaches to Women's Health (5) SSc**

Examination, analysis, and critique of aspects of women's health from a feminist/anti-oppression perspective. Topics include definitions of women's health, concepts of bodies/health, reproductive health/reproductive justice, the United States healthcare system, and disparities in women's health. Uses scholarly and popular articles/books, digital media, film, and graphic novels as source materials.

[View course details in MyPlan: B HLTH 223](#)

### **B HLTH 224 Disease, Human History, Society, and Civilization (5) NSc**

Examines the connections between infectious disease and human history focusing on how plagues and epidemics influence social upheavals and changes in civilization. Explores historical implication, cause, and symptoms, transmission, treatment, and future threat diseases such as smallpox, plague, cholera, influenza, tuberculosis, syphilis, malaria, yellow fever, and HIV.

[View course details in MyPlan: B HLTH 224](#)

**B HLTH 225 Introduction to Cancer Biology (5) NSc**

Examines the basic biology and history of cancer with a focus on how genetics, age, infectious agents, and environmental factors contribute to the development of disease. Explores the risk factors, cause, diagnosis, treatment, and prevention of cancers including breast, skin, liver, thyroid, prostate, lung, and cervical. Course overlaps with: B BIO 233 and BIOL 464.

[View course details in MyPlan: B HLTH 225](#)

**B HLTH 226 Race, Socioeconomic Status, and Health (5) SSc**

Examines race and socioeconomic status, and their effect on health and health care. Attention is given to the health status of the poor and of major racial/ethnic minority groups in the United States, with respect to ways in which their health and healthcare services are embedded in social contexts.

[View course details in MyPlan: B HLTH 226](#)

**B HLTH 227 Migration and Population Health: A Global Representation in Films and Arts (5) SSc/A&H**

Provides a link between migration and public health using the social determinants of health framework. Emphasizes how migrants/immigrants are portrayed in films, television, literature, music, and other artistic images. Explores theories of migration, migration-health relationship, and health issues of migrant populations.

[View course details in MyPlan: B HLTH 227](#)

**B HLTH 228 Infectious Disease Detectives: The Pathogens Inside**

**(5) NSc**

Explores the diagnostic process, human drama, and public health implications of infectious disease. Specific diseases such as botulism, flesh eating bacteria, tape worms, etc., will be described using case studies to highlight real vs. perceived risk and the role of government in public health. Course overlaps with: MICROM 301.

[View course details in MyPlan: B HLTH 228](#)

**B HLTH 229 Quarantine and Isolation (5) SSc**

Explores how the strategies of quarantine and isolation can be implemented to stop the spread of infectious disease and manage outbreaks. Quarantine policies, background, ethical considerations, potential abuses, connection to disease transmission, and historically important events will be discussed.

[View course details in MyPlan: B HLTH 229](#)

**B HLTH 297 Selected Introductory Topics in Health (5, max. 10) SSc**

Provides students with introductory knowledge and skills in a health-related topic. Prepares students with an understanding of promoting human health and well-being by exploring individual and social determinants of health.

[View course details in MyPlan: B HLTH 297](#)

**B HLTH 298 Selected Introductory Topics in Health and the Natural World (5) NSc**

Provides students with introductory knowledge and skills in a health-related topic that connects to the study of the physical world. Prepares students with an understanding of promoting human

health and well-being by exploring individual, community, and population-level health as they connect specifically to biological determinants of health.

[View course details in MyPlan: B HLTH 298](#)

**B HLTH 301 Global Health Practice: Systems, Places, and People (5) SSc**

Introduction to global health practice that offers a close-up, hands-on, critically-informed, and experiential learning experience either in the form of community based learning projects (CBLR), or connected online international learning (COIL) opportunities, or both. Examines what global health systems, geographies, and professional roles look like around the world.

[View course details in MyPlan: B HLTH 301](#)

**B HLTH 320 Human Health and the Environment (5)**

Examines the relationship between environmental factors and the health and well-being of individuals, families, communities, and populations. Contemporary understanding of how the natural and built environments influence risk for disease and illness illustrated through case examples. Explores multi-disciplinary approaches to address environmental problems and improve living and work spaces.

[View course details in MyPlan: B HLTH 320](#)

**B HLTH 397 Current Health Topics (3-5, max. 15)**

Survey of current issues in human health with analysis of selected topics. The personal, social, political, and economic aspects of health are explored through professional health writing and interdisciplinary literature.

[View course details in MyPlan: B HLTH 397](#)

**B HLTH 400 Study Abroad: Health Studies (1-5, max. 15) SSc/NSc**

Upper-division health related courses for which there are no direct University of Washington Bothell equivalents, taken through a University of Washington study abroad program.

[View course details in MyPlan: B HLTH 400](#)

**B HLTH 401 Research Journal Editorial Board (2-5, max. 18)**

Serves as membership on the campus's research journal Editorial Board. Focuses on managing the content and production of the research journal, which is produced annually. Registration is by instructor permission only. Credit/no-credit only.

[View course details in MyPlan: B HLTH 401](#)

**B HLTH 402 Microbiology, Human Disease, and Global Health (5) NSc**

Explores global health concepts related to infectious disease with an emphasis on the connection between the host, pathogen, and environment. Focuses on how microbiology and pathogenicity, in addition to human behavior, influences disease outcomes and impacts society. Course overlaps with: MICROM 301.

[View course details in MyPlan: B HLTH 402](#)

**B HLTH 404 Theories of Health Behavior (5) SSc**

Investigates the relationship between health and human behavior including social, biological, environmental, cultural, and psychological determinants of health and illness. Develops a solid grounding in health behavior theories from personal to population-based and

how they inform the development of health intervention programs. Focuses on understanding why people make health decisions and how to support them in changing health-related behavior.

[View course details in MyPlan: B HLTH 404](#)

### **B HLTH 405 Race, Power, and Food (5) DIV**

Examines the politics of nutrition in the age of globalization. Revisits, re-envisions, and re-articulates dominant understandings of history and culture as they relate to food. Explores food culture as a form of artistic expression, and uses documentary films and interactive theatre to build communication strategies rooted in students' identities. Presents powerful tools for building alliances across racial, gender, class, and cultural lines.

[View course details in MyPlan: B HLTH 405](#)

### **B HLTH 406 Infectious Disease and Art (5) A&H**

Explores the microbiology of pathogens while examining both historical and contemporary pieces of art influenced directly or indirectly by these contagions. Causes, risk factors, symptoms, mechanisms of pathogenesis, treatment, and prevention of infectious disease will be explored through a lens of the visual art pieces they have inspired.

[View course details in MyPlan: B HLTH 406](#)

### **B HLTH 407 Climate Change and Health (5) NSc**

Explores our current knowledge about the impacts of climate change on health and opportunities for creatively addressing these challenges through mitigation and adaptation efforts. Addresses the

scientific basis of climate change health risks and the sociopolitical context of climate-related health solutions.

Develops skills in identifying climate change responses that effectively and equitably reduce population health risks. Offered: AWSpS.

[View course details in MyPlan: B HLTH 407](#)

### **B HLTH 411 Environments and Health (5) SSc/NSc**

Facilitates understanding of complex relationships between human health and living and working environments. Students identify ways that professionals, private citizens, and members of community groups can take actions to preserve the environment and protect human health.

[View course details in MyPlan: B HLTH 411](#)

### **B HLTH 412 Stories that Matter: Narratives of Illness and Healing (5) A&H**

Focuses on methods for reading, analyzing, eliciting and creating narratives of illness and healing, and using production of, and reflection on, these narratives to improve care, understand cultural perspectives on illness, connect with patients, and communicate with the broader public.

[View course details in MyPlan: B HLTH 412](#)

### **B HLTH 413 Pandemics, Plagues, and Fear (5) SSc**

Focuses on the social and emotional aspects surrounding plagues and pandemics by exploring the perceived risk of infectious disease and whether that fear is based in scientific evidence. Examines the science, stigma, and misunderstanding of various infectious

diseases including HIV, cholera, typhus, Ebola, Zika, and others. Course overlaps with: T HLTH 355.

[View course details in MyPlan: B HLTH 413](#)

### **B HLTH 420 Women's Global Health and Human Rights (5) SSc**

Uses a human rights framework and interdisciplinary approach to critically examine socio-ecological factors that impact women's health and gender equity around the world. Includes a variety of learning activities (e.g. film, debate, digital media; case studies) and a service learning project.

[View course details in MyPlan: B HLTH 420](#)

### **B HLTH 421 Food and Culture (5) A&H/SSc**

Through writing, video, storytelling, and creative exploration, examines the forces that shape our choices about food, and how food choices drive our economy, our health, our self-image, and our social connections.

[View course details in MyPlan: B HLTH 421](#)

### **B HLTH 422 Walking in Beauty: Native Art and Healing (5) SSc/A&H**

Explores the impact of social, economic, historic, and environmental disparities on American Indian/Alaska Native health, along with the healing effects of Native art, culture, pride, and community.

[View course details in MyPlan: B HLTH 422](#)

### **B HLTH 423 Global Health: Critical Perspectives (5) SSc**

Critical exploration into the emerging field of global health, focusing on: how historical and social forces shape health in the world; and global health practice and strategy across different contexts.

[View course details in MyPlan: B HLTH 423](#)

### **B HLTH 424 Root Issues in American Indian Health (5) SSc**

Provides an overview of biobehavior and psychosocial health issues in American Indian communities. Uses media created by Native people and expresses perspectives best understood in Native voices and images to explore how social determinants of health intersect and shape health conditions, health beliefs, healing practices, and delivery of care.

[View course details in MyPlan: B HLTH 424](#)

### **B HLTH 425 Health in a Developing Nation: Study Abroad (5) SSc**

Provides an overview of the health and health care challenges in a developing and low-income country. Addresses socio-cultural, environmental, economic, political, and ecological factors that influence health, illness, disability, and death as well as responses to health issues both within and outside the health sector. Includes study abroad.

[View course details in MyPlan: B HLTH 425](#)

### **B HLTH 426 Selected Topics in Health Humanities (5, max. 15) A&H**

Explores the intersection of the arts and humanities with health and healthcare by focusing on a particular health issue or artistic modality. Investigates how the arts illuminates and influences the human dimensions of health, illness, and care. Critically appraises competing images of health and illness in society.

[View course details in MyPlan: B HLTH 426](#)

### **B HLTH 427 Women, Culture, and Healing (5) A&H/SSc**

Interdisciplinary course explores the

inter-connectedness of identity, culture, healing. Addresses how women make meaning in their lives; how they are both shaped by and influence history, culture, and the world. Integrates humanities, social and health sciences to study cultural influences on women's health and healing.

[View course details in MyPlan: B HLTH 427](#)

**B HLTH 428 Adolescent Health (5) SSc**

Explores growth and development, challenges of adolescence, and how society, through its communities, health agencies and schools and media, identifies and responds to adolescent health care needs. Uses literature and media produced for adolescent and professional, reflective writing and interviews to examine issues related to promoting adolescent health.

[View course details in MyPlan: B HLTH 428](#)

**B HLTH 429 Global and Local Health Inequalities and Interventions (5) SSc**

Examines the conditions (political, economic, cultural, historical) that create and sustain disparities in health globally and locally. Critically examines health issues from multiple perspectives, exploring theories and movements of people creating social justice in health within frameworks that are both globally and locally situated. Offered: Sp.

[View course details in MyPlan: B HLTH 429](#)

**B HLTH 430 Health Policies and Politics in a Global Context (5) SSc**

Examines current and emerging global health challenges, their transnational determinants, and selected policies that address those challenges at varying national and global political contexts.

[View course details in MyPlan: B HLTH 430](#)

**B HLTH 431 Representations of Health Policy and Ethics in Film (5) A&H**

Examines representations of ethical and policy conflicts about health and health care in contemporary films. Explores competing images of bodies, workers, policies, and institutions used to frame these debates. Films supplemented by readings in film analysis, literature, narrative ethics, and health policy.

[View course details in MyPlan: B HLTH 431](#)

**B HLTH 435 Foundations and Principles of Health Education and Communication (5) SSc**

Introduction to the health education profession, associated competencies, theories and principles of health communication. Covers strategies and design principles for planning culturally tailored health education and communication for a variety of audiences, uses digital technology and social media for health promotion. Includes a service learning assignment. Course overlaps with: HSERV 343. Prerequisite: BHS 201.

[View course details in MyPlan: B HLTH 435](#)

**B HLTH 436 Introduction to Management and Leadership for Health Professionals (5)**

Introduction to management and leadership principles for health promotion specialists and other health professionals. Content develops skills and competencies for managing and leading health promotion programs and staff. Activities emphasize introspection and reflection, cultural humility, and address issues that influence the



implementation of health promotion programs. Prerequisite: BHS 201.

[View course details in MyPlan: B HLTH 436](#)

### **B HLTH 437 Program Planning & Strategies for Health Promotion (5)**

Introduction to program planning for health education specialists, including: needs and capacity assessment, strategy selection, and theoretical frameworks. Covers program implementation, management, and evaluation concepts. Assignments include developing a sample program plan and experiential, community-based activities. Prerequisite: BHS 201

[View course details in MyPlan: B HLTH 437](#)

### **B HLTH 438 Program Evaluation for Health Education & Promotion (5)**

Introduces competencies, theories and principles of program evaluation to health education and promotion specialists. Emphasizes cultural humility and respectful community engagement as frameworks for successful program evaluation. Explores and employs various evaluation methodologies, quantitative and qualitative. Includes a service learning assignment.

Prerequisite: BHS 201; BHS 300; B HLTH 437.

[View course details in MyPlan: B HLTH 438](#)

### **B HLTH 439 Health Policy and Advocacy (5)**

Examines how health policy and advocacy influence health outcomes of individuals and populations. Addresses policy process and the advocacy role of health education specialists in influencing local, state, and federal policy. Considers the impact of global

trends on public health practice, policy, and systems. Prerequisite: BHS 201.

[View course details in MyPlan: B HLTH 439](#)

### **B HLTH 440 Health of Military Veterans (5) SSc**

Intended for students less familiar with military and veteran issues and environments. Addresses the more common mental and physical health issues that are faced by today's veterans (primarily but not exclusively United States military veterans), their families, and communities.

[View course details in MyPlan: B HLTH 440](#)

### **B HLTH 441 Community Engagement in Health Interventions and Research: From Principles to Practice (5)**

Introduces principles and approaches of engaging and collaborating with communities when planning, implementing, and evaluating population-level interventions and research.

Includes fieldwork assignment with a community agency or organization so lessons of community engagement can be experienced.

[View course details in MyPlan: B HLTH 441](#)

### **B HLTH 442 Family Caregiving Across the Life Span (5) SSc**

Focuses on family caregiving across the lifespan. Examines issues, problems, and challenges family caregivers face while taking on this role across communities and illnesses. Supports health and social service providers in defining their roles within the context of family caregiving.

[View course details in MyPlan: B HLTH 442](#)

### **B HLTH 443 Assessment of Older Adults (5)**



Focuses on understanding the experience of aging and developing competence in assessing older adults and their needs. Studies and evaluates selected evidence-based functional, clinical, and psychosocial assessment instruments and approaches relevant to desired professional practice focus.

[View course details in MyPlan: B HLTH 443](#)

**B HLTH 444 Disaster Preparation: Promoting Community Resiliency (5)**

Analyzes community and individual vulnerabilities and assets that impact disaster outcomes. Examines hazard awareness, risk reduction, resiliency, and mitigation in disaster prevention planning and response. Addresses select assessment, planning, implementation, and evaluation efforts to enhance community and individual capacities. Also applies public health principles in disaster preparation to promote community health.

[View course details in MyPlan: B HLTH 444](#)

**B HLTH 460 Women, Rhetoric, and Healing (5) SSc/A&H**

Examines the history and theory of rhetoric, focusing on how women are represented in terms of persuasion, education, and relationship that might have not been privileged or acceptable in past centuries. Students gain confidence in their abilities to represent themselves as educated, compassionate humans.

[View course details in MyPlan: B HLTH 460](#)

**B HLTH 491 Special Topics in Health - Health & Life Sciences (1-10, max. 10) SSc**

Investigates a selected topic in Health and Life Sciences not covered in the

current core curriculum.

[View course details in MyPlan: B HLTH 491](#)

**B HLTH 492 Special Topics in Health - Health & Society (1-10, max. 10)**

Investigates a selected topic in Health and Society not covered in the current core curriculum.

[View course details in MyPlan: B HLTH 492](#)

**B HLTH 493 Special Topics in Health - Health Policy, Leadership, & Ethics (1-10, max. 10) SSc**

Investigates a selected topic in Health Policy, Leadership, & Ethics not covered in the current core curriculum.

[View course details in MyPlan: B HLTH 493](#)

**B HLTH 494 Special Topics in Health - Community Health Intervention & Practice (1-10, max. 10) SSc**

Investigates a selected topic in Community Health Intervention and Practice not covered in the current core curriculum.

[View course details in MyPlan: B HLTH 494](#)

**B HLTH 497 Selected Topics in Health (5, max. 15)**

Investigates a health-related topic to provide students with knowledge and skills to promote health and well-being. Evaluates individual, institutional, and/or social determinants of health to guide life and work practice.

[View course details in MyPlan: B HLTH 497](#)

**B HLTH 498 Special Project in Health (1-10, max. 10)**

Provides the opportunity to pursue a specific health-related project under faculty supervision. Project activities facilitate the attainment of

knowledge, skills, and practical experience that contribute to the advancement of professional career goals in a health field.

[View course details in MyPlan: B HLTH 498](#)

### **B HLTH 499 Undergraduate Research in Health Studies (1-10, max. 10)**

Provides the opportunity to engage in research-related activities under the supervision of a faculty mentor. Students gain understanding of theoretical and methodological approaches, practical research skills, and importance of scientific findings with respect to a selected area of inquiry in a health science field.

[View course details in MyPlan: B HLTH 499](#)

### **B HLTH 511 Curriculum Development in Nursing Education (5)**

Introduces curricular processes of development, implementation and evaluation within the context of clinical healthcare and academic nursing education settings. Examines contextual, philosophical, and theoretical approaches to education. Explores expectations of industry, students, profession, and stakeholders; tailoring curriculum to selected delivery modalities, settings, and roles to promote context-responsive nursing education. Offered: A.

[View course details in MyPlan: B HLTH 511](#)

### **B HLTH 512 Evaluation of Academic and Clinical Performance in Nursing and Healthcare (4)**

Examines concepts of assessment and evaluation of learning and performance relevant to nurse educators in academic and healthcare delivery settings.

Analyzes a range of assessment strategies for formative and summative evaluation. Applies program planning and evaluation principles to educational interventions in the academic and healthcare delivery settings. Course overlaps with: T NURS 512. Prerequisite: graduate standing or permission of instructor.

[View course details in MyPlan: B HLTH 512](#)

### **B HLTH 513 Theories and Methods of Teaching and Learning (5)**

Addresses instructional designs, teaching methodologies, skills, technologies, and theories of teaching and learning useful for implementation of nursing curriculum to diverse populations of student learners. Explores tools, resources, role development, tools for evaluation, and common issues faced by nurse educators in clinical healthcare and academic nursing education. Recommended: B HLTH 511. Offered: W.

[View course details in MyPlan: B HLTH 513](#)

### **B HLTH 514 Evaluation of Academic and Clinical Performance in Nursing and Healthcare (5)**

Examines learning assessment and program evaluation strategies useful to nurse educators in clinical healthcare and academic nursing education settings. Analyzes various approaches for formative and summative evaluation. Explores implications for short-, medium-, and long-term program evaluation in nursing curriculum. Recommended: B HLTH 511 and B HLTH 513. Offered: Sp.

[View course details in MyPlan: B HLTH 514](#)

### **B HLTH 515 Technology Enhanced Pedagogy (4)**

Explores how technology influences the development of teaching philosophy, lesson plans, and learning activities. Digital tools, simulation approaches, and other strategies in teaching and learning will be explored and applied to the transformation of learning activities from passive to active modalities. Course overlaps with: T NURS 515.

[View course details in MyPlan: B HLTH 515](#)

#### **B HLTH 540 Health Informatics (4)**

Explores how technology and health care intersect. Examines health care information systems, information standards/compliance, benchmarking/evaluation techniques, usability analysis, methods for data collection/transmission/analysis, and best practices for collaboration between health care providers and technologists in designing/selecting and delivering high quality, effective systems. Course overlaps with: T NURS 554.

[View course details in MyPlan: B HLTH 540](#)

#### **B HLTH 550 Society, Equity, Anatomy, Medicine, and Disease (5)**

Discusses the complex relationship between biology and society as students are given an overview to the major organs/body systems of the human body with an emphasis on how underlying social issues like identity, society, politics, and economics influence anatomical and physical outcomes such as chronic disease.

[View course details in MyPlan: B HLTH 550](#)

#### **B HLTH 597 Special Topics in Health (3-5, max. 10)**

Study and analysis of special topics in health. Topics vary each

quarter depending on curricular needs and interests of students and faculty.

Offered: AWSpS.

[View course details in MyPlan: B HLTH 597](#)

#### **B HLTH 598 Special Projects (1-6, max. 12)**

Scholarly inquiry with in-depth, focused analysis, culminating in a written product/report for dissemination.

Credit/no-credit only.

[View course details in MyPlan: B HLTH 598](#)

#### **B HLTH 600 Independent Research ([1-5]-, max. 15)**

Provides graduate students an opportunity to investigate and report on selected problems under the supervision of a graduate faculty member. Credit/no-credit only.

[View course details in MyPlan: B HLTH 600](#)

### **HEALTH STUDIES**

#### **BHS 201 Introduction to Public Health (5) NSc/SSc**

Provides an introduction to the principle of public health with exploration of the frameworks, tools, and evidence base that guides disease prevention and health promotion efforts. Consideration given to ethical and public policy issues important to ensuring the fair distribution of resources. Course overlaps with: TBIOMD 201.

[View course details in MyPlan: BHS 201](#)

#### **BHS 210 Community Health Promotion and Communication (5)**

Develops students' ability to read, write, and communicate with diverse audiences, while building knowledge pertinent to the appropriate selection of health interventions. Students will learn to use health information,

communication and promotion strategies, and behavior theories to develop and assess health interventions. Prerequisite: a minimum grade of 2.0 in BHS 201, which may be taken concurrently.

[View course details in MyPlan: BHS 210](#)

### **BHS 300 Principles of Health Research (5) NSc**

Develops competence in accessing, understanding, and evaluating scientific knowledge about population health. To improve students' ability to effectively advocate for public health improvements, emphasis placed on composition approaches that effectively synthesize and translate evidence. Prerequisite: BHS 201; and BHS 210, which may be taken concurrently. Offered: AWSp.

[View course details in MyPlan: BHS 300](#)

### **BHS 302 Social Dimensions of Health (5) SSc, DIV**

Addresses several main concepts in public health with an exploration of the links between: community, health, and culture; health equity and social justice; and the emerging field of global health. Prerequisite: minimum grade of 2.0 in BHS 201.

[View course details in MyPlan: BHS 302](#)

### **BHS 305 Introduction to Healthcare Systems, Policy, and Advocacy (5) SSc**

Introduces policies, organizations, and systems that have shaped the U.S. healthcare system. Examines financing healthcare, forms of insurance, and care delivery models through a comparative lens. Explores different healthcare systems globally and how advocacy plays a role in creating policy and systems change. Course overlaps with: T HLTH 440. Prerequisite: BHS 201.

[View course details in MyPlan: BHS 305](#)

### **BHS 403 Introduction to Epidemiology (5)**

Introduces principles, methods, and issues in public health practice-based epidemiology. Covers research designs and methods to describe disease occurrence and risk factor associations, and the role of epidemiologic data in health policy. Prerequisite: a minimum grade of 2.0 in BHS 201 and BHS 300; and a minimum grade of 1.7 in either B HLTH 215, B MATH 215, BIS 215, BIS 315, B BUS 215, STAT 220, QMETH 201 or STMATH 341. Offered: S.

[View course details in MyPlan: BHS 403](#)

### **BHS 496 Fieldwork in Health (5)**

Students participate in fieldwork experiences to explore career options and develop skills in population health practice. Students use critical reflection to synthesize knowledge and experiences from fieldwork and program courses to support their professional development. Prerequisite: a minimum grade of 2.0 in BHS 201; a minimum grade of 2.0 in BHS 210; a minimum grade of 2.0 in BHS 300; a minimum grade of 2.0 in BHS 302; a minimum grade of 2.0 in BHS 305; and a minimum grade of 2.0 in BHS 403 (which may be taken concurrently). Credit/no-credit only.

[View course details in MyPlan: BHS 496](#)

### **BHS 501 Social Justice and Ethics (5)**

Examines theories and principles of justice, and investigates how these have worked historically to shape health policy and ethics. Focuses on equity, racism, intersectionality, inclusion, and human rights, as well as developing an understanding of the societal structures conducive toward cultivating a just and healthy community.

[View course details in MyPlan: BHS 501](#)

**BHS 502 History, Frameworks, and Foundations of Community Health (5)**

Addresses the history of community health and provides foundations for inclusive strategies for working alongside communities. The frameworks and strategies for "doing" community health will be explored as well as factors that predispose some communities to greater health disparities than others.

[View course details in MyPlan: BHS 502](#)

**BHS 505 Critical Approaches to Health Communication and Promotion (5)**

Introduces theory and research that inform the development, implementation, and evaluation of varied forms of health communication for public health promotion. Students utilize critical, analytical, and applied strategies to develop a health communication intervention for a select audience served by partnering community organizations. Prerequisite: a minimum grade of 2.7 in BHS 501.

[View course details in MyPlan: BHS 505](#)

**BHS 510 Health Policy, Systems, and Advocacy (5)**

Provides an overview of health policies and policymaking environments that shape community health and social justice. Focuses on diverse advocacy strategies to improve those systems, and how to promote social justice principles and practices in policy-making and governance institutions. Prerequisite: a minimum grade of 2.7 in BHS 501.

[View course details in MyPlan: BHS 510](#)

**BHS 515 Social Justice Leadership and Management (5)**

Explores socially-responsible leadership strategies and the tools needed to build organizational capacity to employ inclusive policies and decision-making,

create and maintain respectful work environments, and challenge organizational barriers in health care founded in inequity at the interpersonal and systems level. Prerequisite: a minimum grade of 2.7 in BHS 501.

[View course details in MyPlan: BHS 515](#)

**BHS 520 Research Theory, Methods, and Practice (5)**

Examines the research methods used to develop the evidence which supports informed and socially-just community health practice. Situates health research in a historical and sociopolitical context while building skills for identifying, evaluating, and applying research to community health challenges.

Prerequisite: a minimum grade of 2.7 in BHS 501.

[View course details in MyPlan: BHS 520](#)

**BHS 521 Social Epidemiology (5)**

Provides a non-technical introduction to Social Epidemiology. Students will gain insight to the historical and theoretical underpinnings of the field, and will explore epidemiologic methods used to investigate the relations between social factors and health and health disparities. Prerequisite: a minimum grade of 2.7 in BHS 501; and a minimum grade of 2.7 in BHS 520.

[View course details in MyPlan: BHS 521](#)

**BHS 525 Program Planning, Implementation, and Evaluation (5)**

Provides approaches to community health planning, implementation, and evaluation using evidence-based practice. Students address community health and social justice issues by advocating and supporting those negatively impacted by inequity and injustice. Students synthesize concepts and theories from prior courses.

Prerequisite: a minimum grade of 2.7 in BHS 505; a minimum grade of 2.7 in BHS 520; and a minimum grade of 2.7 in BHS 521.

[View course details in MyPlan: BHS 525](#)

### **BHS 529 Capstone Experience I (5)**

Provides students with the skills and groundwork needed for their final capstone project where students synthesize and apply competencies and skills acquired during their program. The capstone is a community-engaged health project that addresses a social justice and equity focused issue. Prerequisite: a minimum grade of 2.7 in BHS 501; a minimum grade of 2.7 in BHS 502; a minimum grade of 2.7 in BHS 505; a minimum grade of 2.7 in BHS 510; a minimum grade of 2.7 in BHS 515; a minimum grade of 2.7 in BHS 520; and a minimum grade of 2.7 in BHS 521.

Credit/no-credit only. Offered: W.

[View course details in MyPlan: BHS 529](#)

### **BHS 530 Capstone Experience II (5)**

Completion of the capstone project demonstrating scholarly synthesis and application of program competencies and skills acquired as an MS Community Health and Social Justice student, culminating in a product for presentation and/or dissemination.

Prerequisite: a minimum grade of 2.7 in BHS 525; and a minimum grade of 2.7 in BHS 529. Credit/no-credit only. Offered: Sp.

[View course details in MyPlan: BHS 530](#)

## **NURSING**

### **B NURS 297 Building Skills in Health (1-3, max. 12)**

Emphasizes practical strategies to enhance student academic or life skills related to health and health topics. Covers fundamental concepts and skills

and provides opportunities for direct application and experiential learning. Credit/no-credit only.

[View course details in MyPlan: B NURS 297](#)

### **B NURS 360 Critical Reading and Information Literacy in Nursing (5)**

Focuses on critical reading, analysis, and source appraisal of scholarly knowledge. Builds skills in conducting systematic information searches of materials and evidence relevant to nursing practice. Basic introduction to reading of varied sources for understanding, academic writing, presentation skills, and reflective writing for academic and professional purposes.

[View course details in MyPlan: B NURS 360](#)

### **B NURS 420 Health Policy and the Organization of Healthcare (5) SSc**

Overview of health policy and the organization of healthcare systems including structure, financing, and regulation. Introduces roles and approaches for healthcare professionals to participate in organizational, community, governmental health policy activities. Strategies emphasized include collaboration, partnership, and teamwork to affect policy change and improve service access, delivery, and outcomes. Course overlaps with: T NURS 460.

[View course details in MyPlan: B NURS 420](#)

### **B NURS 421 Social Justice in Health (5) SSc, DIV**

Examines how multilevel societal factors influence differences in health and the provision of health services. Emphasizes impact of power and inequality on health of individuals, families, communities, and populations.



Considers principles and actions of social justice and public health ethics to encourage self-exploration of roles to advocate for social change. Course overlaps with: T NURS 407/THLEAD 407. Prerequisite: B NURS 360.

[View course details in MyPlan: B NURS 421](#)

### **B NURS 422 Team Leadership and Care Coordination (5)**

Focuses on the professional nurse's role as leader across the continuum of care. Builds skills for team leadership, delegation, and supervision; Applies interprofessional teamwork and communication skills to coordination of care transitions. Emphasizes identification, reflection and giving voice to self as leader. Course overlaps with: T NURS 420 and T NURS 440. Prerequisite: B NURS 360; and B NURS 460.

[View course details in MyPlan: B NURS 422](#)

### **B NURS 423 Ethical and Quality Nursing Care (5) SSc**

Explores strategies to promote ethical and quality patient-centered care as an individual provider, team member, and in collaboration with other disciplines. Provides a foundation of ethical frameworks and quality improvement approaches to support accountability for best practice. Course overlaps with: T NURS 410/THLEAD 410. Prerequisite: B NURS 360; and B NURS 460.

[View course details in MyPlan: B NURS 423](#)

### **B NURS 424 Population-Based Health in Community Practice (5) SSc**

Provides introduction to community health practice emphasizing nurses' roles in population-based care through

partnership with community agencies. Discusses socio-cultural, epidemiological, economic, and political influences on community health.

Explores the role of professional communication and collaboration in facilitating health promotion, disease prevention, public health, and social justice efforts. Prerequisite: BNURS 360; BNURS 460; BNURS 420; and BNURS 421.

[View course details in MyPlan: B NURS 424](#)

### **B NURS 460 Translating Scholarly Knowledge to Nursing Practice (5)**

Focuses on strategies for translating scholarly knowledge to practice. Continue to advance skills in evaluating and synthesis of scholarly literature. Attention to effective communication of evidence through written and oral formats. Prerequisite: minimum grade of 2.0 in B NURS 360.

[View course details in MyPlan: B NURS 460](#)

### **B NURS 497 Selected Topics in Nursing (1-12, max. 12)**

Investigates a selected topic in nursing and health care not already covered in the current curriculum.

[View course details in MyPlan: B NURS 497](#)

### **B NURS 498 Special Project in Nursing (1-12, max. 12)**

Further development, critical examination, and synthesis of nursing care in a specialized setting. Increasing depth of clinical practice, including care to groups and communities as clients, applying leadership skills, assessing problems affecting quality health care delivery, and applying research findings.



[View course details in MyPlan: B NURS 498](#)

**B NURS 499 Undergraduate Research (1-5, max. 12)**

Provides an opportunity to investigate a selected problem and to do an analysis and interpretation of the findings resulting from the investigation under supervision of a faculty member.

[View course details in MyPlan: B NURS 499](#)

**B NURS 504 Disparity and Social Justice in Healthcare (4)**

Analyzes how social, cultural, economic, and political factors related to the nature, distribution, and meaning of health and illness. Examines how social determinants contribute to health inequity and create health disparities. Emphasizes advocacy approaches to improve individual and population health outcomes and quality of healthcare system.

[View course details in MyPlan: B NURS 504](#)

**B NURS 505 Pathway Planning, Practicum, and Portfolio (1-6, max. 12)**

Critically examines advanced nursing roles in complex and inter-professional healthcare environments, including clinical practice, leadership, and education. Coaches students to analyze their current fit with the competencies required for advanced roles. Creates plans for elective coursework and practicum experiences to meet competencies of their selected advanced nursing role. Prerequisite: B NURS 501. Credit/no-credit only.

[View course details in MyPlan: B NURS 505](#)

**B NURS 506 Advanced Pathophysiology, Pharmacology and**

**Health Assessment (4)**

Focuses on expanding student knowledge of pathophysiology, pharmacology, and health assessment beyond the baccalaureate level. Course does not prepare student for independent practice as an Advanced Practice Registered Nurse (APRN), but provides advanced understanding of pathophysiology, pharmacological treatment possibilities, advanced health assessment, and reasoning.

[View course details in MyPlan: B NURS 506](#)

**B NURS 509 Ethics and Policy in Advanced Nursing Practice (4)**

Prepares advance practice nurses to understand, promote, and develop ethics and health policy in healthcare structures through the lens of the ANA Code of Ethics. Examines the organization of the US healthcare system with special attention to policy development. Explores the nature of ethical citizenship in a complex healthcare environment.

[View course details in MyPlan: B NURS 509](#)

**B NURS 520 Translational Research I (4)**

Analyzes conceptual, theoretical, and empirical knowledge as a basis for evidence-based practice. Examines methodological approaches to research applied to nursing practice. Evaluates the role of advanced practice nurses in research. First of a two-quarter sequence in translating research scholarship into nursing practice. Prerequisite: a course in statistics.

[View course details in MyPlan: B NURS 520](#)

**B NURS 522 Translational Research II (4)**

Examines and applies theories, frameworks, models, and processes in the context of organizational and system structures. Focus on analysis of how research evidence influences the delivery of quality, effective and efficient healthcare. Emphasis on skills in translating evidence into practice by engaging in aspects of program planning/evaluation and quality improvement initiatives. Prerequisite: a minimum grade of 2.7 in B NURS 520.

[View course details in MyPlan: B NURS 522](#)

**B NURS 525 Healthcare Systems Leadership for Advanced Roles (4)**

Personal and professional development for leadership in advanced nursing roles in health care systems and nursing education. Emphasis is on application of nursing, leadership and systems theory, critical thinking, and interprofessional collaboration to leadership roles that will improve population health, and quality and safety of care in organizations and systems.

[View course details in MyPlan: B NURS 525](#)

**B NURS 530 Advanced Practice Management and Administration in Healthcare Organizations (4)**

Examines management organizational theory and administration of healthcare organizations. Focuses on advanced management skills such as: strategic leadership, strategic planning, and preparing students to lead high performance teams in complex healthcare organizations.

[View course details in MyPlan: B NURS 530](#)

**B NURS 550 Seminar on Professional Issues in Nursing Education (3)**

Seminar on role and related professional issues in nursing education. Prerequisite: either NSG 545, B NURS 513, or T NURS 513; either NSG 546, B NURS 511, or T NURS 511. Offered: jointly with NSG 550/T NURS 550.

[View course details in MyPlan: B NURS 550](#)

**B NURS 590 Advanced Fieldwork and Capstone I (4)**

Provides substantive field experience in a setting of interest in alignment with competencies required for selected advanced nursing roles. Assists students in delineating master's level nursing practice roles and translating and integrating scholarship into practice knowledge. Development of the proposal for a capstone project. Prerequisite: B NURS 504 and B NURS 525. Credit/no-credit only. Offered: A.

[View course details in MyPlan: B NURS 590](#)

**B NURS 591 Advanced Fieldwork and Capstone II (4)**

Provides substantive field experience in a setting of interest in alignment with competencies required for a selected advanced nursing role. Assists students in delineating master's level nursing practice roles and translating and integrating scholarship into practice knowledge. Students will complete the practice portion of the capstone project and prepare literature review and initial project report. Prerequisite: BNURS 590. Credit/no-credit only. Offered: W.

[View course details in MyPlan: B NURS 591](#)

**B NURS 592 Capstone Seminar (3)**

Completion of capstone

project demonstrating scholarly analysis and application of evidence and theoretical concepts to practice, culminating in a product for presentation or dissemination. Reflection on and development of professional identity and self-presentation. Prerequisite: B NURS 591. Credit/no-credit only. Offered: Sp.

[View course details in MyPlan: B NURS 592](#)

**B NURS 597 Selected Topics in Nursing (1-5, max. 15)**

Course content and credits vary depending upon topic.

[View course details in MyPlan: B NURS 597](#)

## SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM)

### BIOLOGY

**B BIO 130 Introduction to Marine Life (5) NSc**

Identification of invertebrates, fish, mammals, and birds of the Salish Sea with a focus on their anatomy, adaptations, and roles in the ecosystem. Exploration of unique environmental conditions that allow life to thrive in the Salish Sea, including anthropogenic impacts on local species.

[View course details in MyPlan: B BIO 130](#)

**B BIO 180 Introductory Biology I (5) NSc**

For students intending to take advanced courses in the biological sciences or enroll in pre-professional programs. Mendelian genetics, evolution, biodiversity of life forms, ecology, conservation biology. First course in a three-quarter series (B BIO 180, B BIO 200, B BIO 220). Maximum 15 credits allowed between B BIO 180; B BIO 200; B BIO 220 (or equivalents); and BIOL 240.

Course equivalent to: BIOL 180. Course overlaps with: T BIOL 120.

[View course details in MyPlan: B BIO 180](#)

**B BIO 200 Introductory Biology II (5) NSc**

For students intending to take advanced courses in the biological sciences or enroll in pre-professional programs. Metabolism and energetics, structure and function of biomolecules, cell structure and function, animal development. Second course in a three-quarter series (B BIO 180, B BIO 200, B BIO 220). Maximum 15 credits allowed between B BIO 180; B BIO 200; B BIO 220 (or equivalents); and BIOL 240. Course equivalent to: BIOL 200. Course overlaps with: T BIOL 130. Prerequisite: B BIO 180; B CHEM 143; and B CHEM 153, which may be taken concurrently.

[View course details in MyPlan: B BIO 200](#)

**B BIO 220 Introductory Biology III (5) NSc**

For students intending to take advanced courses in the biological sciences or enroll in pre-professional programs. Animal physiology, plant development and physiology. Final course in a three-quarter series (B BIO 180, B BIO 200, B BIO 220). Maximum 15 credits allowed between B BIO 180; B BIO 200; B BIO 220 (or equivalents); and BIOL 240. Course equivalent to: BIOL 220. Course overlaps with: T BIOL 140. Prerequisite: B BIO 200.

[View course details in MyPlan: B BIO 220](#)

**B BIO 230 Study Abroad: Biology (1-5, max. 15) NSc**

Lower-division biology courses for which there are no direct University of Washington Bothell equivalents, taken through a University of Washington study

abroad program.

[View course details in MyPlan: B BIO 230](#)

**B BIO 231 Genes, Genomes and Heredity (5) SSc/NSc**

Explores basic concepts of heredity, including DNA structure and function, Mendel's rules of inheritance, and human genetic diseases. Goals include understanding current issues in the field, including genetic screening and testing, DNA fingerprinting and forensic analysis, the genetic basis of cancer, and genetically modified organisms. Offered: jointly with BISSTS 231.

[View course details in MyPlan: B BIO 231](#)

**B BIO 232 Embryos, Genes and Reproductive Technology (5) SSc/NSc**

Explores human reproduction, embryonic development, and genetic technology. Explores the increasing use of technology used in reproduction and related issues (e.g. in vitro fertilization, genetic selection of embryos, cloning, stem cells). Offered: jointly with BISSTS 232.

[View course details in MyPlan: B BIO 232](#)

**B BIO 233 Cancer: Biology, Risk, and Treatment (5) NSc**

Addresses the basic biology of cancer, genetic and environmental risk factors, and treatment options. Cancer is the second leading cause of death in the U.S, but improvements in detection and treatment are changing the way we think about and live with it. Course overlaps with: B HLTH 225. Offered: Sp.

[View course details in MyPlan: B BIO 233](#)

**B BIO 240 Fundamentals of Cellular Biology for Nursing and Allied Health (5) NSc**

Survey of cell biology, including macromolecules, cellular metabolism and reproduction, genetics, molecular biology, and evolution, especially as they

apply to organisms. Lectures and weekly lab exercises. Intended for students pursuing nursing or allied health degrees; not intended for biology majors. Prerequisite: minimum grade of 2.0 in either B CHEM 115 or B CHEM 143/B CHEM 144.

[View course details in MyPlan: B BIO 240](#)

**B BIO 241 Human Anatomy and Physiology I for Nursing and Allied Health (6) NSc**

First in a two-quarter sequence. Structure and function of the human body, specifically the integumentary, skeletal, muscular, and nervous systems. Uses models, skeletons, microscope slides, photographs, and animal dissections. Intended for students pursuing nursing or allied health degrees; not intended for biology majors. Prerequisite: minimum grade of 2.0 in either B BIO 220 or B BIO 240.

[View course details in MyPlan: B BIO 241](#)

**B BIO 242 Human Anatomy and Physiology II for Nursing and Allied Health (6) NSc**

Second in a two-quarter sequence. Structure and function of the human body, specifically the endocrine, respiratory, cardiovascular, digestive, urinary, and reproductive systems. Uses models, microscope slides, photographs, and animal dissections. Intended for students pursuing nursing or allied health degrees; not intended for biology majors. Prerequisite: B BIO 241.

[View course details in MyPlan: B BIO 242](#)

**B BIO 285 Seminar in Biology (3, max. 9) SSc/NSc**

Supervised readings and group discussion on a specific area of biology. Topics vary with instructor. Offered:

jointly with BIS 285.

[View course details in MyPlan: B BIO 285](#)

**B BIO 293 Special Topics in Biology (2-5, max. 15) NSc**

Explores selected topics in biology.

[View course details in MyPlan: B BIO 293](#)

**B BIO 305 The Science and Ethics of Stem Cells (5) NSc/SSc**

Combines study of stem cell biology with discussion of bioethical issues surrounding stem cell research; include laboratory sessions. Examines media portrayals of stem cell science and claims of proponents and opponents of stem cell research. Offered: A.

[View course details in MyPlan: B BIO 305](#)

**B BIO 310 Brain and Behavior (5) NSc**

Interdisciplinary exploration of the biological basis of human behavior, including altruism, aggression, learning, communication, and mating. Draws on neuroanatomy, neuroscience, endocrinology, ethology, genetics, and sociobiology to examine how the brain influences, and is influenced, by behavior. Readings include primary literature as well as popular publications. Course overlaps with: TPSYCH 260/T BIOL 260. Offered: Sp.

[View course details in MyPlan: B BIO 310](#)

**B BIO 320 Behavioral Neuroscience (5) NSc**

An exploration of how brain cells and their connections form functional neural networks to control and modulate behavior in both humans and non-human animals. Takes both bottom-up and top-down approaches to understand how the nervous system facilitates, regulates, and modulates sensation and perception, muscle movement, vision, learning and memory, wanting and liking, drug addiction, and belief. Course equivalent

to: T BIOL 412. Course overlaps with: NEUSCI 302. Prerequisite: B BIO 220. Offered: W.

[View course details in MyPlan: B BIO 320](#)

**B BIO 330 Marine Biology (5) NSc**

Investigates how marine life adapts to ocean habitats from deep-sea vents to tropical coral reefs by exploring animal behavior, physiology, evolution, and ecology. Fieldtrips required, including an overnight to Friday Harbor Lab.

Prerequisite: minimum grade of 2.0 in either B BIO 180 or BIOL 180; recommended: B BIO 200, B BIO 220.

[View course details in MyPlan: B BIO 330](#)

**B BIO 335 Salmon and Society (5) NSc/SSc**

Exploration of the complexities of salmon biology, management, and conservation from local to international scales, and the cultural, historical, and political contexts in which management decisions are made. Prerequisite: B BIO 180. Offered: A.

[View course details in MyPlan: B BIO 335](#)

**B BIO 340 Introduction to Bioinformatics (5, max. 10) NSc, RSN**

Develops confidence in incorporating computational methods into research. Introduces topics such as DNA sequence analysis alongside elements of the python programming language. Emphasizes student-directed projects that work with real data to address open-ended biological questions. Prerequisite: B BIO 180. Offered: W.

[View course details in MyPlan: B BIO 340](#)

**B BIO 351 Principles of Anatomy and Physiology I (5) NSc**

Examines basic principles of anatomy and physiology at the cellular, tissue, and organismal levels. Considers adaptations



in a broad range of animals, including humans, covering homeostasis, endocrinology, cellular neuroscience, higher brain function, sensory systems, and reproduction. Prerequisite: B BIO 220. Offered: AW.

[View course details in MyPlan: B BIO 351](#)

### **B BIO 352 Principles of Anatomy and Physiology II (5) NSc**

Examines anatomy and physiology at the cellular, tissue, and organismal levels. Considers adaptations in a range of animals, including humans, covering skeletal systems, muscle physiology, cardiovascular systems, respiration, osmoregulation, digestion, and energy balance. Prerequisite: B BIO 220 or BIOL 220; recommended: B BIO 351. Offered: WSp.

[View course details in MyPlan: B BIO 352](#)

### **B BIO 355 Behavioral Endocrinology (5) NSc**

Explores how endocrine and neural systems interact to modulate complex behavior. Takes a comparative approach, covering the endocrine and neural bases of behavior in multiple vertebrate taxa. Topics are introduced in lecture then explored through student-led discussion of primary and secondary literature. Prerequisite: B BIO 200.

[View course details in MyPlan: B BIO 355](#)

### **B BIO 360 Introduction to Genetics (5) NSc**

Explores principles of heredity including gene transmission, classical genetics, mutation, chromosomal mapping, and molecular genetics, including recombinant DNA and DNA analysis. Prerequisite: minimum grade of 2.0 in B BIO 200.

[View course details in MyPlan: B BIO 360](#)

### **B BIO 364 Biochemistry I (5) NSc**

First quarter of biochemistry covering macromolecules, including proteins and enzymes. Includes chemical structure of biological molecules and their interactions, how cells synthesize and degrade biological molecules, and how these activities are organized.

Emphasizes how biochemical processes interrelate. Prerequisite: either both B BIO 200 and B CHEM 237, or B CHEM 239.

Offered: jointly with B CHEM 364; A.

[View course details in MyPlan: B BIO 364](#)

### **B BIO 365 Biochemistry II (5)**

Second quarter of biochemistry, covering chemistry of major metabolic pathways, including glycolysis, the Krebs cycle, electron transport, and metabolism of amino acids and fatty acids. Prerequisite: B BIO 364/B CHEM 364. Offered: jointly with B CHEM 365; W.

[View course details in MyPlan: B BIO 365](#)

### **B BIO 366 Biochemistry Laboratory (3) NSc**

Prerequisite: a minimum grade of 2.0 in B BIO 364/B CHEM 364, which may be taken concurrently. Offered: jointly with B CHEM 366.

[View course details in MyPlan: B BIO 366](#)

### **B BIO 370 Microbiology (5) NSc**

Explores microbiology, including microbial diversity, survival strategies, metabolism, habitats, ecology, and evolution. Covers methods used to study microbes, and the impact of microorganisms on engineering and human health. Includes laboratory. Prerequisite: B BIO 200; and either CHEM 162 or B CHEM 163. Offered: A.

[View course details in MyPlan: B BIO 370](#)

### **B BIO 372 Stem Cells (5)**

Explores stem cell biology, molecular and cellular research techniques,

disease pathology, and stem cell therapies. Emphasis on primary literature and student led projects. Prerequisite: B BIO 200 and B BIO 220. Offered: W.

[View course details in MyPlan: B BIO 372](#)

### **B BIO 373 Medical Microbiology (5) NSc**

Explores the medical aspects of microbiology, including disease mechanisms, transmission and control, human defense mechanisms, and antimicrobial drugs. Reviews the structures, genetics, and functions of microorganisms. Features experiential learning via a series of lab activities. Prerequisite: B BIO 220; and either B CHEM 163 or CHEM 162.

[View course details in MyPlan: B BIO 373](#)

### **B BIO 375 Molecular Biology (5)**

Molecular biology, focusing on structure and synthesis of informational macromolecules. Includes DNA replication and repair, chromosome structure, synthesis and processing of RNA and proteins, regulatory RNAs, amino acid metabolism, and protein trafficking and degradation. Prerequisite: B BIO 200; and either B BIO 360, B BIO 364/B CHEM 364, GENOME 361, or BIOC 405. Offered: jointly with B CHEM 375; Sp.

[View course details in MyPlan: B BIO 375](#)

### **B BIO 380 Cell Biology (5) NSc**

Studies the biology of the cell, cell structure and organization, and cellular function. Covers membrane systems, information flow within cells, cell recognition, cell signaling, and malignancy, emphasizing molecular approaches to the study of cells. Prerequisite: either B BIO 360, B BIO 364/B CHEM 364, or B BIO375/B CHEM 375.

[View course details in MyPlan: B BIO 380](#)

### **B BIO 383 Bioinformatics (5) NSc**

A project-based introduction to fundamental topics in Bioinformatics. Students develop a working knowledge of computational approaches to analyze biological datasets, including DNA, RNA and protein sequence datasets. Includes topics such as: sequence analysis, alignment, phylogeny, comparative genomics, and biological network analysis. Offered: jointly with CSS 383; W.

[View course details in MyPlan: B BIO 383](#)

### **B BIO 385 Animal Behavior (5) NSc**

Examines the ultimate (evolutionary) and proximate (mechanistic) causes of animal behavior. Topics are introduced in lecture, explored through student-led discussion of primary literature, and put into action with student collection of behavioral data at the zoo and in the field. Course overlaps with: PSYCH 408/BIOL 408. Prerequisite: B BIO 220. Offered: W.

[View course details in MyPlan: B BIO 385](#)

### **B BIO 390 Diseases and Disorders of the Nervous System (5) NSc**

Examines selected nervous system diseases and disorders representative of different types of neurological and neuropsychiatric dysfunction. Develops historical perspectives of these conditions to compare with current understanding of the etiology (causation), underlying mechanisms (structural, pathophysiological, neurochemical), and related treatments.

Supports understanding of the process of scientific investigation and involved limitations. Course overlaps with: NEUSCI 402 and NEUSCI 404.

Prerequisite: B BIO 220; recommended: B BIO 351 or equivalent.

[View course details in MyPlan: B BIO 390](#)



**B BIO 393 Special Topics in Biology (2-5, max. 20)**

Explores special topics in biology.

[View course details in MyPlan: B BIO 393](#)

**B BIO 394 Special Topics in Neuroscience (5, max. 15) NSc**

Allows students to delve into depth in a specific area of neural science through the discussion of peer-reviewed scientific articles. Specific topics vary by instructor and iteration. Prerequisite: B BIO 220; recommended: B BIO 351.

Offered: AWSp.

[View course details in MyPlan: B BIO 394](#)

**B BIO 430 Study Abroad: Advanced Biology (1-5, max. 15) NSc**

Upper-division biology courses for which there are no direct University of Washington Bothell equivalents, taken through a University of Washington study abroad program.

[View course details in MyPlan: B BIO 430](#)

**B BIO 460 Developmental Biology (5) NSc**

Studies the biology of embryonic development. Covers major features of development of vertebrates and invertebrates.

Topics include: morphological features of early development (fertilization, cleavage, gastrulation, establishment of the body plan), cell determination, pattern formation, molecular biology of early embryos, and introduction to evolutionary developmental biology.

Course equivalent to: BIOL 411.

Prerequisite: B BIO 360. Offered: Sp.

[View course details in MyPlan: B BIO 460](#)

**B BIO 466 Evolution (5) NSc, RSN**

Explores evolution using experiments and simple algebraic models, explains processes underlying observed patterns (e.g., evolution of HIV), predicts

outcomes (e.g., health and crop management), and depicts and interprets relationships. Prerequisite: B BIO 180.

[View course details in MyPlan: B BIO 466](#)

**B BIO 470 Microbiology II: Microbial Interactions (5)**

Covers microbial genetics and genomics, methods in microbial ecology and evolution, virology, symbiosis, pathogenesis, evolution of cooperation and virulence. Requires reading primary literature in microbiology and evolution. Includes development of scholarship and grant writing skills in microbiology. Prerequisite: B BIO 370. Offered: W.

[View course details in MyPlan: B BIO 470](#)

**B BIO 471 Plant Ecology (5) NSc**

Explores the evolution and ecology of plants, starting at the scale of a plant individual to populations to community interactions to ecosystem dynamics. Topics covered in lecture and explored through student-led discussion of primary literature. Includes student collected field and greenhouse data. Prerequisite: B BIO 180. Offered: Sp.

[View course details in MyPlan: B BIO 471](#)

**B BIO 480 Neurobiology (5) NSc**

Studies the biological aspects of the brain and nervous systems, and the effects of these systems on morphology, physiology, and behavior. Advanced concepts in neurophysiology, cell/molecular neuroscience, neural development, and neuropathology. Prerequisite: minimum grade of 2.0 in B BIO 351. Offered: Sp.

[View course details in MyPlan: B BIO 480](#)

**B BIO 485 Advanced Seminar in Biology (1-3, max. 6)**

Supervised readings and group discussion on a specific area of biology.

Topics Vary. Prerequisite: B BIO 220.

[View course details in MyPlan: B BIO 485](#)

### **B BIO 495 Investigative Biology (5) NSc, RSN**

Provides research experience in Biology.

Topic and research methods vary.

Prerequisite: B BIO 220; and either B MATH 215, B HLTH 215, or STMATH 341.

Offered: AWSpS.

[View course details in MyPlan: B BIO 495](#)

### **B BIO 498 Independent Study in Biology (1-5, max. 15)**

independent study on a topic or area agreed upon by the instructor and student. Prerequisite: B BIO 220.

[View course details in MyPlan: B BIO 498](#)

### **B BIO 499 Undergraduate Research in Biology (1-5, max. 20)**

Undergraduate research on a topic agreed upon by the instructor and student. Prerequisite: B BIO 220.

[View course details in MyPlan: B BIO 499](#)

## **CHEMISTRY**

### **B CHEM 110 Chemistry and Life (5) NSc**

Survey course exploring the chemistry of life. Topics include the molecular nature of all life, chemical processes of living organisms, chemistry of food, air, water, nutrition, pollution, genetic engineering, and drug design. Material includes basic chemical principles related to explored topics. No prior chemistry knowledge assumed. Offered: jointly with BST 110; A.

[View course details in MyPlan: B CHEM 110](#)

### **B CHEM 115 Introductory Chemistry I (5) NSc, RSN**

Covers atomic nature of matter, chemical reactions, stoichiometry, solution chemistry, atomic theory, chemical bonding, gas laws, and acid/base

reactions. First in a three-quarter sequence designed for non-majors or students interested in pursuing a health studies field like nursing or public health. Includes laboratory. Maximum 6 credits allowed between B CHEM 115; B CHEM 143; B CHEM 144; CHEM 120; CHEM 142; CHEM 143; and CHEM 145. Course equivalent to: CHEM 120. Course overlaps with: CHEM 142; CHEM 143; and CHEM 145. Offered: AW.

[View course details in MyPlan: B CHEM 115](#)

### **B CHEM 139 Preparation for General Chemistry (5) NSc**

Provides preparation for taking the yearlong General Chemistry sequence. Covers the language of chemistry and develops proficiency and skills in mathematical concepts that are applied to the quantitative topics in chemistry. Offered: A.

[View course details in MyPlan: B CHEM 139](#)

### **B CHEM 143 General Chemistry I (4) NSc, RSN**

Covers atomic nature of matter, chemical reactions, stoichiometry, solution chemistry, atomic theory, chemical bonding, molecular geometry and structure. First of a three-quarter sequence for science and engineering majors. Maximum 6 credits allowed between B CHEM 115; B CHEM 143; B CHEM 144; CHEM 120; CHEM 142; CHEM 143; and CHEM 145. Course overlaps with: CHEM 142. Prerequisite: either a minimum grade of 2.0 in B CHEM 139, a minimum grade of 2.5 in either B MATH 122, B MATH 123, STMATH 124, STMATH 125, or STMATH 126, a minimum score of 300 on the MTHDSP directed self-placement test, a score of 145-153 on the

MPT-AS test, or a minimum score of 151 on the MPT-GS test; recommended: High School Chemistry. Offered: AW.

[View course details in MyPlan: B CHEM 143](#)

### **B CHEM 144 General Chemistry Lab I (2) NSc, RSN**

Laboratory experience designed to complement the knowledge gained in B CHEM 143. Emphasizes collection and analysis of laboratory results in a well prepared laboratory notebook. Maximum 6 credits allowed between B CHEM 115; B CHEM 143; B CHEM 144; CHEM 120; CHEM 142; CHEM 143; and CHEM 145. Prerequisite: minimum grade of 2.0 in B CHEM 143, which may be taken concurrently. Offered: AW.

[View course details in MyPlan: B CHEM 144](#)

### **B CHEM 153 General Chemistry II (4) NSc, RSN**

Covers energy, enthalpy, thermochemistry, gas laws, properties of solutions, solids, entropy, free energy, spontaneity, and organic chemistry. Second of a three-quarter sequence for science and engineering majors. Maximum 6 credits allowed between B CHEM 153; B CHEM 154; CHEM 152; CHEM 153; and CHEM 155. Course overlaps with: CHEM 152. Prerequisite: minimum grade of 2.0 in B CHEM 143. Offered: WSp.

[View course details in MyPlan: B CHEM 153](#)

### **B CHEM 154 General Chemistry Lab II (2) NSc, RSN**

Laboratory experience designed to complement the knowledge gained in B CHEM 153. Continued emphasis placed on quality results with the addition of writing sections of a standard lab report.

Maximum 6 credits allowed between B CHEM 153; B CHEM 154; CHEM 152; CHEM 153; and CHEM 155.

Prerequisite: minimum grade of 2.0 in B CHEM 144; minimum grade of 2.0 in B CHEM 153, which may be taken concurrently. Offered: WSp.

[View course details in MyPlan: B CHEM 154](#)

### **B CHEM 157 General Learning Strategies for General Chemistry (1, max. 3)**

Provides practice in using quantitative tools and techniques introduced during the general chemistry lecture. Allows students to sharpen the reasoning necessary for use in science courses. Includes questions, lecture, and text review, and additional practice problems. Corequisite: either B CHEM 142, B CHEM 152, or B CHEM 162. Offered: AWSpS.

[View course details in MyPlan: B CHEM 157](#)

### **B CHEM 163 General Chemistry III (4) NSc, RSN**

Covers chemical kinetics, chemical equilibrium, acids and bases, aqueous equilibria, transition metals and coordination chemistry, organic chemistry, biochemistry, and electrochemistry. Third of a three-quarter sequence for science and engineering majors. Maximum 6 credits allowed between CHEM 162; CHEM 165; B CHEM 163; and B CHEM 164. Course overlaps with: CHEM 162.

Prerequisite: minimum grade of 2.0 in B CHEM 153. Offered: SpS.

[View course details in MyPlan: B CHEM 163](#)

### **B CHEM 164 General Chemistry Lab III (2) NSc, RSN**

Laboratory experience designed to

complement the knowledge gained in B CHEM 163. Continued emphasis placed on quality results with the writing of standard lab reports. Maximum 6 credits allowed between CHEM 162; CHEM 165; B CHEM 163; and B CHEM 164. Course overlaps with: CHEM 162.

Prerequisite: minimum grade of 2.0 in B CHEM 154; minimum grade of 2.0 in B CHEM 163, which may be taken concurrently. Offered: SpS.

[View course details in MyPlan: B CHEM 164](#)

### **B CHEM 237 Organic Chemistry I**

#### **(4) NSc**

Structure, nomenclature, reactions, and synthesis of the main types of organic compounds. No organic laboratory accompanies this course. First in a three quarter sequence. B CHEM 237, B CHEM 238, and B CHEM 239 (or equivalents) must be completed in sequence. Course equivalent to: CHEM 237. Course overlaps with: CHEM 220; CHEM 223; CHEM 257; and T CHEM 251. Prerequisite: minimum of a 2.0 in either B CHEM 162 or B CHEM 163 and B CHEM 164.

[View course details in MyPlan: B CHEM 237](#)

### **B CHEM 238 Organic Chemistry II**

#### **(4) NSc**

Further discussion of physical properties and transformations of organic molecules, especially aromatic and carbonyl compounds. Second in a three-quarter sequence. B CHEM 237, B CHEM 238, and B CHEM 239 (or equivalents) must be completed in sequence. Course equivalent to: CHEM 238. Course overlaps with: CHEM 258.

Prerequisite: minimum grade of 1.7 in B CHEM 237.

[View course details in MyPlan: B CHEM 238](#)

### **B CHEM 239 Organic Chemistry III**

#### **(4) NSc**

Third course for students planning to take three quarters of organic chemistry. Polyfunctional compounds and natural products, lipids, carbohydrates, amino acids, proteins, and nucleic acids. Includes introduction to membranes, enzyme mechanisms, prosthetic groups, macromolecular conformations and supramolecular architecture. B CHEM 237, B CHEM 238, and B CHEM 239 (or equivalents) must be completed in sequence. Course equivalent to: CHEM 239. Course overlaps with: CHEM 221; CHEM 224; CHEM 259; and T CHEM 271. Prerequisite: minimum grade of 1.7 in B CHEM 238.

[View course details in MyPlan: B CHEM 239](#)

### **B CHEM 241 Organic**

#### **Chemistry Laboratory I (3) NSc**

Introduction to organic laboratory techniques. Preparation of representative compounds. Designed to be taken with B CUSP 238. Course equivalent to: CHEM 241. Course overlaps with: CHEM 261. Prerequisite: minimum grade of 1.7 in B CHEM 237; B CHEM 238, which may be taken concurrently.

[View course details in MyPlan: B CHEM 241](#)

### **B CHEM 242 Organic Chemistry Laboratory II (3) NSc**

Preparations and qualitative organic analysis. Designed to be taken with B CHEM 239. Course equivalent to: CHEM 242. Course overlaps with: CHEM 262. Prerequisite: minimum grade of 1.7 in both B CHEM 238 and B CHEM 241; B CHEM 239, which may be taken

concurrently.

[View course details in MyPlan: B CHEM 242](#)

**B CHEM 293 Special Topics in Chemistry (2-5, max. 15)**

Explores selected topics in chemistry.

[View course details in MyPlan: B CHEM 293](#)

**B CHEM 294 Chemistry Seminar (1, max. 2)**

Introduces incoming Chemistry majors to research in chemistry and related disciplines and informs majors about career options for those who obtain a degree in chemistry. Course overlaps with: CHEM 190. Credit/no-credit only. Offered: W.

[View course details in MyPlan: B CHEM 294](#)

**B CHEM 310 Molecular Modeling (5)**

Introduces students to the most widely used techniques in the field of molecular modeling and computational chemistry. We will spend each week studying a different molecular modeling method, including the theory that underlies the method and how to apply it to relevant research questions in areas such as drug discovery, biochemistry, protein structure prediction, and cheminformatics. Course overlaps with: BIOEN 488. Prerequisite: B BIO 364/B CHEM 364.

[View course details in MyPlan: B CHEM 310](#)

**B CHEM 312 Inorganic Chemistry I (3) NSc, RSN**

The first in a two-quarter course sequence in inorganic chemistry for students majoring in chemistry and related subjects like biochemistry and chemical engineering. Concepts include bonding, atomic-molecular

structure, symmetry and group theory, oxidation-reductions, and acid-base chemistry in aqueous/non-aqueous media. Prerequisite: minimum 2.0 grade in B CHEM 238. Offered: W.

[View course details in MyPlan: B CHEM 312](#)

**B CHEM 313 Inorganic Chemistry II (3) NSc, RSN**

The second of a two-quarter course sequence in inorganic chemistry for majors in chemistry and chemical engineering. Includes transition metal chemistry, along with structure and reactivity of organometallic compounds, solid state chemistry, and an introduction to materials chemistry. Prerequisite: a minimum grade of 2.0 in B CHEM 312. Offered: Sp.

[View course details in MyPlan: B CHEM 313](#)

**B CHEM 315 Quantitative Environmental Analysis (5) NSc, RSN**

Covers fundamental principles for making quantitative chemical measurements including techniques in stoichiometry, spectroscopy, chromatography, statistics, and potentiometric methods. Includes laboratory. Prerequisite: a minimum grade of 2.0 in B CHEM 164. Offered: A.

[View course details in MyPlan: B CHEM 315](#)

**B CHEM 316 Quantitative Chemical Analysis and Equilibrium Chemistry (4) NSc, RSN**

In this course students will learn the principles of quantitative chemical methods, chemical equilibrium and basic statistics. Students will also learn about applications and career opportunities in analytical chemistry in the fields of environmental, forensic and industrial

chemistry. Course overlaps with: CHEM 321. Prerequisite: either a minimum grade of 2.0 in B CHEM 163 and a minimum grade of 2.0 in B CHEM 164, or a minimum grade of 2.0 in CHEM 162; recommended: B CHEM 237 and STMATH 341. Offered: A.

[View course details in MyPlan: B CHEM 316](#)

### **B CHEM 317 Quantitative Environmental Analysis Lab (3) NSc, RSN**

In this course students will develop lab skills and techniques for quantitative analysis using real environmental samples. Students will learn techniques for preparation and chemical analysis of environmental samples and use statistical methods to interpret data. Students will continue developing scientific communication skills (oral and written). Prerequisite: either a minimum grade of 2.0 in B CHEM 163 and a minimum grade of 2.0 in B CHEM 164, or a minimum grade of 2.0 in CHEM 162 and a minimum grade of 2.0 in B CHEM 316, which may be taken concurrently; recommended: B CHEM 237 and STMATH 341. Offered: ASp.

[View course details in MyPlan: B CHEM 317](#)

### **B CHEM 350 Atmospheric Chemistry and Air Pollution (5) NSc, RSN**

Examines the chemistry of the atmosphere and the relationship between air pollution sources, air quality, and human health from both a scientific and policy perspective. Course overlaps with: ATMOS 458/CHEM 458. Prerequisite: either a minimum grade of 2.0 in B CHEM 163 and a minimum grade of 2.0 in B CHEM 164, or a minimum grade of 2.0 in CHEM 162. Offered: W.

[View course details in MyPlan: B CHEM 350](#)

### **B CHEM 364 Biochemistry I (5) NSc**

First quarter of biochemistry covering macromolecules, including proteins and enzymes. Includes chemical structure of biological molecules and their interactions, how cells synthesize and degrade biological molecules, and how these activities are organized.

Emphasizes how biochemical processes interrelate. Prerequisite: either both B BIO 200 and B CHEM 237, or B CHEM 239.

Offered: jointly with B BIO 364; A.

[View course details in MyPlan: B CHEM 364](#)

### **B CHEM 365 Biochemistry II (5)**

Second quarter of biochemistry, covering chemistry of major metabolic pathways, including glycolysis, the Krebs cycle, electron transport, and metabolism of amino acids and fatty acids. Prerequisite: B BIO 364/B CHEM 364. Offered: jointly with B BIO 365; W.

[View course details in MyPlan: B CHEM 365](#)

### **B CHEM 366 Biochemistry Laboratory (3) NSc**

Prerequisite: a minimum grade of 2.0 in B BIO 364/B CHEM 364, which may be taken concurrently. Offered: jointly with B BIO 366.

[View course details in MyPlan: B CHEM 366](#)

### **B CHEM 375 Molecular Biology (5)**

Molecular biology, focusing on structure and synthesis of informational macromolecules. Includes DNA replication and repair, chromosome structure, synthesis and processing of RNA and proteins, regulatory RNAs, amino acid metabolism, and protein trafficking and degradation. Prerequisite:



B BIO 200; and either B BIO 360, B BIO 364/B CHEM 364, GENOME 361, or BIOC 405. Offered: jointly with B BIO 375; Sp.  
[View course details in MyPlan: B CHEM 375](#)

#### **B CHEM 401 Physical Chemistry I (4) NSc, RSN**

The first in a 2-course physical chemistry sequence. Topics include thermodynamics and its application to chemical systems, properties of ideal and real solutions and systems at equilibrium. Course overlaps with: CHEM 452. Prerequisite: a minimum grade of 2.0 in B PHYS 123; a minimum grade of 2.0 in STMATH 126; and a minimum grade of 2.0 in B CHEM 237. Offered: A.

[View course details in MyPlan: B CHEM 401](#)

#### **B CHEM 402 Physical Chemistry II (4) NSc, RSN**

The second in a 2-course physical chemistry sequence. Topics include electrochemistry, chemical kinetics and quantum chemistry and its applications to molecular structure and spectroscopy. Course overlaps with: CHEM 453. Prerequisite: minimum grade of 2.0 in B CHEM 401. Offered: W.

[View course details in MyPlan: B CHEM 402](#)

#### **B CHEM 403 Physical Chemistry III (4) NSc, RSN**

Introduction to quantum mechanics, molecular structure, spectroscopy, and applications of spectroscopy to molecular systems. The third course in a three-course physical chemistry sequence. Prerequisite: minimum grade of 2.0 in B CHEM 402. Offered: Sp.

[View course details in MyPlan: B CHEM 403](#)

#### **B CHEM 404 Physical Chemistry Laboratory (4)**

Covers the application of physical chemistry laboratory and data analysis techniques. Focuses upon the practical application of laboratory and computational methods used in the study of thermodynamics, statistical mechanics, kinetics, and spectroscopy. Prerequisite: minimum grade of 2.0 in B CHEM 402. Offered: Sp.

[View course details in MyPlan: B CHEM 404](#)

#### **B CHEM 426 Instrumental Analysis (5) NSc, RSN**

Introduction to the modern instrumental methods of analysis with emphasis on optical, spectroscopic, electrochemical, and separation techniques. Includes the introductory principles of basic electronics, along with sample preparation and acquisition/treatment of instrumental and computerized data and results. Prerequisite: either a minimum grade of 2.0 in B CHEM 315, or a minimum grade of 2.0 in B CHEM 316 and a minimum grade of 2.0 in B CHEM 317. Offered: W.

[View course details in MyPlan: B CHEM 426](#)

#### **B CHEM 493 Advanced Topics in Chemistry (1-5, max. 15)**

Covers advanced topics within a particular branch of chemistry (analytical, inorganic, organic, physical, and environmental). Covers topics of current research interest or those in professional demand.

[View course details in MyPlan: B CHEM 493](#)

#### **B CHEM 494 Special Topics in Biochemistry (3, max. 12) NSc, RSN**

Covers advanced topics in



of biochemistry. Covers topics that are in the forefront of current research or those in professional demand.

Prerequisite: minimum grade of 2.0 in B CHEM 237; B CHEM 364.

[View course details in MyPlan: B CHEM 494](#)

### **B CHEM 495 Investigative Chemistry I (3)**

Introduction to the research methods used in chemistry and covers such topics as hypothesis formation, literature review, proposal writing, method of development, and data analysis.

Writing intensive course that prepares students for B CHEM 496. Prerequisite: either a minimum grade of 2.0 in B CHEM 315; a minimum grade of 2.0 in B CHEM 239; and a minimum grade of 2.0 in B CHEM 242, or a minimum grade of 2.0 in B CHEM 316 and a minimum grade of 2.0 in B CHEM 317.

[View course details in MyPlan: B CHEM 495](#)

### **B CHEM 496 Investigative Chemistry II (3)**

Students perform independent research, analyze, and present the results of the research in an area of chemistry selected by the instructor.

Prerequisite: minimum grade of 2.0 in B CHEM 495.

[View course details in MyPlan: B CHEM 496](#)

### **B CHEM 497 Apprenticeship in Chemistry Education (1-3, max. 6)**

For students interested in pursuing careers in education and in teaching chemistry and science subjects. Involves attending lectures as well as assisting a faculty member teaching a particular lab course.

[View course details in MyPlan: B CHEM 497](#)

### **B CHEM 498 Independent Study in Chemistry (1-5, max. 10)**

Independent study on a topic or area agreed upon by the instructor and the student.

[View course details in MyPlan: B CHEM 498](#)

### **B CHEM 499 Undergraduate Research in Chemistry (1-5, max. 10)**

Undergraduate research on a topic or area agreed upon by the instructor and the student.

[View course details in MyPlan: B CHEM 499](#)

## **COMPUTER ENGINEERING**

### **B CE 495 Capstone Project in Computer Engineering I (3)**

First of a two-course sequence capstone design experience for computer engineering. Students design a system, component, or process with specific realistic design constraints such as cost, engineering standards, and social impact. Prerequisite: a minimum grade of 2.0 in B EE 271; a minimum grade of 2.0 in B EE 331; a minimum grade of 2.0 in CSS 360; a minimum grade of 2.0 in B ENGR 494; and a minimum grade of 2.0 in B EE 425, which may be taken concurrently.

[View course details in MyPlan: B CE 495](#)

### **B CE 496 Capstone Project in Computer Engineering II (4)**

Second of a two-course sequence capstone design experience for computer engineering. Individual or small-team project that is representative of the solution to an open-ended design problem in computer engineering. May be undertaken as part of an industrial internship with direct supervision of the

computer engineering faculty and industrial sponsor. Includes many aspects of an industrial research and development product development lifecycle. Prerequisite: a minimum grade of 2.0 in B CE 495.

[View course details in MyPlan: B CE 496](#)

## EARTH SYSTEM SCIENCE

### **BEARTH 153 Introduction to Geology (5) NSc**

Survey of the physical systems that give the earth its form. Emphasizes the dynamic nature of interior and surface processes on the earth and stressing the value of geological forms in understanding of the past and predicting future events. Course overlaps with: ESS 101. Offered: AWSp.

[View course details in MyPlan: BEARTH 153](#)

### **BEARTH 154 Introduction to Oceanography (5) NSc**

Case studies of research on the oceans, deep-sea exploration, climate change, and human impacts on marine life. Considers societal factors affecting progress in marine science, changing popular attitudes toward the oceans, and key current policy implications of marine science. Course equivalent to: OCEAN 101. Course overlaps with: T GEOS 241. Offered: AWSp.

[View course details in MyPlan: BEARTH 154](#)

### **BEARTH 155 Introduction to Climate Science (5) SSc/NSc**

Introduces climate science and global climate change. Topics include the scientific method, earth history, global biogeochemical cycles, population and energy consumption, and greenhouse gas

emissions; fundamental climate science, energy conservation, alternative energy; climate and the media; and climate policy. Offered: AWSpS.

[View course details in MyPlan: BEARTH 155](#)

### **BEARTH 201 Mapping the Earth System (5) NSc**

Focuses on issues of environmental health and environmental change in a local or regional earth system as a means to investigate the interconnected biologic, geologic, hydrologic and social systems of that region. Course overlaps with: ESS 201.

[View course details in MyPlan: BEARTH 201](#)

### **BEARTH 202 Modeling Global Systems (5) NSc**

Introduces computer-based modelling as a tool to represent, investigate and understand Earth's interconnected systems. Prerequisite: B MATH 122.

[View course details in MyPlan: BEARTH 202](#)

### **BEARTH 300 Environmental Systems Thinking (5)**

Introduces students to the Schools of Interdisciplinary Arts and Sciences and STEM, interdisciplinary inquiry, reflective learning, and the creation of a learning portfolio. Pedagogies emphasize critical reading, writing development, research question formation, and peer collaboration. Thematic focus on the characteristics and applications of systems thinking in analyzing complex socio-ecological phenomena. Course overlaps with: BIS 300.

[View course details in MyPlan: BEARTH 300](#)

### **BEARTH 310 Fundamentals of Weather and Climate (5) NSc**

Comprehensive introduction to the science of the atmosphere and climate systems including: composition and structure of the atmosphere; atmospheric physics; thermodynamic processes; solar and terrestrial radiation; atmospheric dynamics and large-scale circulation; and climate processes and dynamics. Prerequisite: a minimum grade of 2.0 in either MATH 124, STMATH 124, B MATH 144, or STMATH 114; and a minimum grade of 2.0 in either B PHYS 114, PHYS 114, B PHYS 121, or PHYS 121.

[View course details in MyPlan: BEARTH 310](#)

### **BEARTH 317 Soils in the Environment (5) NSc**

Introduces the types of soils analyses necessary to understand the physical and chemical state of soils. Includes an introduction to soils in general, and local soils in particular. Prerequisite: either BEARTH 153, BEARTH 154, BEARTH 155, BEARTH 201, B PHYS 101, BIS 242, or BIS 243.

[View course details in MyPlan: BEARTH 317](#)

### **BEARTH 318 Hydrogeology (5) NSc, RSN**

Examines details and mechanisms of the natural processes associated with the hydrologic cycle. Explores rivers, groundwater, and watershed management issues within Washington State.

[View course details in MyPlan: BEARTH 318](#)

### **BEARTH 320 Impacts of Climate Change (5) NSc/SSc**

Surveys climate change implications for natural and human systems, both globally and locally. Topics include

natural science, human health, and policy issues; climate system processes, air/water quality, ecosystem services, human health, extreme weather, flooding, snow pack, stream flow, vulnerability assessment, adaptation, and mitigation strategies. Offered: A.

[View course details in MyPlan: BEARTH 320](#)

### **BEARTH 321 Geomorphology (5) NSc**

Provides an overview of the science and geomorphology, emphasizing field observations, data collection, and data analyses associated with geomorphological methods. Examines how landforms evolve, how landforms and abiotic processes influence ecosystems, and how human activities are impacting all of the above. Course overlaps with: ESS 326.

[View course details in MyPlan: BEARTH 321](#)

### **BEARTH 341 Natural Hazards and Human Disasters (5) NSc/SSc**

Investigates the distribution and impacts of natural hazards and what controls the magnitude and frequency of these events. Examines how cultural and social factors influence the hazard vulnerability of populations. Offered: W.

[View course details in MyPlan: BEARTH 341](#)

## **ELECTRICAL ENGINEERING**

### **B EE 200 Electric Circuits Lab (2)**

The laboratory course of electrical engineering with selected laboratory experiments emphasizing measurement, analysis, and fundamental laws of electric circuits: including Ohm's law, KVL & KCL, superposition theorem, Thevenin & Norton theorem, phasor, frequency and s-domain analysis of RC,

RL, and RLC circuits, system functions, and operational amplifiers. Co-requisite: B EE 233. Prerequisite: a minimum grade of 2.0 in B EE 215 or E E 215.

[View course details in MyPlan: B EE 200](#)

### **B EE 215 Fundamentals of Electrical Engineering (4)**

Introduction to electrical engineering. Basic circuit concepts. Mathematical models of components. Kirchhoff's laws. Resistors, sources, capacitors, inductors, and operational amplifiers. Solutions of first and second order linear differential equations associated with basic circuit forms. Course overlaps with: TCES 215. Prerequisite: a minimum grade of 2.0 in STMATH 125.

[View course details in MyPlan: B EE 215](#)

### **B EE 233 Circuit Theory (4)**

Electric circuit theory. Analysis of circuits with sinusoidal signals. Phasors, system functions, and complex frequency. Frequency response. Computer analysis of electrical circuits. Power and energy. Two port network theory. Co-requisite: B EE 200. Course overlaps with: E E 233. Prerequisite: a minimum grade of 2.0 in either B EE 215 or E E 215.

[View course details in MyPlan: B EE 233](#)

### **B EE 235 Continuous Time Linear Systems (5)**

Introduction to continuous time signal analysis. Basic signals including impulses, pulses, and unit steps. Periodic signals. Convolution of signals. Fourier series and transforms in discrete and continuous time. Computer laboratory. Course overlaps with: E E 235; E E 242; and TCES 310. Prerequisite: a minimum grade of 2.0 in B EE 215 or E E 215; a minimum grade of 2.0 in B PHYS 122 or PHYS 122; a minimum grade of 2.0 in STMATH 207; and a minimum grade of 2.0

in CSS 132 or CSS 142, either of which may be taken concurrently.

[View course details in MyPlan: B EE 235](#)

### **B EE 271 Digital Circuits and Systems (5)**

Overview of digital computer systems. Digital logic, Boolean algebra, combinational and sequential circuits and logic design, programmable logic devices, and the design and operation of digital computers, including ALU, memory, and I/O. Weekly laboratories. Course overlaps with: E E 271.

Prerequisite: a minimum grade of 2.0 in either CSS 132, CSS 142, CSE 121, CSE 122, or CSE 123.

[View course details in MyPlan: B EE 271](#)

### **B EE 331 Devices and Circuits I (5)**

Physics, characteristics, applications, analysis, and design of circuits using semiconductor diodes and field-effect transistors with an emphasis on large-signal behavior and digital logic circuits. Classroom concepts are reinforced through laboratory experiments and design exercises. Course overlaps with: E E 331 and TCES 312. Prerequisite: a minimum grade of 2.0 in B EE 200; a minimum grade of 2.0 in either B EE 233 or E E 233; and a minimum grade of 1.7 in either B EE 271 or E E 271, either of which may be taken concurrently.

[View course details in MyPlan: B EE 331](#)

### **B EE 332 Devices and Circuits II (5)**

Examines the characteristics and models of bipolar and field-effect transistors, linear acircuit applications, including low and high frequency analysis of differential amplifiers, currents sources, gain stages and output stages, circuitry of op-amps, their configurations, stability and compensation. Course overlaps with:

E E 332. Prerequisite: a minimum grade of 1.7 in either B EE 331 or E E 331.

[View course details in MyPlan: B EE 332](#)

### **B EE 341 Discrete Time Linear Systems (5)**

Discrete time signals and systems, impulse response, convolution, Z-transforms, discrete time Fourier analysis. Computer laboratory. Course overlaps with: E E 242; E E 341; and E E 342. Prerequisite: a minimum grade of 2.0 in B EE 200; a minimum grade of 2.0 in B EE 233; a minimum grade of 1.7 in B EE 235; and a minimum grade of 2.0 in STMATH 126.

[View course details in MyPlan: B EE 341](#)

### **B EE 361 Applied Electromagnetics (5)**

Introductory electromagnetic field theory and Maxwell's equations in integral and differential forms; uniform plane waves in linear media; boundary conditions and reflection and transmission of waves; guided waves; transmission lines and Smith chart; and electrostatics. Course overlaps with: E E 361. Prerequisite: a minimum grade of 2.0 in B EE 200; a minimum grade of 2.0 in B EE 233; a minimum grade of 1.7 in B EE 235; a minimum grade of 2.0 in either STMATH 224 or MATH 224; and a minimum grade of 2.0 in B PHYS 122

[View course details in MyPlan: B EE 361](#)

### **B EE 381 Introduction to Electric Power Generation (5) NSc, RSN**

Reviews the design and operation of power plants for the generation of electric power. Covers thermodynamic principles of energy conversion, cycle analysis, combustion, nuclear and hydroelectric power, emerging energy technologies, plant economics, emission controls, and environmental impact. Course overlaps with: B ME 446 and TEE 433. Prerequisite:

STMATH 126 or MATH 126; and B PHYS 122. Offered: jointly with BST 381.

[View course details in MyPlan: B EE 381](#)

### **B EE 417 Digital Communication (5)**

Covers the basic principles and techniques of digital signal transmission and reception. Examines the process of converting analog signals to digital formats, explores various digital modulation schemes, analyzes the limitation imposed by noise on communication systems, and studies the design of optimum receivers. Course overlaps with: E E 417. Prerequisite: a minimum grade of 1.7 in B EE 341; and STMATH 390, which may be taken concurrently.

[View course details in MyPlan: B EE 417](#)

### **B EE 425 Microprocessor System Design (5)**

Examines the specification, design of a microprocessor-based computer system that are dedicated to specific application. Covers low-level programming, memory systems, I/O and system debugging. Students design an embedded microprocessor system using computer-aided design tools. Course overlaps with: B ME 460. Prerequisite: a minimum grade of 2.0 in B EE 271; and a minimum grade of 1.7 in B EE 331.

[View course details in MyPlan: B EE 425](#)

### **B EE 427 Introduction to Digital System Design Using Hardware Description Languages (5)**

Modeling techniques with the Verilog hardware description language; methodologies for finite-state machine (FSM) design, register-transfer level (RTL) design, and datapath and control unit design; computer arithmetic algorithms; and fast arithmetic hardware architectures. Prerequisite: a minimum

grade of 1.7 in B EE 271.

[View course details in MyPlan: B EE 427](#)

### **B EE 433 Electronic Circuit Design (5)**

Provides an understanding of modern analog solid-state circuit design techniques what are used for instrumentation purposes. Emphasizes design techniques using integrated circuits, particularly operational amplifiers. Prerequisite: a minimum grade of 1.7 in either B EE 332 or E E 332.

[View course details in MyPlan: B EE 433](#)

### **B EE 436 Biomedical Instrumentation I (5)**

Introduction to the basic principles of medical electronic instruments. Covers biopotentials, biosignal amplifiers, electrical safety, the design of clinical electronics and FDA regulations. Students design biomedical signal measurement systems using analog and digital circuits and perform biomedical signal analysis. Prerequisite: a minimum grade of 1.7 in B EE 235 or E E 235; and a minimum grade of 1.7 in B EE 332 or E E 332.

[View course details in MyPlan: B EE 436](#)

### **B EE 437 Biomedical Instrumentation II (5)**

Introduction to the principles of measuring human vital signals such as blood pressure, heart rate, and respiratory rate. Covers medical imaging techniques (CT, MRI, PET) and working principal of clinical ultrasound systems. Students design biomedical signal measurement systems and perform basic biomedical image and signal analysis. Prerequisite: a minimum grade of 1.7 in B EE 332 or E E 332.

[View course details in MyPlan: B EE 437](#)

### **B EE 440 Electronic Test and Measurement (5)**

Introduction to the principle of metrology and modern electronic testing and measurement. Topics covered include types of testing and design-for-testability techniques such as scan-path, boundary scan and built-in-self test. The understanding of theoretical concepts of testing related subjects are augmented through extensive lab projects using Verilog and Labview tools. Prerequisite: a minimum grade of 2.0 in B EE 271. Offered: Sp.

[View course details in MyPlan: B EE 440](#)

### **B EE 442 Digital Signal Processing (5)**

Examines methods and techniques of digital signal processing. Reviews sampling theorems, A/D and D/A converters, demodulation by quadrature sampling, Z-transform methods, linear shift-invariant systems, difference equations, signal flow graphs for digital networks, canonical forms, design of digital filters, practical considerations, IIR and FIR filters; and digital Fourier transforms and FFT techniques. Prerequisite: a minimum grade of 1.7 in B EE 341.

[View course details in MyPlan: B EE 442](#)

### **B EE 445 Fundamentals of Digital Image Processing (5)**

Introduction to digital image processing emphasizing image processing techniques, image filtering design and its applications. Topics include mathematical foundations for digital manipulation of images; image pre-processing; spatial and frequency-domain filtering, morphological transformations and segmentation. Theoretical foundations



and practical applications. Computer Laboratory. Course overlaps with: TEE 461. Prerequisite: a minimum grade of 1.7 in B EE 235 or E E 235.

[View course details in MyPlan: B EE 445](#)

### **B EE 447 Introduction to Control Systems (5)**

Provides an introduction to analysis and design of control systems with applications ranging across electrical, mechanical, and electromechanical systems. Topics include system modeling, performance and stability analysis using root locus, Bode and Nyquist plots, and designs of PID and lead-lag compensators. Course overlaps with: E E 447. Prerequisite: a minimum grade of 2.0 in B EE 200; a minimum grade of 2.0 in B EE 233; and a minimum grade of 1.7 in B EE 235.

[View course details in MyPlan: B EE 447](#)

### **B EE 450 Introduction to Power Electronics (5)**

Introduction to power electronics. Topics covered include characterization of power semiconductor devices, design of magnetic components and filters, analysis and design of ac-to-dc, dc-to-dc and dc-to-ac power converters. Applications in power supplies are presented. Theoretical concepts and analyses are augmented by simulations and lab projects. Prerequisite: a minimum grade of 1.7 in either B EE 331 or E E 331.

[View course details in MyPlan: B EE 450](#)

### **B EE 451 Introduction to MEMS (5)**

Develops the basics for microelectromechanical devices (MEMS) including micro-actuators, micro-sensors, and micro-motors, principles of operation, different micromachining techniques (surface and bulk

micromachining), IC-derived microfabrication techniques, thin-film technologies as they apply to MEMS. Prerequisite: a minimum grade of 1.7 in either B EE 331 or E E 331; recommended: Fundamental circuit and electronic classes for EE major and design classes for CompE major

[View course details in MyPlan: B EE 451](#)

### **B EE 454 Introduction to RF and Microwave Engineering (5)**

Theory of transmission lines and microwave network analysis techniques are used to design passive microwave devices. Topics include operational properties of active microwave circuits, antennas, and electromagnetic waves. RF, microwave RADAR and remote sensing systems. Prerequisite: a minimum grade of 1.7 in either B EE 331 or E E 331; and a minimum grade of 1.7 in B EE 361.

[View course details in MyPlan: B EE 454](#)

### **B EE 455 Introduction to Electrical Machines and Drives (5)**

Introduction to electrical machines and drives. Topics covered include principles and analyses of electromechanical systems including dc, synchronous and induction machines, both motors and generators. Control strategies for the different machine types are presented. Theoretical concepts are augmented by simulation tools and lab projects. Prerequisite: a minimum grade of 2.0 in B EE 200; and a minimum grade of 2.0 in B EE 233.

[View course details in MyPlan: B EE 455](#)

### **B EE 457 Electrical/Power Electronic Systems in Renewable Energy (5)**

Provides a quantitative and practical introduction to renewable energy electrical/power electronic



systems. Emphasis on the fastest growing solar and wind technologies. Electrical/electronic architectures of other technologies such as hydroelectric power and electric vehicles are introduced. Energy storage technologies, such as battery technologies and their associated power electronics are discussed. Course overlaps with: E E 351. Prerequisite: a minimum grade of 1.7 in either B EE 331 or E E 331.

[View course details in MyPlan: B EE 457](#)

### **B EE 461 Introduction to Digital Speech and Audio Processing (5)**

Covers basic techniques of digital speech and audio processing for practical applications including audio feature extraction, speech and music analysis and synthesis, speech coding, denoising and enhancement, and spatial audio. Programming assignments use Matlab and Python and the final class project involves real-time algorithm implementation on digital signal processors. Prerequisite: a minimum grade of 2.0 in B EE 341.

[View course details in MyPlan: B EE 461](#)

### **B EE 465 Introduction to Electromagnetic Compatibility and Signal Integrity (5)**

Covers signal spectra, transmission line signal integrity, and nonideal behavior of components to understand conducted emissions. Students learn antenna theory of radiated emissions, susceptibility of circuits to conducted and radiated emissions, and concepts of electromagnetic interference and shielding. Pre-compliance test procedures presented to mitigate electromagnetic compatibility problems in the early design cycle of electronic systems. Prerequisite: a minimum grade

of 2.0 in B EE 233; and a minimum grade of 2.0 in B EE 235; recommended: B EE 361.

[View course details in MyPlan: B EE 465](#)

### **B EE 477 Power System Fundamentals (5)**

Basic power system analytical concepts, three-phase systems, impedance, steady-state network analysis, normalization, transmission lines, transformers, and synchronous machines. Prerequisite: a minimum grade of 2.0 in B EE 200; and a minimum grade of 2.0 in B EE 233.

[View course details in MyPlan: B EE 477](#)

### **B EE 478 Power System Analysis (5)**

Topics include the iteration and simulation techniques as well as the numerical solutions required to analyze power and energy systems; power flow; symmetrical components; and faulted system analysis and stability study.

Course overlaps with:

E E 454 and E E 455. Prerequisite: a minimum grade of 1.7 in B EE 477.

[View course details in MyPlan: B EE 478](#)

### **B EE 479 Energy Technologies and Power Systems (5)**

Covers characteristics of conventional and renewable power generation with an emphasis on power systems of wind and solar generation technologies. Explores planning, operation, and analysis of power systems with distributed generation and emerging technologies like electric vehicles and storage systems. Examines power system economics and the benefits of integrating new energy technologies. Course overlaps with: E E 451 and TEE 433. Prerequisite: a minimum grade of 2.0 in B EE 233. Offered: SpS.

[View course details in MyPlan: B EE 479](#)

**B EE 482 Semiconductor Devices (5)**

Covers fundamentals of semiconductor theory: carrier diffusion and drift; concept of direct and indirect energy gap materials, effective mass of mobile carriers; device physics; homo- and heterojunctions, metal-semiconductor junction, bipolar transistor, and MOS transistors. Prerequisite: a minimum grade of 1.7 in B EE 332 or E E 332.

[View course details in MyPlan: B EE 482](#)

**B EE 484 Sensors and Sensor Systems (5)**

Focuses on understanding a broad variety of sensor technologies and their application as systems in everyday use. Provides both a foundation to move into a particular area of sensor technology and also a means to apply appropriate sensors for particular applications. Prerequisite: a minimum grade of 1.7 in either B EE 235 or E E 235; and a minimum grade of 1.7 in either B EE 331 or E E 331.

[View course details in MyPlan: B EE 484](#)

**B EE 486 Fundamentals of Integrated Circuit Technology (5)**

Introduces the fundamentals of IC technologies. Covers the microelectronic processing technology, including evaporation, sputtering, epitaxial growth, diffusion, ion implantation, oxidation, chemical vapor deposition, and photoresists. Introduces the design considerations for transistors, materials and process characterization, and future trends. Prerequisite: a minimum grade of 1.7 in either B EE 331 or E E 331.

[View course details in MyPlan: B EE 486](#)

**B EE 490 Special Topics in Electrical Engineering (1-5, max. 10)**

Explores special topics in electrical

engineering.

[View course details in MyPlan: B EE 490](#)

**B EE 495 Capstone Project in Electrical Engineering I (3)**

First of a two-course sequence capstone design experience. Students design a system, component, or process with specific realistic design constraint such as cost, engineering standards, and social impact. Prerequisite: a minimum grade of 1.7 of B EE 332, which may be taken concurrently; a minimum grade of 1.7 in either B ENGR 494 or CSS 371/B EE 371; and a minimum grade of 1.7 in B EE 425, which may be taken concurrently.

[View course details in MyPlan: B EE 495](#)

**B EE 496 Capstone Project in Electrical Engineering II (4)**

Second of a two-course sequence capstone design experience. Individual or small-team project that is representative of the solution to an open-ended design problem in electrical engineering. May be undertaken as part of an industrial internship with direct supervision of the EE faculty and industrial sponsor. Includes many aspects of an industrial research and development product development lifecycle. Prerequisite: a minimum grade of 1.7 in B EE 495.

[View course details in MyPlan: B EE 496](#)

**B EE 498 Independent Study in Electrical Engineering (1-5, max. 10)**

Independent study on a topic or area agreed upon by the instructor and student.

[View course details in MyPlan: B EE 498](#)

**B EE 499 Undergraduate Research in Electrical Engineering (1-5, max. 20)**

Undergraduate research on a topic agreed upon by the instructor and

student.

[View course details in MyPlan: B EE 499](#)

### **B EE 503 DC Circuits and Applications (3)**

DC circuit analysis using various circuit laws, theorems and methods. Topics covered: voltage-current characteristics of basic circuit elements; equivalent resistance of circuits; circuit analysis using Ohm's law and Kirchhoff's laws; Thevenin and Norton equivalent circuits; superposition theorem; nod voltage and mesh current methods; transient response of first and second order circuits; and introduction to operational amplifiers. Offered: A.

[View course details in MyPlan: B EE 503](#)

### **B EE 504 Device Electronics (3)**

An introduction to characteristics and application of three electronic devices: diodes, field-effect and bipolar junction transistors. Topics include characteristics of the devices, small-signal and large-signal analyses. Prerequisite: a minimum grade of 2.5 in B EE 503. Offered: W.

[View course details in MyPlan: B EE 504](#)

### **B EE 505 Digital Systems (3)**

An introduction to methods and techniques for designing basic digital circuits and systems. Topics include: logic circuits and Verilog; circuit minimization using Boolean algebra and Karnaugh maps; combinational circuit design; multiplexers and decoders; latches and flip flops; registers and counters; sequential circuits; and implementation of digital circuits in an FPGA using Verilog. Offered: A.

[View course details in MyPlan: B EE 505](#)

### **B EE 506 AC Circuits and Power (3)**

An introduction to AC circuits and power

systems. Topics

covered include: analysis of circuits using phasors; power computations in ac circuits and frequency response of circuits; power transformers; synchronous generators; three-phase circuits; and Laplace transforms in circuit analysis. Prerequisite: a minimum grade of 2.5 in B EE 503. Offered: W.

[View course details in MyPlan: B EE 506](#)

### **B EE 507 Signals and Systems (3)**

An introduction to the mathematical representation, analysis and classification of continuous-time and discrete-time signals and systems. Topics covered include: time domain analysis of Linear Time Invariant (LTI) systems; Fourier Transform for continuous-time and discrete-time signals and systems; digital filters; and introduction to Z-transform. Prerequisite: a minimum grade of 2.5 in B EE 503. Offered: Sp.

[View course details in MyPlan: B EE 507](#)

### **B EE 508 Introduction to Embedded Systems (3)**

An introduction to the embedded systems from a hardware and software perspective and how they interact to accomplish real-world tasks. Topics covered include: microprocessor organization; number systems and basic arithmetic operations for microprocessors; basic assembly and embedded C programming; memory, interrupt, and input/output peripheral interfaces; and microprocessor-based system design. Prerequisite: a minimum grade of 2.5 in B EE 503; and a minimum grade of 2.5 in B EE 505. Offered: Sp.

[View course details in MyPlan: B EE 508](#)

### **B EE 509 Engineering Simulations (2)**

Provides an introduction

to simulations techniques to solve engineering problems. Industry standard simulation tools such as MATLAB, SPICE, and LabView are introduced and intensively used in simulating design and analysis from several disciplines of electrical engineering such as signal processing, circuit design, system fault analysis, and instrumentation interface.

[View course details in MyPlan: B EE 509](#)

### **B EE 510 Probability and Random Processes for Electrical Engineering (5)**

Covers basic probability and random processes and their applications to engineering. Topics include probability concepts, random variables and vectors, expectations, moments, moment-generating and characteristic functions, random processes, auto-correlation, power spectral density, linear filtering of random signals, and introduction to estimation and detection. Course overlaps with: TECE 565.

[View course details in MyPlan: B EE 510](#)

### **B EE 511 Signal Processing I (5)**

Introduces basic digital signal processing techniques for analysis of systems and designing of digital filters. Topics include time-domain and frequency-domain analysis of discrete-time signals and systems, z-transforms; FFT; sampling and reconstruction; design of digital filters; and multi-rate signal processing. Course equivalent to: TECE 563. Course overlaps with: E E 518 and EE P 518.

[View course details in MyPlan: B EE 511](#)

### **B EE 512 Signal Processing II (5)**

Introduces statistical signal processing which deals with random signals, their modeling, characterization, and transformation to extract useful information about the underlying mechanism that generates them.

Topics include: signal modeling; optimum filtering; linear prediction and estimation; spectrum estimation; and adaptive filtering.

Prerequisite: a minimum grade of 2.5 in B EE 510; and a minimum grade of 2.5 in B EE 511.

[View course details in MyPlan: B EE 512](#)

### **B EE 515 Digital Image Processing Applications (5)**

Focuses on image processing techniques, image filtering design, and its applications to images acquired from various imaging techniques. Topics include spatial and frequency-domain image filtering, image reconstruction, image segmentation, color, and morphological transformation techniques, understanding and replicating methodologies from research papers. Computer Laboratory.

Prerequisite: a minimum grade of 2.5 in B EE 510.

[View course details in MyPlan: B EE 515](#)

### **B EE 517 Wireless Communications I (5)**

Introduces fundamental principles of wireless communications. This course is the first of a two-course sequence. Topics include: digital modulation techniques; demodulation and detection of signals in Gaussian channels; principles of cellular communications; characteristics and modeling of wireless channels; bit-error-rate (BER) analysis of wireless system in flat-fading channels; and introduction to channel coding (Linear Block Codes). Course overlaps with: E E 506; TECE 567; and TECE 569. Prerequisite: minimum grade of 2.7 in B EE 510.

[View course details in MyPlan: B EE 517](#)

### **B EE 518 Wireless Communications II (5)**

Studies underlying theories and practices of advanced techniques of modern wireless communications. This course is the second of a two-course sequence. Covers: Convolutional channel coding and decoding; Intersymbol Interference (ISI) and equalization; CDMA: capacity, data detection and rake receivers; diversity techniques; MIMO: principles, data detection, and capacity; OFDM: receiver architecture, data detection and analysis. Course overlaps with: E E 507 and TECE 569. Prerequisite: a minimum grade of 2.5 in B EE 517.

[View course details in MyPlan: B EE 518](#)

### **B EE 520 Foundations of Machine Learning (5)**

Concepts of machine learning algorithms for supervised and unsupervised learning tasks. Linear models, decision trees, nearest neighbor, Gaussian mixture models, support vector machines, neural networks, gradient boosting models, Bayesian inferencing, interpretability of machine learning, dimensionality reduction and clustering. Assignments and class projects in a high-level programming language (Python) and cloud-computing platform.

[View course details in MyPlan: B EE 520](#)

### **B EE 525 Embedded Systems Design (5)**

Focuses on course design, testing, and validation of modern embedded systems and systems-on-silicon. Topics include introduction to embedded programming languages for hardware and software, designing with FPGA cores, real-time operating systems, and modern synthesis tools.

[View course details in MyPlan: B EE 525](#)

### **B EE 526 Advanced Topics in Embedded Systems Design (5)**

Focuses on debugging, validation and system integration of embedded systems and systems-on-silicon. Topics include design and validation of mission-critical hardware and software, performance optimization techniques and hardware-assisted debug and validation.

Prerequisite: a minimum grade of 2.5 in B EE 525.

[View course details in MyPlan: B EE 526](#)

### **B EE 527 Advanced Digital System Design with Reconfigurable Computing Platforms (5)**

This course focuses on designing custom hardware using a reconfigurable computing platform. Topics include hardware description language, architectural methodologies, and simulation/synthesis techniques. Course projects provide hands-on experience implementing these skills.

[View course details in MyPlan: B EE 527](#)

### **B EE 528 Computer Organization (5)**

Introduction to computer organization. Assembly language; machine language; microarchitecture including single-cycle, multicycle, and pipelined processor architectures; memory systems; and input/output systems.

[View course details in MyPlan: B EE 528](#)

### **B EE 531 Introduction to Ultrasound Imaging (5)**

Covers physics and signal processing behind ultrasound imaging and therapy, including generation and propagation of ultrasound waves into the body, their reflection and subsequent signal processing of received signals, and reconstructed images of anatomy and blood flow. Students have an opportunity to work with simulated and real-world

data and images produced from ultrasound systems. Course overlaps with: M E 525.

[View course details in MyPlan: B EE 531](#)

### **B EE 532 Advanced Applications of Ultrasound Imaging (5)**

Explores advanced ultrasound imaging modes of blood flow, molecular imaging, tissue stiffness and artificial intelligence. Student project explores new applications or new ultrasound technology and approach. Prerequisite: a minimum grade of 2.5 in B EE 531.

[View course details in MyPlan: B EE 532](#)

### **B EE 533 Biomedical Devices and Instrumentation (5)**

Introduction to biopotential signal; design and analysis of biomedical devices and instrumentation to acquire biosignal. FDA regulation consideration; introduction to medical imaging and signal processing including ultrasound imaging. Hardware design and simulations. There is a lab component in the class.

[View course details in MyPlan: B EE 533](#)

### **B EE 542 Solar Cells (5)**

Provides balanced study of various solar cell technologies by covering renewable energy resources, photovoltaic basics and systems, the state-of-the-art solar cell technologies, manufacturing advancement, and current engineering challenges. Also provides hands-on experience in solar cell fabrication and characterization.

[View course details in MyPlan: B EE 542](#)

### **B EE 545 Complementary Metal Oxide Semiconductors I (5)**

Studies complementary metal oxide semiconductor (CMOS) technology by offering circuit analysis, fabrication technology, and characterizations. Introduction to the physics

and characters of basic CMOS circuits, the fundamental fabrication technologies for CMOS-based integrated circuits, and measurement characterization for CMOS inverters.

[View course details in MyPlan: B EE 545](#)

### **B EE 546 CMOS II (5)**

Provides hands-on laboratory experience for fabrication and testing of CMOS transistors. CMOS inverters will be fabricated and tested. Various CMOS fabrication technologies and equipment will be used including a mask aligner, furnace, metal sputter, and spin-coater. Prerequisite: a minimum grade of 2.5 in B EE 545.

[View course details in MyPlan: B EE 546](#)

### **B EE 550 Introduction to Power Electronics (5)**

Introduction to power electronics. Topics covered include characterization of power semiconductor devices, design of magnetic components and filters, analysis and design of ac-to-dc, dc-to-dc and dc-to-ac power converters. Applications in power supplies are presented. Theoretical concepts and analyses are augmented by simulations and lab projects. Course overlaps with: TECE 539.

[View course details in MyPlan: B EE 550](#)

### **B EE 551 Introduction to MEMS (5)**

Develops the basics for microelectromechanical devices and systems including micro-actuators, micro-sensors, and micro-motors, principles of operation, different micromachining techniques (surface and bulk micromachining), IC-derived microfabrication techniques, thin-film technologies as they apply to MEMS.

[View course details in MyPlan: B EE 551](#)



**B EE 552 Biomedical Microsystems (5)**

Develops multidisciplinary knowledge in microfabrication, sensor development, surface modification essential for designing and implementing biomedical devices and systems. Specific real-world systems will be fabricated, characterized and optimized. Prerequisite: a minimum grade of 2.5 in B EE 551.

[View course details in MyPlan: B EE 552](#)

**B EE 554 Planar RF and Microwave Engineering I: Passive Circuits and Networks (5)**

Provides a project-based radio frequency (RF) and microwave engineering approach that allows students to design, build, and test various passive RF and microwave circuits on planar printed circuit boards (PCB's) and ceramic substrates. Transmission line theory and Smith charts are used along with network analysis techniques for designing planar passive RF and microwave circuits. Student designs will be tested on a vector network analyzer. Course overlaps with: TECE 572.

[View course details in MyPlan: B EE 554](#)

**B EE 555 Introduction to Electrical Machines and Drives (5)**

Introduction to electrical machines and drives. Topics covered include principles and analyses of electromechanical systems including dc, synchronous and induction machines, both motors and generators. Control strategies for the different machine types are presented. Theoretical concepts are augmented by simulation tools and lab projects. Course overlaps with: TECE 537.

[View course details in MyPlan: B EE 555](#)

**B EE 557 Electrical/Power Electronic Systems in Renewable Energy (5)**

The course provides in-depth coverage of the power electronics of a range of renewable technologies including solar, wind and hydroelectric. The power electronics for energy storage technologies utilized in renewable systems and for electric transportation systems are addressed. The course covers recent advances of control and management architectures and discusses them in the context of current renewable energy technologies. Course overlaps with: TECE 533 and TECE 539. Recommended: degree in Electrical Engineering or equivalent.

[View course details in MyPlan: B EE 557](#)

**B EE 561 Digital Speech and Audio Signal Processing (5)**

Covers advanced techniques and concepts in digital speech and audio processing, including speech analysis and synthesis, audio beamforming, speech denoising, automatic speech recognition, spatial audio for virtual and augmented reality, and AI-driven speech technologies. Programming assignments and class projects focused on simulating and implementing signal processing algorithms. Prerequisite: a minimum grade of 2.5 in B EE 510.

[View course details in MyPlan: B EE 561](#)

**B EE 571 Power System Analysis (5)**

Topics include the iteration and simulation techniques as well as the numerical solutions required to analyze and power and energy systems; power flow; symmetrical components; faulted system analysis; stability study; and computer usage to simulate large-scale power systems.

[View course details in MyPlan: B EE 571](#)



**B EE 572 Power System Operations (5)**

Topics include: electric power grid and its operation in the United States; characteristics of generating units; power/load flow analysis; economic dispatch; unit commitment; optimal power flow; and introduction of renewable energy generation such as wind and solar energy and their integration into the grid. Course overlaps with: TECE 533. Prerequisite: a minimum grade of 2.5 in B EE 571.

[View course details in MyPlan: B EE 572](#)

**B EE 590 Special Topics in Electrical Engineering (5, max. 15)**

Address contemporary topics in electrical engineering focused on emerging methods and technologies, critical issues facing disciplines within and connected with trends in research, critical theory and/or other topics important to the field.

[View course details in MyPlan: B EE 590](#)

**B EE 599****Electrical Engineering Graduate Seminar (1)**

Examines current research and technological trends in electrical engineering and related fields of interest of UWB faculty. Faculty demonstrate how to lead a seminar session, followed by graduate students leading the seminar session in the following week and presenting their own research findings.

[View course details in MyPlan: B EE 599](#)

**B EE 600 Independent Study or Research (\*-)**

Graduate research on electrical engineering topics conducted under the direction of one or more instructors

[View course details in MyPlan: B EE 600](#)

**B EE 601 Internship (1-10, max. 15)**

Graduate internship under the supervision of an EE faculty member. Credit/no-credit only.

[View course details in MyPlan: B EE 601](#)

**B EE 700 Master's Thesis (\*-)**

Graduate Research to prepare for and complete the requirements for a thesis defense. Credit/no-credit only.

[View course details in MyPlan: B EE 700](#)

**ENGINEERING****B ENGR 310 Computation Physical Modeling (4)**

Computational methods for analyzing mathematical representations of physical processes that builds upon computer programming skills. Development of judgment for mathematical tool selection and identification of plausible but incorrect computational solutions and movement to correct solutions. Taught via in-class examples and programming with computational linear algebra utilized. Course overlaps with: TME 310. Prerequisite: a minimum grade of 2.0 in either CSS 112, CSE 121, or CSE 142; and a minimum grade of 2.0 in either STMATH 207 or MATH 207.

Offered: AW.

[View course details in MyPlan: B ENGR 310](#)

**B ENGR 320 Fundamentals of Materials Science (4)**

Properties of metals, ceramics, polymers, and composites in relation to their internal subatomic, microscopic, and macroscopic structures.

Incorporates materials testing, analysis of failure, and engineering of materials to achieve desired function and performance. Course overlaps with: MSE 170 and TME 320. Prerequisite: a minimum grade of 2.0 in B CHEM 143;

and a minimum grade of 2.0 in B CHEM 144. Offered: AW.

[View course details in MyPlan: B ENGR 320](#)

### **B ENGR 321 Materials Engineering Lab (2)**

Weekly lab experimentation and techniques used in evaluating the physical and mechanical properties of metals, ceramics, polymers, and composites. Instruction and use of analytical equipment, data collection and analysis, teamwork skills, laboratory report writing. Course overlaps with: MSE 311. Prerequisite: a minimum grade of 1.7 in B ME 222; and a minimum grade of 1.7 in B ENGR 320, which may be taken concurrently. Offered: AWSp.

[View course details in MyPlan: B ENGR 321](#)

### **B ENGR 494 Engineering Design and Innovation (3)**

This course prepares students of the Electrical/Computer/Mechanical Engineering programs to start capstone courses. Topics include engineering ethics; consideration of societal, environmental and other factors in design; innovation, design process, and methodology; human centered design; project planning and management; introduction to capstone projects. Prerequisite: a minimum grade of 1.7 in either B EE 332 or B ME 333, or a minimum grade of 2.0 in CSS 360, any of which may be taken concurrently; and a minimum grade of 1.7 in either B EE 425 or B ME 343, either of which may be taken concurrently.

[View course details in MyPlan: B ENGR 494](#)

### **B ENGR 495 Capstone Project in Engineering I (3)**

The first course of a two-sequence capstone design course where students work on real-world multidisciplinary engineering projects to design a system, component, or process with specific realistic design constraints such as cost, engineering standards, and social impact. In this first course, students are expected to define and formulate the design problem, study alternative solutions, and develop a design plan and methodology. Prerequisite: a minimum grade of 1.7 in either B ENGR 494 or B ME 494; a minimum grade of 1.7 in either B EE 332 or B ME 333, or a minimum grade of 2.0 in CSS 360; and a minimum grade of 1.7 in either B EE 425 or B ME 343. Offered: WSp.

[View course details in MyPlan: B ENGR 495](#)

### **B ENGR 496 Capstone Project in Engineering II (4)**

The second course of a two-sequence capstone design course where students work on real-world multidisciplinary engineering projects to design a system, component, or process with specific realistic design constraints such as cost, engineering standards, and social impact. In this second course, students are expected to refine and complete, build, and test their design work with the direct supervision of an engineering faculty. Prerequisite: a minimum grade of 1.7 in B ENGR 495. Offered: SpS.

[View course details in MyPlan: B ENGR 496](#)

## **MATHEMATICS**

### **B MATH 121 Algebraic and Quantitative Reasoning (5) RSN**

Explores how numbers can be used to inform decisions about everyday life.

Investigates numerical concepts, graphical displays, proportional relationships, equations, functions, and linear, exponential and other mathematical models. Develops conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts. Prerequisite: a minimum score of 100 on the MTHDSP directed self-placement test. Offered: AWSp.

[View course details in MyPlan: B MATH 121](#)

### **B MATH 122 Precalculus I: Algebraic Functions (5) RSN**

Introduces functions and their multiple representations. Explores linear, quadratic, polynomial, and rational functions. Emphasis on conceptual understanding, application, and symbolic manipulation skill throughout the course. Prerequisite: either a minimum grade of 2.5 in B MATH 121, or a minimum score of 200 on the MTHDSP directed self-placement test. Offered: AWSp.

[View course details in MyPlan: B MATH 122](#)

### **B MATH 123 Precalculus II: Transcendental Functions (5) NSc, RSN**

Continuation of the study of functions. Explores exponential, logarithmic, trigonometric and inverse trigonometric functions. Emphasis will be placed on conceptual understanding, application, and symbolic manipulation skill throughout the course. Course overlaps with: MATH 120 and TMATH 120. Prerequisite: either a minimum grade of 2.5 in B MATH 122, a minimum score of 300 on the MTHDSP directed self-placement, a score of 145-153 on the MPT-AS assessment test, or a

minimum score of 151 on the MPT-GS assessment test. Offered: AWSpS.

[View course details in MyPlan: B MATH 123](#)

### **B MATH 127 LEARNING STRATEGIES IN MATHEMATICS (1-2, max. 6)**

Explores applications of formulas, computational skills, and interpreting certain quantities. Reviews study techniques to enhance course comprehension, and the pros and cons of the use of calculators in a math class. Credit/no-credit only. Co-requisite: either B MATH 121, B MATH 122, or B MATH 123. Credit/no-credit only. Offered: AWSpS.

[View course details in MyPlan: B MATH 127](#)

### **B MATH 144 Calculus for the Life and Social Sciences (5) NSc, RSN**

Introduction to differential and integral calculus using real world applications drawn from life and social sciences, and business. Conceptual and algebraic definitions of continuity, limits, with an emphasis on polynomial, exponential, and logarithmic functions. Statement and applications of the fundamental theorem of calculus. Course equivalent to: MATH 112 and TMATH 122. Course overlaps with: STMATH 113; STMATH 114; STMATH 124; MATH 124; Q SCI 291; and TMATH 124. Prerequisite: either a minimum grade of 2.5 in B MATH 123, a minimum score of 400 on the MTHDSP directed self-placement, or a score of 154-163 on the MPT-AS assessment test. Offered: AWSpS.

[View course details in MyPlan: B MATH 144](#)

### **B MATH 215 Statistics for Health Sciences (5) RSN**

Provides an overview of basic concepts of statistics used in health sciences with

opportunities to learn through experience with health-related data. Course equivalent to: B HLTH 215 and BIS 215. Course overlaps with: B BUS 215; B EDUC 295; STAT 220; and TMATH 110.

[View course details in MyPlan: B MATH 215](#)

## MECHANICAL ENGINEERING

### **ME 221 Statics (4)**

Applies vector analysis to equilibrium of rigid body systems and subsystems. Includes force and moment resultants, free body diagrams, internal forces, and friction. Analyzes basic structural and machine systems and components. Course equivalent to: TME 221. Course overlaps with: A A 210.

Prerequisite: minimum grade of 2.0 in either STMATH 126 or MATH 126; minimum grade of 2.0 in either B PHYS 121 or PHYS 121. Offered: A.

[View course details in MyPlan: B ME 221](#)

### **B ME 222 Mechanics of Materials (4)**

Introduces deformations of solids in response to external loads and effects of deformations on stability and material behavior. Develops basic relationships among loads, stresses, and deflections of structural and machine elements such as rods, shafts, and beams. Includes laboratory. Course equivalent to: TME 222. Course overlaps with: CEE 220. Prerequisite: minimum grade of 2.0 in B ME 221. Offered: W.

[View course details in MyPlan: B ME 222](#)

### **B ME 223 Dynamics (4)**

Kinematics of particles, systems of particles, and rigid bodies; moving reference frames; kinetics of particles, systems of particles, and rigid bodies; equilibrium, energy, linear momentum, angular momentum. Includes laboratory. Course equivalent to: M E 230 and TME

223. Prerequisite: minimum grade of 2.0 in B ME 221. Offered: Sp.

[View course details in MyPlan: B ME 223](#)

### **B ME 293 Special Topics in Mechanical Engineering (1-5, max. 15)**

Explores special topics in mechanical engineering.

[View course details in MyPlan: B ME 293](#)

### **B ME 301 Introductory Seminar for Mechanical Engineering (1)**

Reviews the mechanical engineering degree program at UW Bothell, emphasizing its unique features as well as relating its structure and intent to mechanical engineering as a profession. Credit/no-credit only. Offered: W.

[View course details in MyPlan: B ME 301](#)

### **B ME 315 Introduction to 3D Modeling, Design, and Analysis (4) A&H**

Explores design, representation, and analysis of three-dimensional objects using computational methods and computer-aided design (CAD). Topics include free-hand sketching; optimization of design parameters; documentation and communication of design information using appropriate engineering standards and practices. Course overlaps with: M E 123 and TME 315. Prerequisite: a minimum grade of 2.0 in either B ME 222 or CEE 220. Offered: WSp.

[View course details in MyPlan: B ME 315](#)

### **B ME 331 Thermodynamics (4)**

First and Second Laws of thermodynamics, and their application in open and closed systems. Includes thermodynamic properties of substances, gas laws, entropy, power and refrigeration cycles. Course overlaps with: M E 323 and TME 331. Prerequisite: a minimum grade of 1.7

in B CHEM 143; a minimum grade of 1.7 in either B CHEM 144 or CHEM 142; a minimum grade of 1.7 in either STMATH 207 or MATH 207; and a minimum grade of 1.7 in B PHYS 121 or PHYS 121.

[View course details in MyPlan: B ME 331](#)

#### **B ME 332 Fluid Mechanics (4)**

Introduction to fluid properties, hydrostatics, momentum transfer in internal and external fluid flow, analysis of fluid flow systems, and fluid dynamics. Course overlaps with: M E 333; TCE 347; and TME 332. Prerequisite: a minimum grade of 1.7 in either B ME 331 or A A 260; and a minimum grade of 1.7 in either STMATH 224 or MATH 224. Offered: W.

[View course details in MyPlan: B ME 332](#)

#### **B ME 333 Heat Transfer (4)**

Introduction to heat transfer by conduction, natural and forced convection, radiation, heat transfer in internal and external flow, and heat exchangers. Course overlaps with: M E 331 and TME 433.

Prerequisite: minimum grade of 1.7 in B ME 332. Offered: Sp.

[View course details in MyPlan: B ME 333](#)

#### **B ME 334 Thermal Fluids Lab (2)**

Weekly lab experiments designed to introduce students to the basics of experimentation, instrumentation, data collection and analysis, error analysis, report writing, and teamwork skills. Topics will include fluid mechanics and heat transfer.

Prerequisite: minimum grade of 1.7 in B ME 331; minimum grade of 1.7 in B ME 332; and minimum grade of 1.7 in B ME 333 Offered: A.

[View course details in MyPlan: B ME 334](#)

#### **B ME 341 Mechanical Systems Design I (4)**

Mechanical analysis and materials selecti

on of machine components.

Topics include material properties, load analysis, advanced strength of materials, impact, fracture mechanics, fatigue and reliability. Detailed materials

selection methodology is introduced.

Associated manufacturing processes.

Course overlaps with: M E 440 and TME 341. Prerequisite: a minimum grade of 1.7 in either B ENGR 320 or MSE 170; and a minimum grade of 1.7 in either B ME 223 or M E 230. Offered: WSp.

[View course details in MyPlan: B ME 341](#)

#### **B ME 342 Mechanical Systems Design II (4)**

Analytical techniques are presented for the design and analysis of a variety of mechanical components including fasteners, welded joints, springs, bearings, clutches and brakes, shafts, and gears. Materials selection considerations included. Lubrication principles are introduced through bearing analysis. Course overlaps with: TME 342. Prerequisite: minimum grade of 1.7 in B ME 341. Offered: SpS.

[View course details in MyPlan: B ME 342](#)

#### **B ME 343 Mechanical Systems Design III (5)**

Covers dynamic system modeling (mechanical, electrical, fluid, and thermos systems); linear oscillator analysis (Laplace transforms, Fourier transforms, eigenvalue problems, and modal analysis); performance specifications of feedback control systems; and controller designs for single input single output systems. Includes laboratory experiences. Course equivalent to: TME 373. Course overlaps with: M E 471. Prerequisite: a minimum grade of 1.7 in B ME 342; and a minimum grade of 1.7 in either B ME 315

or M E 123.

[View course details in MyPlan: B ME 343](#)

#### **B ME 345 Machining Fundamentals (4)**

Introduction to the principles and operations of metal removal processes emphasizing drilling, milling, lathe, sawing, and grinding processes. B ME 331 may be taken concurrently. Course overlaps with: TME 345.

[View course details in MyPlan: B ME 345](#)

#### **B ME 410 Electric Power and Machinery (5)**

Fundamentals of electrical circuits and components, and their application in motors, generators, and other machinery used in industrial applications. Includes laboratory. Prerequisite: a minimum grade of 1.7 in either STMATH 126 or MATH 126; and a minimum grade of 1.7 in either B PHYS 122 or PHYS 122. Offered: A.

[View course details in MyPlan: B ME 410](#)

#### **B ME 431 Acoustical Engineering: Fundamentals (4)**

Covers underlying physics of diagnostic and therapeutic ultrasound systems and their physical effects. Estimates important ultrasound parameters using numerical simulations, algebraic techniques, and laboratory-based measurements. Prerequisite: a minimum grade of 2.0 in either B ENGR 310 or AMATH 301; a minimum grade of 2.0 in either STMATH 208, MATH 208, or AMATH 352; and a minimum grade of 2.0 in either B PHYS 123 or PHYS 123.

[View course details in MyPlan: B ME 431](#)

#### **B ME 432 Acoustical Engineering: Medical Devices (4)**

Analysis of advanced applications of diagnostic and therapeutic ultrasound systems to brain and to peripheral tissue. Algebraic estimation of physical forces

exerted by ultrasound and of associated biological responses. Literature review of ultrasound application to brain and peripheral tissue.

[View course details in MyPlan: B ME 432](#)

#### **B ME 433 Advanced Thermal Fluids (4)**

Explores advanced topics in thermodynamics, heat transfer, and fluid mechanics, including but not limited to HVAC, combustion, compressible fluid mechanics, advanced power generation, computational methods, and renewable energy. Prerequisite:

Prerequisites: Minimum grade of 2.0 in B ME 333; recommended: B ME 333

[View course details in MyPlan: B ME 433](#)

#### **B ME 435 Introduction to Heating, Ventilation, and Air Conditioning (4)**

Fundamentals of heating, ventilation, and air conditioning (HVAC) to keep buildings comfortable and healthy for their occupants while minimizing environmental impact.

Topics include: properties of air-water mixtures; combustion, refrigeration cycles, heating and cooling load calculations, HVAC equipment, and design of HVAC systems for sustainable buildings. Course overlaps with: M E 425; TME 425; and TME 435.

Prerequisite: minimum grade of 2.0 in B ME 333.

[View course details in MyPlan: B ME 435](#)

#### **B ME 440 Mechanical Behavior of Materials (4)**

Thorough investigation into the basic fundamentals of deformation and failure of engineering materials. Emphasis is given to crystalline structure and microstructural aspects relating to mechanisms of deformation, strengthening and fracture. Materials processing is also discussed



with respect to controlling microstructure to achieve desired mechanical properties for engineering applications. Lecture-based with in-class lab exercises included. Course overlaps with: MSE 362 and MSE 462. Prerequisite: B ME 341. Offered: WSp.

[View course details in MyPlan: B ME 440](#)

#### **B ME 446 Sustainable Energy (4)**

Studies principles and technologies of energy conversion and their application in sustainable power generation systems. Topics include: fuels and combustion; combined cycles; renewable energy; nuclear power; fuel cells; and energy storage. Economic, environmental, and policy implications of energy technologies are also considered. Course overlaps with: B EE 381/BST 381; M E 430; and TEE 433. Prerequisite: a minimum grade of 2.0 in B ME 331.

[View course details in MyPlan: B ME 446](#)

#### **B ME 450 Introduction to Ocean Engineering and Sciences (4) NSc**

Introduction to fundamental concepts of ocean sciences and engineering through project-based activities. Topics include Hydrostatistics, Hydrodynamics, Ocean Sensors, Underwater Acoustics, Sonar, Marine Geology, Ocean Vehicles, Marine Ecosystem, Marine Mammals, Energy, Pollution and Policy.

Prerequisite: Minimum grade of 2.0 in B ENGR 310

[View course details in MyPlan: B ME 450](#)

#### **B ME 460 Introduction to Mechatronics (4)**

Explores the multidisciplinary field of Mechatronics, involving a combination of mechanical engineering, electronics, computer engineering, and control engineering. Topics include review of basic programming languages; circuit

fundamentals and their components; microcomputer architecture and applications; electro-mechanical actuators/sensors; Introduction of PC based control; smart materials and application to intelligent systems. Course overlaps with: B EE 425; CSS 427; CSE 474/E E 474; M E 477; TCES 460; and TME 441. Prerequisite: minimum grade of 2.0 in B ME 343; recommended: college-level computer programming course.

[View course details in MyPlan: B ME 460](#)

#### **B ME 481 Citizen Engineer (5) SSc, DIV**

Examines the responsibilities of the engineer in the ethical application of technology in diverse, interconnected, and global societies. Historical and contemporary cases are used to probe socio-cultural implications of engineering practice and the role of engineers in local, national, and global development.

Prerequisite: a minimum grade of 2.0 in B ME 333; and a minimum grade of 2.0 in B ME 342. Offered: AW.

[View course details in MyPlan: B ME 481](#)

#### **B ME 482 Professional Engineer (5) SSc**

Topics in the professional practice of engineering, including engineering economics; product development; project planning; leadership; management and organization; and legal and regulatory matters.

Incorporates review for the Fundamentals of Engineering (FE) exam required as the first step toward professional licensure.

Course overlaps with: TME 403.

Prerequisite: minimum grade of 1.7 in B ME 481.

[View course details in MyPlan: B ME 482](#)

#### **B ME 483 Fundamentals of Engineering Mechanical Exam Preparation (2)**

Supports Mechanical Engineering majors in beginning their preparation for the



Fundamentals of Engineering (FE) Exam, the first step in becoming a licensed Professional Engineer (PE). Students review the subjects covered on the exam and practice fast-paced problem solving under conditions similar to those of the exam. Prerequisite: a minimum grade of 2.0 in B ME 343. Credit/no-credit only.

[View course details in MyPlan: B ME 483](#)

**B ME 493 Advanced Special Topics in Mechanical Engineering (1-5, max. 16)**

Explores special topics in mechanical engineering. Offered: AWSp.

[View course details in MyPlan: B ME 493](#)

**B ME 494 Innovation, Design and Entrepreneurship (5) SSc**

Explores non-technical aspects of business relevant to engineering. Central is essay of the needs of people (as individuals; as members of society) that guide the invention, design and construction of devices, and of businesses, that address those needs. Topics include: needs statements, market analysis, ideation, patenting, business-plan development. Offered: A.

[View course details in MyPlan: B ME 494](#)

**B ME 495 Capstone Project in Mechanical Engineering I (3)**

Small-team project targeting open-ended design problems in mechanical engineering. May be undertaken as part of an industrial internship with direct supervision of the mechanical engineering faculty and sponsor.

Prerequisite: a minimum grade of 1.7 in B ME 333; a minimum grade of 1.7 in B ME 343; and a minimum grade of 1.7 in either B ME 494 or B ENGR 494. Offered: W.

[View course details in MyPlan: B ME 495](#)

**B ME 496 Capstone Project in Mechanical Engineering II (4)**

Small-team project targeting the building phase of open-ended design problems in Mechanical Engineering. May be undertaken as part of an industrial internship with direct supervision of the ME faculty and sponsor. May involve students of complementary disciplines. Prerequisite: a minimum grade of 2.0 in B ME 495. Offered: Sp.

[View course details in MyPlan: B ME 496](#)

**B ME 498 Independent Study in Mechanical Engineering (1-5, max. 10)**

Independent study on a topic or area agreed upon by the instructor and the student.

[View course details in MyPlan: B ME 498](#)

**B ME 499 Undergraduate Research in Mechanical Engineering (1-5, max. 10)**

Undergraduate research on a topic or area agreed upon by the instructor and the student.

[View course details in MyPlan: B ME 499](#)

**PHYSICS**

**B PHYS 101 Introduction to Astronomy (5) NSc, RSN**

Conceptual introduction to the science of astronomy. Studies the planets, solar systems, stars, and galaxies from a conceptual, non-mathematical, standpoint.

[View course details in MyPlan: B PHYS 101](#)

**B PHYS 114 General Physics (4) NSc, RSN**

Basic principles of physics presented without use of calculus. Suitable for students majoring in technically oriented fields other than engineering or the physical sciences. Mechanics. Maximum 5 credits allowed between B PHYS 114; B PHYS 117; B PHYS 121; and PHYS 141 (or equivalents). Course equivalent to: PHYS 114. Course overlaps with: B PHYS 121;

PHYS 121; and PHYS 141.

[View course details in MyPlan: B PHYS 114](#)

**B PHYS 115 General Physics (4) NSc**

Basic principles of physics presented without use of calculus. Suitable for students majoring in technically oriented fields other than engineering or the physical sciences. Heat and electromagnetism. Maximum 5 credits allowed between B PHYS 115; B PHYS 118; B PHYS 122; and PHYS 142 (or equivalents). Course equivalent to: PHYS 115. Course overlaps with: B PHYS 122; PHYS 122; and PHYS 142. Prerequisite: B PHYS 114.

[View course details in MyPlan: B PHYS 115](#)

**B PHYS 116 General Physics (4) NSc**

Basic principles of physics presented without use of calculus. Suitable for students majoring in technically oriented fields other than engineering or the physical sciences. Sound, light, and modern physics. Maximum 5 credits allowed between B PHYS 116; B PHYS 119; B PHYS 123; and PHYS 143 (or equivalents). Course equivalent to: PHYS 116. Course overlaps with: B PHYS 123; PHYS 123; and PHYS 143. Prerequisite: B PHYS 115.

[View course details in MyPlan: B PHYS 116](#)

**B PHYS 117 General Physics Laboratory (1) NSc**

Mechanics laboratory. Maximum 5 credits allowed between B PHYS 114; B PHYS 117; B PHYS 121; and PHYS 141 (or equivalents). Course equivalent to: PHYS 117. Course overlaps with: B PHYS 121; PHYS 121; and PHYS 141. Prerequisite: B PHYS 114, which may be taken concurrently.

[View course details in MyPlan: B PHYS 117](#)

**B PHYS 118 General Physics Laboratory (1) NSc**

Heat and electromagnetism laboratory. Maximum 5 credits allowed between B PHYS 115; B PHYS 118; B PHYS 122; and PHYS 142 (or equivalents). Course equivalent to: PHYS 118. Course overlaps with: B PHYS 122; PHYS 122; and PHYS 142. Prerequisite: B PHYS 115, which may be taken concurrently.

[View course details in MyPlan: B PHYS 118](#)

**B PHYS 119 General Physics Laboratory (1) NSc**

Sound, light, and modern physics laboratory. Maximum 5 credits allowed between B PHYS 116; B PHYS 119; B PHYS 123; and PHYS 143 (or equivalents). Course equivalent to: PHYS 119. Course overlaps with: B PHYS 123; PHYS 123; and PHYS 143. Prerequisite: B PHYS 116, which may be taken concurrently.

[View course details in MyPlan: B PHYS 119](#)

**B PHYS 121 Mechanics (5) NSc, RSN**

Basic principles of mechanics and experiments in mechanics for physical science and engineering majors. Lecture tutorial and lab components must all be taken to receive credit. Maximum 5 credits allowed between B PHYS 114; B PHYS 117; B PHYS 121; and PHYS 141 (or equivalents). Course equivalent to: PHYS 121. Course overlaps with: B PHYS 114; B PHYS 117; PHYS 114; PHYS 117; and PHYS 141. Prerequisite: STMATH 124, which may be taken concurrently.

[View course details in MyPlan: B PHYS 121](#)

**B PHYS 122 Electromagnetism and Oscillatory Motion (5) NSc**

Basic principles of electromagnetism, the mechanics of oscillatory motion, and experiments in these topics for physical science and engineering majors. Lecture tutorial and lab components must all be taken to receive credit.

Maximum 5 credits allowed between B PHYS 115; B PHYS 118; B PHYS 122; and PHYS 142 (or equivalents). Course equivalent to: PHYS 122. Course overlaps with: B PHYS 115; B PHYS 118; PHYS 115; PHYS 118; and PHYS 142. Prerequisite: STMATH 125, which may be taken concurrently; B PHYS 121.

[View course details in MyPlan: B PHYS 122](#)

**B PHYS 123 Waves (5) NSc**

Electromagnetic waves, optics, waves in matter, and experiments in these topics for physical science and engineering majors. Lecture tutorial and lab components must all be taken to receive credit. Maximum 5 credits allowed between B PHYS 116; B PHYS 119; B PHYS 123; and PHYS 143 (or equivalents). Course equivalent to: PHYS 123. Course overlaps with: B PHYS 116; B PHYS 119; PHYS 116; PHYS 119; and PHYS 143. Prerequisite: B PHYS 122.

[View course details in MyPlan: B PHYS 123](#)

**B PHYS 201 The Cosmos (5) NSc, RSN**

Provides a conceptual introduction to the foundations and current theories of cosmology. Studies black holes, time travel, the Big Bang, and dark matter.

[View course details in MyPlan: B PHYS 201](#)

**B PHYS 221 Classical Mechanics (5) NSc, RSN**

Covers Newtonian dynamics, planetary

orbits, drag forces, energy, oscillators, chaos theory, and more.

Some

emphasis placed on Lagrangian and Hamiltonian dynamics. Prerequisite: B PHYS 123; STMATH 126; and STMATH 207, which may be taken concurrently. Offered: Sp.

[View course details in MyPlan: B PHYS 221](#)

**B PHYS 222 Modern Physics (5) NSc, RSN**

Provides an introduction to the theories of relativity and quantum mechanics. Covers topics such as atomic physics, solid state/condensed matter physics, and nuclear physics. Prerequisite: a minimum grade of 2.0 in B PHYS 123; and STMATH 207, which may be taken concurrently. Offered: A.

[View course details in MyPlan: B PHYS 222](#)

**B PHYS 224 Thermal Physics (5) NSc, RSN**

Studies heat, temperature, and forms of thermal energy. Covers the laws of thermodynamics and some statistical mechanics.

Prerequisite: minimum grade of 2.0 in B PHYS 123. Offered: W.

[View course details in MyPlan: B PHYS 224](#)

**B PHYS 231 Introduction to Experimental Physics (3)**

Covers data acquisition and analysis, and presentation of results. Accomplished through experiments in physics.

Prerequisite: minimum grade of 2.0 in B PHYS 123. Offered: A.

[View course details in MyPlan: B PHYS 231](#)

**B PHYS 293 Special Topics in Physics (1-5, max. 15) NSc, RSN**

Explores selected topics in Physics at the sophomore level, and will be an elective in physics major.

[View course details in MyPlan: B PHYS 293](#)

**B PHYS 311 Introduction to Astrophysics I (5)**

Introduces astronomy and astrophysics using mathematics. First in a series of courses of two. Topics include the basics of celestial motion, telescopes, and stars. Prerequisite: minimum grade of 2.0 in B PHYS 123.

[View course details in MyPlan: B PHYS 311](#)

**B PHYS 312 Introduction to Astrophysics II (5)**

Introduces astronomy and astrophysics using mathematics. Second in a series of two. Topics include the basics of galaxy structure, formation, and evolution. Prerequisite: minimum grade of 2.0 in B PHYS 311.

[View course details in MyPlan: B PHYS 312](#)

**B PHYS 314 Introduction to Cosmology (5)**

Provides introduction to the science of cosmology. Topics include mathematical descriptions of the expanding universe, the big bang, the cosmic microwave background, and early universe. Prerequisite: minimum grade of 2.0 in both B PHYS 221 and B PHYS 222.

[View course details in MyPlan: B PHYS 314](#)

**B PHYS 317 Mathematical Physics (5) RSN**

Introduction to mathematical physics, to include vector calculus, differential equations, complex analysis, Fourier analysis, and calculus of variations. Course overlaps with: PHYS 227.

Prerequisite: a minimum grade of 2.0 in B PHYS 123 or PHYS 123; STMATH 207 or MATH 207; and STMATH 208 or MATH 208.

[View course details in MyPlan: B PHYS 317](#)

**B PHYS 321 Electricity and Magnetism I (5) NSc**

Covers electrostatics, including Gauss' law, the electric field, electric potential, conductors, and dielectric media. The first course in a three-quarter sequence covering electromagnetic theory. Course overlaps with: PHYS 321. Prerequisite: a minimum grade of 2.0 in B PHYS 122; and a minimum grade of 2.0 in either STMATH 224 or MATH 224.

[View course details in MyPlan: B PHYS 321](#)

**B PHYS 322 Electricity and Magnetism II (5)**

Covers magnetostatics, vector potentials, Maxwell's equations, magnetic materials, tensors, and electromagnetic waves. Second in a three quarter sequence.

Prerequisite: minimum grade of 2.0 in either B PHYS 321 or PHYS 321.

[View course details in MyPlan: B PHYS 322](#)

**B PHYS 323 Electricity and Magnetism III (5) NSc, RSN**

Covers electrodynamics, electromagnetic waves, radiation, and special relativity. Course overlaps with: PHYS 323. Prerequisite: Either B PHYS 322 or PHYS 322.

[View course details in MyPlan: B PHYS 323](#)

**B PHYS 324 Quantum Mechanics I (5) NSc**

Introduction to nonrelativistic quantum theory. Covers the postulates of quantum

mechanics, Schrodinger wave equations, the Uncertainty Principle, angular momentum, and the hydrogen atom. First part of a two-quarter sequence. Course overlaps with: PHYS 324. Prerequisite: a minimum grade of 2.0 in B PHYS 222; and a minimum grade of 2.0 in either STMATH 224 or MATH 224.

[View course details in MyPlan: B PHYS 324](#)

**B PHYS 325 Quantum Mechanics II (5) NSc, RSN**

Covers nonrelativistic quantum theory. Topics include identical particles, approximation techniques, and scattering problems. Course overlaps with: PHYS 325. Prerequisite: a minimum grade of 2.0 in B PHYS 324.

[View course details in MyPlan: B PHYS 325](#)

**B PHYS 328 Statistical Physics (5) NSc, RSN**

Covers statistical mechanics and quantum statistics. Course overlaps with: PHYS 328. Prerequisite: a minimum grade of 2.0 in B PHYS 224

[View course details in MyPlan: B PHYS 328](#)

**B PHYS 330 Special and General Relativity (5)**

Special relativity including simultaneity, causality, paradoxes, relativistic momentum and energy. General relativity including black holes, the Schwarzschild metric, and geodesics in curved spacetime. Course overlaps with: PHYS 226. Prerequisite: B PHYS 123 or PHYS 123. Offered: Sp.

[View course details in MyPlan: B PHYS 330](#)

**B PHYS 431 Experimental Physics Lab: Analog Circuits (5) NSc, RSN**

Key circuit analysis principles will be

introduced which will help the students analyze a variety of discrete analog dc and ac circuits which would use diodes, bipolar junction transistors, and operational amplifiers. Students will solve the circuits analytically, and then test their answers by simulating the circuits using Multisim in the laboratory. The students will then proceed to build these circuits and test them.

Prerequisite: minimum grade of 2.0 in B PHYS 231.

[View course details in MyPlan: B PHYS 431](#)

**B PHYS 432 Experimental Physics Lab: Digital Circuits and Instrumentation (5)**

Design experiments to measure physical properties using specialized instrumentation and equipment. We will undertake analysis of digital circuits, building and testing circuits combinational and sequential logic circuits, as well as explore modern measurement techniques and precision measurements. Course overlaps with: PHYS 431. Prerequisite: a minimum grade of 2.0 in B PHYS 231.

[View course details in MyPlan: B PHYS 432](#)

**B PHYS 433 Experimental Physics: Senior Project (5)**

Students will be creating deliverable projects and communicating the outcomes and results of their project at end of quarter. Students may propose projects either related to ongoing research or connected to prior coursework in physics. Prerequisite: either a minimum grade of 2.0 in B PHYS 312, a minimum grade of 2.0 in B PHYS 432, a minimum grade of 2.0 in B PHYS 450, or a minimum grade of 2.0 in B PHYS 484. Offered: Sp.

[View course details in MyPlan: B PHYS 433](#)

**B PHYS 441 Condensed Matter Physics I (5) NSc**

Covers condensed matter physics to include the solid and liquid states, crystals, diffraction, phonons, band theory, semiconductors and superconductors. Course overlaps with: PHYS 423. Prerequisite: B PHYS 324

[View course details in MyPlan: B PHYS 441](#)

**B PHYS 442 Condensed Matter 2 (5)**

This is the second course in a series of two courses on Condensed Matter Physics. The objective of this course is to introduce formalisms and simple models on magnetic properties and collective excitations in materials. This course also deals with optical processes in semiconductors, and magnetic resonance, surface physics, nanostructures and amorphous materials. Course overlaps with: MSE 352 and PHYS 423. Prerequisite: B PHYS 441; recommended: Strongly recommend prior course work in advanced calculus, quantum mechanics and statistical physics.

[View course details in MyPlan: B PHYS 442](#)

**B PHYS 450 Computational and Theoretical Modeling in Physics (5) NSc, RSN**

Introduces the concepts and techniques for computational modeling of physical systems. In particular, we will use Matlab or Python to develop computational models, and the course will introduce the Matlab and Python programming languages and cover basic programming methods. We will then model physical systems using differential

equations, Fourier transforms, and matrix methods. Prerequisite: B PHYS 317 and CSS 112.

[View course details in MyPlan: B PHYS 450](#)

**B PHYS 484 Physics, Society and Industry (5) SSc**

Draw connections between physics, mathematics and general science topics and connect these topics to issues relevant in modern day society and industry. Focus on written, verbal and visual communication skills and using literature sources Prerequisite: either B PHYS 222 and B PHYS 224, or BISSTS 307 and BISSTS 355. Offered: A.

[View course details in MyPlan: B PHYS 484](#)

**B PHYS 493 Advanced Topics in Physics (1-5, max. 15) NSc, RSN**

Covers advanced topics in Physics.

[View course details in MyPlan: B PHYS 493](#)

**B PHYS 494 Physics Seminar (1, max. 5)**

Observing and presenting scientific talks. Students will learn about modern physics research and how to present scientific material to an audience. Credit/no-credit only. Offered: A.

[View course details in MyPlan: B PHYS 494](#)

**B PHYS 498 Independent Study in Physics (1-5, max. 10)**

Independent study on a topic or area agreed upon by the instructor and the student.

[View course details in MyPlan: B PHYS 498](#)

**B PHYS 499 Undergraduate Research in Physics (1-5, max. 10)**

Undergraduate research on a topic or area agreed upon by the instructor and the student.



[View course details in MyPlan: B PHYS 499](#)

## SCIENCE AND TECHNOLOGY

### **BST 110 Chemistry and Life (5) NSc**

Survey course exploring the chemistry of life. Topics include the molecular nature of all life, chemical processes of living organisms, chemistry of food, air, water, nutrition, pollution, genetic engineering, and drug design. Material includes basic chemical principles related to explored topics. No prior chemistry knowledge assumed. Offered: jointly with B CHEM 110; A.

[View course details in MyPlan: BST 110](#)

### **BST 205 Women in STEM (5) SSc, DIV**

Many women and gender minorities feel outside of science, technology, engineering, and mathematics (STEM) fields and continue to be underrepresented in STEM. This class explores intersectional challenges experienced by diverse populations in STEM fields and strategies to surmount those challenges at the individual and organizational levels. Students will develop tools to persevere, succeed, and support others as they pursue a career in STEM. Course overlaps with: GWSS 485/PHYS 451; GWSS 488; and T WOMN 211. Offered: A/WSp.

[View course details in MyPlan: BST 205](#)

### **BST 210 Social Justice in Science, Technology, Engineering, and Math (5) DIV**

This course examines longstanding systemic inequities pervasive in STEM that impact scientific research, medicine, technology, engineering, and education. STEM Majors across campus can draw upon their disciplinary expertise to address social injustices. This course examines social justice topics relevant to

your own lives and studies, and students will participate in student-driven activism of your choosing.

[View course details in MyPlan: BST 210](#)

### **BST 293 Special Topics (5, max. 15)**

Examines different subjects or problems from an interdisciplinary framework.

[View course details in MyPlan: BST 293](#)

### **BST 301 Scientific Writing (5)**

Develop written and verbal scientific communication skills that are essential for success in a scientific career. Create multiple products including a scientific paper, research funding proposal, and content for online media. Prerequisite: Minimum 2.0 grade in B WRIT 134.

Offered: A/WSp.

[View course details in MyPlan: BST 301](#)

### **BST 381 Introduction to Electric Power Generation (5) NSc, RSN**

Reviews the design and operation of power plants for the generation of electric power. Covers thermodynamic principles of energy conversion, cycle analysis, combustion, nuclear and hydroelectric power, emerging energy technologies, plant economics, emission controls, and environmental impact. Course overlaps with: B ME 446 and TEE 433. Prerequisite: STMATH 126 or MATH 126; and B PHYS 122. Offered: jointly with B EE 381.

[View course details in MyPlan: BST 381](#)

### **BST 445 Political Economy of Energy (5) SSc**

Covers the theoretical and practical issues in developing public policy to meet demands for efficient, secure, and environmentally sustainable energy. Student evaluate energy technologies in terms of scientific merit, economics, environmental impacts, and political contexts, and propose technologically sound and



politically feasible solutions.

[View course details in MyPlan: BST 445](#)

### **BST 446 Sustainable Energy (5) NSc**

Covers the principles of energy conservation and technologies for generating and transmitting energy sustainably to meet growing energy demand. Discusses the status and prospects of current and emerging energy choices, including fossil and nuclear fuels, biomass, wind, and solar.

Prerequisite: B CUSP 124; either B CHEM 142, B PHYS 114, or B PHYS 121.

[View course details in MyPlan: BST 446](#)

### **BST 493 Advanced Topics in Science and Technology (2-5, max. 15)**

Explores selected advanced topics in science and technology.

[View course details in MyPlan: BST 493](#)

### **BST 498 Independent Study in Science and Technology (1-5, max. 15)**

Independent study on a topic or area agreed upon by the instructor and student.

[View course details in MyPlan: BST 498](#)

### **BST 499 Undergraduate Research in Science and Technology (1-5, max. 20)**

Undergraduate research on a topic agreed upon by the instructor and student.

[View course details in MyPlan: BST 499](#)

## **SCIENCE AND TECHNOLOGY MATHEMATICS**

### **STMATH 113 Calculus I: Stretch I (5) NSc, RSN**

First course in a two-course sequence that studies the development of differential calculus, including just-in-time review of Precalculus and algebra topics including, but not limited to, simplifying algebraic and exponential expressions, and solving algebraic equations. The course starts

with limits, continuity, and the definition of derivative. Emphasizes differentiation techniques and their applications, focusing on algebraic functions. Course overlaps with: B MATH 144; STMATH 124; MATH 112; MATH 124; TMATH 122; and TMATH 124. Prerequisite: either a minimum grade of 2.5 in B MATH 123, a minimum grade of 2.5 in MATH 120, or a minimum score of 350 on the MTHDSP directed self-placement test. Offered: AW.

[View course details in MyPlan: STMATH 113](#)

### **STMATH 114 Calculus I: Stretch II (5) NSc, RSN**

Second course in a two-course sequence that studies the development of differential calculus, including just-in-time review of Precalculus and algebra topics including, but not limited to, simplifying expressions and solving equations involving logarithmic, exponential, and trigonometric functions. Emphasizes differentiation techniques and their applications, focusing on transcendental functions. Course overlaps with: B MATH 144; STMATH 124; MATH 112; MATH 124; TMATH 122; and TMATH 124. Prerequisite: a minimum grade of 2.0 in STMATH 113.

Offered: WSp.

[View course details in MyPlan: STMATH 114](#)

### **STMATH 124 Calculus I (5) NSc, RSN**

Studies the development of differential calculus, starting with limits, continuity, and the definition of derivative. Emphasizes differentiation techniques and their applications. Course equivalent to: MATH 124 and TMATH 124. Course overlaps with: B MATH 144; STMATH 113; STMATH 114;

MATH 112; and TMATH 122. Prerequisite: either a minimum grade of 2.5 in B MATH 123 or MATH 120, a minimum score of 500 on the MTHDSP directed self-placement test, or a score of 154-163 on the MPT-AS placement test.

Offered: AWSpS.

[View course details in MyPlan: STMATH 124](#)

### **STMATH 125 Calculus II (5) NSc**

Integration theory and techniques with applications in science and engineering. Cannot be taken for credit if credit has already been earned for MATH 207.

Course equivalent to: MATH 125 and TMATH 125. Prerequisite: a minimum grade of 2.0 in either STMATH 124 or MATH 124, a minimum score of 3 on the AP MAB exam, or a minimum score of 3 on the AP MBC exam. Offered: AWSpS.

[View course details in MyPlan: STMATH 125](#)

### **STMATH 126 Calculus III (5) NSc**

Studies sequences and series, including convergence tests and Taylor polynomials and series, as well as the calculus of curves in the plane and space described in polar, parametric, or vector-valued form. Course equivalent to: MATH 126 and TMATH 126. Course overlaps with: MATH 136. Prerequisite: a minimum grade of 2.0 in either STMATH 125 or MATH 125, or a minimum score of 4 on AP MBC exam. Offered: AWSpS.

[View course details in MyPlan: STMATH 126](#)

### **STMATH 207 Introduction to Differential Equations (5) NSc**

Introduces ordinary differential equations. Includes first-and second-order equations and Laplace transform. Course overlaps with: MATH 207 and TMATH 207. Prerequisite: a minimum

grade of 2.0 in either STMATH 125 or MATH 125.

[View course details in MyPlan: STMATH 207](#)

### **STMATH 208 Matrix Algebra with Applications (5) NSc**

Introduces linear algebra, including systems of linear equations, Gaussian elimination, matrices and matrix algebra, vector spaces, subspaces of Euclidean space, linear independence, bases and dimension, orthogonality, eigenvectors, and eigenvalues. Applications include data fitting and the method of least squares. Course overlaps with: BIS 231; MATH 208; and TMATH 207. Prerequisite: a minimum grade of 2.0 in either STMATH 125 or MATH 125.

[View course details in MyPlan: STMATH 208](#)

### **STMATH 224 Multivariable Calculus (5)**

Introduction to the concepts and computation techniques of multivariable calculus, including partial derivative, the chain rule, double and triple integrals, vector fields, line integrals, surface integrals, Green's Theorem, Stokes' Theorem, and the Divergence Theorem. Course overlaps with: TMATH 224. Prerequisite: a minimum grade of 2.0 in either STMATH 126 or MATH 126.

Offered: AWSpS.

[View course details in MyPlan: STMATH 224](#)

### **STMATH 300 Foundations of Modern Math (5) RSN**

Introduces students to mathematical argument and to reading and writing proofs. Develops elementary set theory, examples of relations, functions and operations on functions, the principle of induction, counting techniques, elementary number theory,

and combinatorics. Places strong emphasis on methods and practice of problem solving. Prerequisite: a minimum grade of 2.0 in either STMATH 125 or MATH 125; and a minimum grade of 2.0 in either B WRIT 133, B WRIT 134, or ENGL 131.

[View course details in MyPlan: STMATH 300](#)

### **STMATH 301 Introduction to Professional Mathematics (5)**

This course will focus on developing career awareness and readiness as well as fostering community in the major. Topics include: mathematical writing and typesetting; mathematics and career presentations; diversity, equity, and inclusion challenges in the mathematical sciences; ethics in the mathematical sciences; introduction to mathematical software; career exploration and development of portfolios. Prerequisite: STMATH 300, which may be taken concurrently; and a minimum grade of 2.0 in either B WRIT 133, B WRIT 134, or ENGL 131. Offered: ASp.

[View course details in MyPlan: STMATH 301](#)

### **STMATH 310 Mathematical Game Theory (5)**

Covers mathematical aspects of Game Theory, including symmetric and asymmetric games, zero-sum and non-zero-sum games, mixed and pure strategies, equilibria, and strategic moves. Examines examples from several disciplines including anthropology, philosophy, business, social psychology, and biology. Course overlaps with: B BECN 469. Prerequisite: a minimum grade of 2.0 in either STMATH 124 or MATH 124.

[View course details in MyPlan: STMATH 310](#)

### **STMATH 330 Financial Mathematics (5)**

An introduction to the concepts of financial mathematics, and how they are applied in calculating present and accumulated values for various streams of cash flows, as a basis for future use in: reserving; valuation; pricing; asset/liability management; investment income; capital budgeting; and valuing contingent cash flows. Course overlaps with: B BUS 350; FIN 350; FIN 461; FIN 466; and T BUS 350. Prerequisite: a minimum grade of 2.0 in STMATH 125.

[View course details in MyPlan: STMATH 330](#)

### **STMATH 341 Introduction to Statistical Inference (5) RSN**

Stochastic concepts including probabilistic underpinnings of statistics, measures of central tendency, variability, correlation, distributions, sampling, and simulation. Exploratory data analysis including experiments, surveys, measures of association and inferential statistics. Course overlaps with: STMATH 390; Q SCI 381; STAT 220; STAT 221/CSSS 221/SOC 221; STAT 311; STAT 390; TMATH 390; and TME 351. Prerequisite: a minimum grade of 2.0 in either STMATH 124, B MATH 144, or MATH 124.

[View course details in MyPlan: STMATH 341](#)

### **STMATH 350 Applied Number Theory and Cryptography (5)**

Introduces number theory, including divisibility, primes, the Euclidean algorithm, modular arithmetic, Fermat's Little Theorem, and the fast power method. Emphasizes applications in cryptography, including Diffie-Hellman

key exchange, public key cryptography, the ElGamal and RSA cryptosystems, and elementary elliptic curve techniques.

Prerequisite: a minimum grade of 2.0 in STMATH 208.

[View course details in MyPlan: STMATH 350](#)

### **STMATH 381 Discrete Mathematical Modeling (5)**

Introduction to methods of discrete mathematics, including topics from graph theory, network flows, and combinatorics. Emphasis on these tools to formulate models and solve problems arising in variety of applications, such as computer science, biology, and management science. Course overlaps with: MATH 381. Prerequisite: a minimum grade of 2.0 in STMATH 208 or MATH 208; and one of the following: (1) minimum grade of 2.0 in both CSS 123 and CSSSKL 123; (2) minimum grade of 2.0 in both CSS 132 and CSSSKL 132; (3) minimum grade of 2.0 in both CSS 142 and CSSSKL 142; (4) minimum grade of 2.0 in CSE 122 or CSE 142.

[View course details in MyPlan: STMATH 381](#)

### **STMATH 390 Probability and Statistics in Engineering (5) NSc, RSN**

Covers concepts of probability and statistics; conditional probability, independence, random variable, and distribution functions; descriptive statistics, transformations, sampling errors, confidence intervals, least squares, and maximum likelihood; and exploratory data analysis and interactive computing. Course equivalent to: TMATH 390. Course overlaps with: STMATH 341; Q SCI 381; STAT 390; and TME 351.

Prerequisite: a minimum grade of 2.0 in either STMATH 224 or MATH 224.

Offered: AWSp.

[View course details in MyPlan: STMATH 390](#)

### **STMATH 392 Probability (5)**

Introduction to probability theory including combinatorial analysis, conditional probability, independence, and random variables.

Conditional expectation including its use in prediction, moment-generating functions, and the multivariate normal distribution. Theoretical results in probability theory such as the strong law of large numbers and the central limit theorem. Course overlaps with: MATH 394/STAT 394 and TMATH 393.

Prerequisite: a minimum grade of 2.0 in STMATH 224; recommended: B BUS 220 if enrolled in the Actuarial Science Minor.

Offered: W.

[View course details in MyPlan: STMATH 392](#)

### **STMATH 402 Abstract Algebra I (5)**

Introduction to group theory. Emphasizes examples, including cyclic, dihedral, and symmetric groups. Theoretical concepts include: Cosets and Lagrange's theorem; direct products; homomorphisms, normal subgroups, quotient groups, and the fundamental isomorphism theorems; orders and Cauchy's theorem; and the structure of finitely-generated abelian groups. Course overlaps with: MATH 403.

Prerequisite: a minimum grade of 2.0 in either STMATH 300 or MATH 300; and a minimum grade of 2.0 in either STMATH 208 or MATH 208.

[View course details in MyPlan: STMATH 402](#)

### **STMATH 403 Abstract Algebra II (5) RSN**

Introduction to the theory of rings and fields, including ideals, homomorphisms,

quotient rings, integral domains and their fields of fractions, polynomial rings, field extensions, vector spaces, geometric constructions via straight-edge and compass, the classification of finite fields, unique factorization domains, and Euclidean domains. Course overlaps with: MATH 402. Prerequisite: a minimum grade of 2.0 in either STMATH 402 or MATH 402.

[View course details in MyPlan: STMATH 403](#)

#### **STMATH 405 Numerical Analysis I (5)**

Methods and theory for numerically solving systems of equations, both linear and nonlinear. Topics include numerical error, stability and conditioning, root finding, direct and iterative methods for linear systems, linear least squares, eigenvalue problems, and nonlinear systems. Prerequisite: minimum grade of 2.0 in STMATH 208 or MATH 208; minimum grade of 2.0 in STMATH 126 or MATH 126; and one of the following: (1) minimum grade of 2.0 in CSE 122 or CSE 142; (2) minimum grade of 2.0 in either both CSS 123 and CSSSKL 123, both CSS 132 and CSSSKL 132, or both CSS 142 and CSSSKL 142.

[View course details in MyPlan: STMATH 405](#)

#### **STMATH 406 Numerical Analysis II (5)**

Methods and theory for numerically approximating functions, their integrals and derivatives, and solutions to ODEs. Topics include polynomial and piecewise polynomial interpolation, the Fourier transform, numerical differentiation and integration, and approximate solution of ODEs using Euler and Runge-Kutta methods. Course overlaps with: CSS 455. Prerequisite: a minimum grade

of 2.0 in STMATH 207; and a minimum grade of 2.0 in STMATH 405.

[View course details in MyPlan: STMATH 406](#)

#### **STMATH 407 Linear Programming (5)**

Maximize and minimize linear functions subject to constraints consisting of linear equations and inequalities. Define linear optimization models from problem description. Solve linear programming problems using the simplex method. Conduct duality and sensitivity analysis for linear programming.

Prerequisite: minimum grade of 2.0 in STMATH 208 or MATH 208; minimum grade of 2.0 in STMATH 126 or MATH 126; and one of the following: (1) minimum grade of 2.0 in CSE 122 or CSE 142; (2) minimum grade of 2.0 in either both CSS 123 and CSSSKL 123, both CSS 132 and CSSSKL 132, or both CSS 142 and CSSSKL 142.

[View course details in MyPlan: STMATH 407](#)

#### **STMATH 408 Nonlinear Optimization (5) RSN**

Maximize and minimize nonlinear functions, constrained and unconstrained; nonlinear programming problems and methods.

Topics include: Lagrange multipliers, Kuhn-Tucker conditions, convexity, quadratic programming, steepest-descent method, and Newton and quasi-Newton methods. Prerequisite: a minimum grade of 2.0 in either STMATH 224 or MATH 224; a minimum grade of 2.0 in STMATH 300; and a minimum grade of 2.0 in STMATH 405.

[View course details in MyPlan: STMATH 408](#)

#### **STMATH 409 Advanced Linear Algebra (5)**

A mathematically rigorous treatment of vector spaces; linear transformations and matrices; matrix operations and linear systems; determinants; eigenvalues, eigenvectors, and diagonalization; canonical forms; and special matrices including permutation and nonnegative matrices. Course overlaps with: MATH 340. Prerequisite: a minimum grade of 2.0 in STMATH 402.

[View course details in MyPlan: STMATH 409](#)

### **STMATH 420 History of Mathematics (5) NSc, RSN**

Surveys the historical development of mathematics from its earliest beginnings, through the emergence of calculus, and into the early 20th century. Course overlaps with: MATH 420 and TMATH 420. Prerequisite: a minimum grade of 2.0 in either STMATH 126 or MATH 126; and a minimum grade of 2.0 in either STMATH 300 or MATH 300.

[View course details in MyPlan: STMATH 420](#)

### **STMATH 424 Real Analysis I (5)**

Introduces real analysis, with a focus on the theoretical development of single-variable calculus, including topics from the following: Countable and uncountable sets, field axioms and completeness, topology of the real numbers, sequences and convergence, Cauchy sequences, monotone sequences, subsequences, limits of functions, continuity and uniform continuity, the derivative, Mean Value Theorem, L'Hospital's Rule, and Taylor's Theorem. Course overlaps with: MATH 327; MATH 424; and TMATH 424. Prerequisite: a minimum grade of 2.0 in STMATH 300 or MATH 300. Offered: AW.

[View course details in MyPlan: STMATH 424](#)

### **STMATH 425 Real Analysis II (5)**

Focuses on the theoretical development of single-variable calculus. Includes topics from the following: the derivative, Mean Value

Theorem, L'Hospital's Rule, Taylor's Theorem, the Riemann integral, Fundamental Theorem of Calculus, convergence of series, tests of convergence of series, power series, pointwise and uniform convergence of sequences of functions, uniform convergence of power series. Course overlaps with: MATH 424; MATH 425; and TMATH 425. Prerequisite: a minimum grade of 2.0 in STMATH 424. Offered: W, odd years.

[View course details in MyPlan: STMATH 425](#)

### **STMATH 427 Complex Analysis (5)**

Complex numbers; analytics functions; sequences and series; complex integration; Cauchy integral formula; Taylor and Laurent series; uniform convergence; residue theory; conformal mapping. Course overlaps with: MATH 427 and TMATH 427. Prerequisite: a minimum grade of 2.0 in either STMATH 300 or MATH 300; and a minimum grade of 2.0 in either STMATH 224 or MATH 224.

[View course details in MyPlan: STMATH 427](#)

### **STMATH 441 Topology (5)**

Topological spaces, product spaces, quotient spaces, metric spaces, convergence, continuity, separation and countability axioms, connectedness, and compactness. Course overlaps with: MATH 441. Prerequisite: Minimum grade of 2.0 in STMATH 424.



[View course details in MyPlan: STMATH 441](#)

**STMATH 444 Foundations of Geometry (5)**

Studies classical geometry, including topics from neutral geometry of the triangle, non-neutral Euclidean geometry, spherical geometry, hyperbolic geometry, projective geometry, and symmetries. Emphasizes proof writing.

Course overlaps with: MATH 444.

Prerequisite: a minimum grade of 2.0 in either STMATH 300 or MATH 300.

[View course details in MyPlan: STMATH 444](#)

**STMATH 465 Fostering Algebraic Reasoning (5) NSc, RSN**

Focuses on methods of teaching algebra from a developmental perspective, including research-based methods for developing students' algebraic thinking and structure and processes used in algebra. Prerequisite: a minimum grade of 2.0 in either STMATH 125 or MATH 125. Offered: jointly with B EDUC 465.

[View course details in MyPlan: STMATH 465](#)

**STMATH 466 Fostering Geometric Thinking (5) NSc, RSN**

Focuses on methods of teaching geometry from a developmental perspective, including research-based methods for developing students' geometric thinking and structure and processes used in geometry including proof. Prerequisite: a minimum grade of 2.0 in STMATH 125 or MATH 125. Offered: jointly with B EDUC 466.

[View course details in MyPlan: STMATH 466](#)

**STMATH 467 Fostering Statistical Thinking, Data, and Graphical Analysis (5) NSc, RSN**

Focuses on methods of teaching data and graphical analysis and statistical thinking from a developmental perspective, including how to foster secondary students' statistical thinking, and using technological tools to teach key concepts in secondary mathematics using big data sets, graphical analysis, and dynamic visualization. Prerequisite: a minimum grade of 2.0 in either STMATH 125 or MATH 125. Offered: jointly with B EDUC 467.

[View course details in MyPlan: STMATH 467](#)

**STMATH 493 Special Topics in Mathematics (1-5, max. 15)**

Covers special topics in advanced mathematics in a classroom setting not currently taught in the mathematics curriculum. Prerequisite: a minimum grade of 2.0 in either STMATH 300 or MATH 300.

[View course details in MyPlan: STMATH 493](#)

**STMATH 498 Independent Study in Mathematics (1-5, max. 15)**

Advanced special topic in mathematics. Topic guided by an articulated need or interest and not covered in regularly scheduled courses. Course equivalent to: MATH 498.

[View course details in MyPlan: STMATH 498](#)

**STMATH 499 Undergraduate Research in Mathematics (1-5, max. 5)**

Undergraduate research project agreed upon by student and a mathematics faculty member. This course is intended to produce a quality research artifact (e.g., a poster presentation, a research article, a conference presentation, etc.). Cannot be taken if credit received for either MATH 399 or



MATH 499.

[View course details in MyPlan: STMATH 499](#)

## UNIVERSITY STUDIES

### ARABIC

#### **B ARAB 296 Study Abroad: Arabic (1-5, max. 15) A&H**

Intermediate-level Arabic language courses for which there are no direct University of Washington Bothell equivalents, taken through a University of Washington study abroad program. Further study at 200-level subject to placement test scores.

[View course details in MyPlan: B ARAB 296](#)

### CHINESE

#### **B CHIN 101 First-Year Chinese (5)**

Introduction to the standard language. Emphasis on learning correct pronunciation and basic structure. Drill in oral use of the language. Open only to students who do not have any previous training in Chinese. Maximum 10 credits allowed between B CHIN 101; B CHIN 102; and CHIN 121 (or equivalents). Maximum 15 credits allowed between B CHIN 101; B CHIN 102; B CHIN 103; CHIN 121; and CHIN 134 (or equivalents). Maximum 20 credits allowed between B CHIN 101; B CHIN 102; B CHIN 103; CHIN 201; and CHIN 138 (or equivalents). Course equivalent to: CHIN 101 and TCHIN 101. Course overlaps with: CHIN 111. Offered: A.

[View course details in MyPlan: B CHIN 101](#)

#### **B CHIN 102 First-Year Chinese (5)**

Introduction to the standard language. Emphasis on learning correct pronunciation and basic structure. Drill in oral use of the language. Open only to

students who do not have any previous training in Chinese.

Maximum 10 credits allowed between B CHIN 101; B CHIN 102; and CHIN 121 (or equivalents). Maximum 15 credits allowed between B CHIN 101; B CHIN 102; B CHIN 103; CHIN 121; and CHIN 134 (or equivalents). Maximum 20 credits allowed between B CHIN 101; B CHIN 102; B CHIN 103; CHIN 201; and CHIN 138 (or equivalents). Course equivalent to: CHIN 102 and TCHIN 102. Course overlaps with: CHIN 112.

Prerequisite: minimum grade of 2.0 in B CHIN 101. Offered: W.

[View course details in MyPlan: B CHIN 102](#)

#### **B CHIN 103 First-Year Chinese (5)**

Introduction to the standard language. Emphasis on learning correct pronunciation and basic structure. Drill in oral use of the language. Open only to students who do not have any previous training in Chinese. Maximum 15 credits allowed between B CHIN 101; B CHIN 102; B CHIN 103; CHIN 121; and CHIN 134 (or equivalents). Maximum 20 credits allowed between B CHIN 101; B CHIN 102; B CHIN 103; CHIN 201; and CHIN 138 (or equivalents). Maximum 10 credits allowed between B CHIN 103; CHIN 201; and CHIN 222 (or equivalents). Course equivalent to: CHIN 103 and TCHIN 103. Course overlaps with: CHIN 113 and CHIN 133.

Prerequisite: minimum grade of 2.0 in B CHIN 102. Offered: Sp.

[View course details in MyPlan: B CHIN 103](#)

#### **B CHIN 296 Study Abroad: Chinese (1-5, max. 15) A&H**

Intermediate-level Chinese language courses for which there are no direct

University of Washington Bothell equivalents, taken through a University of Washington study abroad program. Further study at 200-level subject to placement test scores.

[View course details in MyPlan: B CHIN 296](#)

## **BOTHELL CORE**

### **B CORE 104 Discovery Core: Arts and Humanities (5) A&H**

Introduces key elements of interdisciplinary, collaborative, and reflective learning while identifying resources and learning strategies for success as a college student. Addresses important social issues through various forms of performance, written, or visual art. Offered: A.

[View course details in MyPlan: B CORE 104](#)

### **B CORE 107 Discovery Core: Social Sciences (5) SSc**

Introduces key elements of interdisciplinary, collaborative, and reflective learning while identifying resources and learning strategies for success as a college student. Addresses important social issues through methods used in the social sciences. Offered: A.

[View course details in MyPlan: B CORE 107](#)

### **B CORE 110 Discovery Core: Natural Sciences (5) NSc**

Introduces key elements of interdisciplinary, collaborative, and reflective learning while identifying resources and learning strategies for success as a college student. Addresses important social issues through methods used in the natural sciences. Offered: A.

[View course details in MyPlan: B CORE 110](#)

### **B CORE 115 Explore: Social Sciences (5, max. 15) SSc**

This course is an interdisciplinary approach to examining contemporary issues from various angles and perspectives, building creative and critical inquiry skills, and discussing the ways people as individuals or groups, behaviors, cultures, communities, politics, histories, economies, social structures and systems, and institutions interact as a foundation of social science inquiry and practice. Offered: WSp.

[View course details in MyPlan: B CORE 115](#)

### **B CORE 116 Explore: Natural Sciences (5, max. 15) NSc**

This course is an interdisciplinary approach to examining questions and problems from various angles and perspectives, building creative and critical inquiry skills, and investigating the ways in which we interact with, study, reflect on, and analyze the natural world through physical, chemical, biological, mathematical, and/or technological phenomena, concepts, principles, processes, and/or theories. Offered: WSp.

[View course details in MyPlan: B CORE 116](#)

### **B CORE 117 Explore: Arts and Humanities (5, max. 15) A&H**

Examines questions and problems from various interdisciplinary angles and perspectives, builds creative and critical inquiry skills, and investigates the ways in which we reflect on and engage with arts and/or humanities performance, creation, research, and/or interpretation. Offered: WSp.

[View course details in MyPlan: B CORE 117](#)

**B CORE 118 Discovery Core III: Individuals and Society Portfolio and Experiential Learning (5) SSc**

Evaluates progress at the conclusion of the first year through the construction of a portfolio and offers an experiential learning opportunity, either on- or off-campus. Offered: Sp.

[View course details in MyPlan: B CORE 118](#)

**B CORE 119 Discovery Core III: Natural World Portfolio and Experiential Learning (5) NSc**

Evaluates progress at the conclusion of the first year through the construction of a portfolio and offers an experiential learning opportunity, either on- or off-campus. Offered: Sp.

[View course details in MyPlan: B CORE 119](#)

**B CORE 120 Discovery Core III: Visual, Literary, and Performing Arts Portfolio and Experiential Learning (5) A&H**

Evaluates progress at the conclusion of the first year through the construction of a portfolio and offers an experiential learning opportunity, either on- or off-campus. Offered: Sp.

[View course details in MyPlan: B CORE 120](#)

**B CORE 133 Discovery Core III: Reflect, Engage, Prepare (2)**

Through reflective assignments and projects, students will construct a portfolio of work, accomplishments, and experiences related to their first year experience. Includes co-curricular opportunities to help bridge students to academic and professional interests. Offered: Sp.

[View course details in MyPlan: B CORE 133](#)

**B CORE 207 Discovery Core Accelerated-Individuals & Society (5) SSc**

Orientation to UWB plus skill development in interdisciplinary analysis as students explore and critically evaluate various academic genres and sources. Students also practice skills in research and reflection. Offered: A.

[View course details in MyPlan: B CORE 207](#)

**B CORE 211 Discovery Core Special Topics (2)**

For students new to UWB entering with 45+ credits, this course provides an orientation to UWB as well as skill development in interdisciplinary analysis, research and reflection. Offered: A.

[View course details in MyPlan: B CORE 211](#)

**B CORE 233 Special Topics in Pre-Health Professional Pathways (2, max. 6)**

Explores pathways to a career in health and prepares students for professional roles in healthcare. Students ready to apply to graduate and professional health programs will receive additional instruction and support in applying to those programs. Course overlaps with: GEN ST 151. Credit/no-credit only. Offered: W.

[View course details in MyPlan: B CORE 233](#)

**DATA ANALYTICS AND VISUALIZATION**

**B DATA 200 Introduction to Data Studies (5) RSN**

Introduces students to an understanding of foundational concepts, overview

technical practices of data analysis and computational approaches as well as prepares them to navigate the sea of information. Learners will explore topics including data types, data structure, basic descriptive statistics, data visualization, machine learning, and communication. Course overlaps with: CSE 180; INFO 180; and STAT 180.

Offered: AWP.

[View course details in MyPlan: B DATA 200](#)

### **B DATA 232 Introduction to Data Visualization (5) NSc, RSN**

Introduces descriptive statistics and visual representations of quantitative data. Examines data sets using graphing and statistical software packages. Demonstrates how to present data in ways that are accurate, effective, and visually appealing.

[View course details in MyPlan: B DATA 232](#)

### **B DATA 411 Network Analysis and Visualization (5) RSN**

Network analysis is a set of mathematical and statistical tools for studying simple and complex relationships. This course covers a variety of such tools, including graph theory, small worlds, hubs, communities, and network models. The techniques covered in this course are widely applicable, including the fields of data science, social and natural sciences, humanities, public health, education, business, and communications. Prerequisite: B DATA 232.

[View course details in MyPlan: B DATA 411](#)

### **B DATA 412 Advanced Data Visualization (5) RSN**

Provides advanced trainings on

visualization methods to show data in complex and compelling ways. Applies complex visualization methods to examine topics including, project management, the grammar of graphics, data types, data structure, modeling, complex and interactive data visualization, and data dashboards.

Prerequisite: B DATA 232.

[View course details in MyPlan: B DATA 412](#)

### **B DATA 497 Advanced Topics in Data Visualization (5, max. 15)**

Advanced study of a specific topic, theme, or problem in data visualization and data analytics.

[View course details in MyPlan: B DATA 497](#)

## **LEADERSHIP**

### **B LEAD 102 Leading with Purpose: Working in Teams (2)**

Develops team leader competencies needed to succeed in any leadership situation, including identifying personal strengths and challenges; connecting with other and building trust; and managing change and influencing others. Addresses current theory and research about group and team leadership and the application to teamwork. Credit/no-credit only.

[View course details in MyPlan: B LEAD 102](#)

### **B LEAD 103 Leading with Purpose: People Skills (2)**

Addresses fundamental people skills necessary to effectively engage with and lead others in multiple settings. Explores the importance of self-awareness and self-esteem in building relationships, the use of effective listening and non-verbal communication, the value of empathy, giving and receiving effective

interpersonal feedback, and influencing positive interpersonal engagement.

Credit/no-credit only. Offered: SpS.

[View course details in MyPlan: B LEAD 103](#)

**B LEAD 104 Leading with Purpose: Presentation Skills (2)**

Uses creativity and practical application to help students become stronger speakers and presenters. Utilizing theatre activities and public speaking skills, students learn to be confident speakers in a variety of contexts. Offered: S.

[View course details in MyPlan: B LEAD 104](#)

**B LEAD 206 Learning to Lead: Collaboration in Diverse Contexts (2) SSc**

Explores methods of shared leadership best practices for leading oneself in diverse contexts as a foundation for leadership development. Participants work together to identify relevant issues and necessary skills, knowledge, and abilities for campus, community, and career leadership and engagement. Credit/no-credit only. Offered: AW.

[View course details in MyPlan: B LEAD 206](#)

**B LEAD 207 Learning to Lead: Leading Others (2) SSc**

Explores methods of shared leadership best practices for leading others in diverse contexts as a foundation for leadership development. Participants work together to identify relevant issues and necessary skills, knowledge, and abilities for campus, community, and career leadership and engagement. Credit/no-credit only.

[View course details in MyPlan: B LEAD 207](#)

## JAPANESE

**BJAPAN 111 First-Year Japanese (5)**

Elementary speaking, listening, reading, and writing skills in modern Japanese. Maximum 15 credits allowed between BJAPAN 111; BJAPAN 112; BJAPAN 113 (or equivalents); and JAPAN 134. Course equivalent to: JAPAN 101. Course overlaps with: JAPAN 121. Offered: AW.

[View course details in MyPlan: BJAPAN 111](#)

**BJAPAN 112 First-Year Japanese (5)**

Elementary speaking, listening, reading, and writing skills in modern Japanese. Maximum 15 credits allowed between BJAPAN 111; BJAPAN 112; BJAPAN 113 (or equivalents); and JAPAN 134. Course equivalent to: JAPAN 102. Course overlaps with: JAPAN 121. Prerequisite: either BJAPAN 111 or score of 6-20 on JP 100A placement test. Offered: WSp.

[View course details in MyPlan: BJAPAN 112](#)

**BJAPAN 113 First-Year Japanese (5)**

Elementary speaking, listening, reading, and writing skills in modern Japanese. Maximum 15 credits allowed between BJAPAN 111; BJAPAN 112; BJAPAN 113 (or equivalents); and JAPAN 134. Course equivalent to: JAPAN 103; JAPAN 131; and JAPAN 133. Prerequisite: either BJAPAN 112 or score of 21-40 on JP 100A placement test. Offered: Sp.

[View course details in MyPlan: BJAPAN 113](#)

**BJAPAN 211 Second-Year Japanese (5) A&H**

Development of further skills in the spoken and written languages. Students must enroll in both a lecture and quiz section to receive credit. Maximum 15 credits allowed between BJAPAN 211;



BJAPAN 212; BJAPAN 213 (or equivalents); and JAPAN 234. Course equivalent to: JAPAN 201. Course overlaps with: JAPAN 231. Prerequisite: BJAPAN 113.

[View course details in MyPlan: BJAPAN 211](#)

**BJAPAN 212 Second-Year Japanese (5) A&H**

Development of further skills in the spoken and written languages. Students must enroll in both a lecture and quiz section to receive credit. Maximum 15 credits allowed between BJAPAN 211; BJAPAN 212; BJAPAN 213 (or equivalents); and JAPAN 234. Course equivalent to: JAPAN 202. Course overlaps with: JAPAN 232. Prerequisite: BJAPAN 211.

[View course details in MyPlan: BJAPAN 212](#)

**BJAPAN 213 Second-Year Japanese (5) A&H**

Development of further skills in the spoken and written languages. Students must enroll in both a lecture and quiz section to receive credit. Maximum 15 credits allowed between BJAPAN 211; BJAPAN 212; BJAPAN 213 (or equivalents); and JAPAN 234. Maximum 15 credits allowed between BJAPAN 213; JAPAN 231; JAPAN 232 (or equivalents); and JAPAN 234. Course equivalent to: JAPAN 203. Prerequisite: BJAPAN 212.

[View course details in MyPlan: BJAPAN 213](#)

**BJAPAN 296 Study Abroad: Japanese (1-5, max. 15) A&H**

Intermediate-level Japanese language courses for which there are no direct University of Washington Bothell equivalents, taken through a University of Washington study abroad program.

Further study at 200-level subject to placement test scores.

[View course details in MyPlan: BJAPAN 296](#)

**KOREAN**

**BKOREA 196 Study Abroad: Elementary Korean (1-6, max. 15)**

Elementary-level Korean language and culture course taken through a UW-approved study abroad program. Further study of Korean language subject to placement test score.

[View course details in MyPlan: BKOREA 196](#)

**BKOREA 296 Study Abroad: Intermediate Korean (1-6, max. 15)**

Intermediate-level Korean language and culture courses taken through a UW-approved study abroad program. Further study of Korean language subject to placement test score.

[View course details in MyPlan: BKOREA 296](#)

**SPANISH**

**B SPAN 101 Elementary (5)**

Methods and objectives are primarily oral-aural. Maximum 15 credits allowed between B SPAN 101; B SPAN 102; B SPAN 103 (or equivalents); SPAN 121; SPAN 122; SPAN 123 (or equivalents); and SPAN 134. Course equivalent to: SPAN 101; SPAN 121; and TSPAN 101. Course overlaps with: SPAN 110 and TSPAN 110. Offered: AW.

[View course details in MyPlan: B SPAN 101](#)

**B SPAN 102 Elementary (5)**

Methods and objectives are primarily oral-aural. Maximum 15 credits allowed between B SPAN 101; B SPAN 102; B SPAN 103 (or equivalents); SPAN 121; SPAN 122; SPAN 123 (or equivalents); and SPAN 134. Course equivalent to:

SPAN 102; SPAN 122; and TSPAN 102. Course overlaps with: SPAN 110 and TSPAN 110. Prerequisite: either B SPAN 101 or score of 16-44 on SP100A placement test. Offered: WSp.

[View course details in MyPlan: B SPAN 102](#)

### **B SPAN 103 Elementary (5)**

Methods and objectives are primarily oral-aural. Maximum 15 credits allowed between B SPAN 101; B SPAN 102; B SPAN 103 (or equivalents); SPAN 121; SPAN 122; SPAN 123 (or equivalents); and SPAN 134. Course equivalent to: SPAN 103; SPAN 123; and TSPAN 103. Prerequisite: either B SPAN 102 or score of 45-69 on SP100A placement test. Offered: Sp.

[View course details in MyPlan: B SPAN 103](#)

### **B SPAN 196 Study Abroad: Immersive Elementary Spanish (1-6, max. 15)**

Elementary-level Spanish language course taken through a UW-approved study abroad program. Explores language, culture and history in a Spanish-speaking country.

[View course details in MyPlan: B SPAN 196](#)

### **B SPAN 201 Intermediate (5) A&H**

Intensive practice in speaking, reading, and writing. Review of Spanish grammar. Oral practice based on literary and cultural readings. Maximum 10 credits allowed between B SPAN 201; B SPAN 202; and SPAN 210 (or equivalents). Course equivalent to: SPAN 201 and TSPAN 201. Prerequisite: either B SPAN 103, score of 70-100 on SP100A placement test, minimum score of 51 on SP TL placement test, or score of 0-75 on SP200A placement test.

[View course details in MyPlan: B SPAN 201](#)

### **B SPAN 202 Intermediate (5) A&H**

Intensive practice in speaking, reading, and writing. Review of Spanish grammar. Oral practice based on literary and cultural readings. Maximum 10 credits allowed between B SPAN 201; B SPAN 202; and SPAN 210 (or equivalents). Course equivalent to: SPAN 202 and TSPAN 202. Course overlaps with: SPAN 204. Prerequisite: either B SPAN 201 or score of 76-145 on SP200A placement test.

[View course details in MyPlan: B SPAN 202](#)

### **B SPAN 203 Intermediate (5) A&H**

Intensive practice in speaking, reading, and writing. Review of Spanish grammar. Oral practice based on literary and cultural readings. Course equivalent to: SPAN 203 and TSPAN 203. Course overlaps with: SPAN 204. Prerequisite: either B SPAN 202, or score of 146-165 on SP200A placement test.

[View course details in MyPlan: B SPAN 203](#)

### **B SPAN 216 Spanish for Heritage Speakers (5) A&H**

Designed for heritage or native speakers of Spanish only and taught exclusively in Spanish, this course builds upon the knowledge that these students bring to the classroom, advancing their proficiency of Spanish in multiple contexts, giving attention to building and strengthening their vocabulary, writing and reading skills. Additionally, students will advance their understanding of the multiple issues related to Hispanic culture in the U.S.A. Course overlaps with: SPAN 216. Offered: Sp.



[View course details in MyPlan: B SPAN 216](#)

**B SPAN 296 Study Abroad: Spanish (1-5, max. 15) A&H**

Intermediate-level Spanish language courses for which there are no direct University of Washington Bothell equivalents, taken through a University of Washington study abroad program. Further study at 200-level subject to placement test scores.

[View course details in MyPlan: B SPAN 296](#)

**UNIV STUDIES AND PROGRAMS**

**B CUSP 100 General Learning Strategies (2, max. 6)**

This course provides students with active learning strategies and exploration of university curricular and co-curricular resources and services to help them transition into a university setting and become effective learners; and includes interactive work on building collaborative skills, and as well as reflection on personal and academic goals. Offered: AWSp.

[View course details in MyPlan: B CUSP 100](#)

**B CUSP 102 Transitioning to College Learning (3) SSc**

Focuses on equity and access in higher education in the current socio-political climate. Students will connect their lived experiences with current texts and social issues to better understand the educational system in the United States. Additionally, students will develop analytical and writing skills needed to succeed in college courses. Offered: A.

[View course details in MyPlan: B CUSP 102](#)

**B CUSP 103 Intercultural Literacy for Multilingual Students (3)**

Develops the intercultural abilities of

students whose native language is not English. Students learn close reading skills and practical guidelines and strategies that can help them develop writing abilities for various genres of assignments.

[View course details in MyPlan: B CUSP 103](#)

**B CUSP 131 Special Topics in First-Year Learning (1-5, max. 15)**

Various topics designed to respond to curricular interests and needs for first-year students.

[View course details in MyPlan: B CUSP 131](#)

**B CUSP 133 First-Year Interest Group (1-5, max. 15)**

Provides a range of educational experiences that are able to move both within and beyond the traditional classroom. Experiences include options such as participation in undergraduate research, community engagement, and on-campus groups organized around themes of common interest.

[View course details in MyPlan: B CUSP 133](#)

**B CUSP 199 Field-Based Learning (1-3, max. 10)**

Designed for pre-majors interested in gaining hands-on work experience to access potential educational and career paths. Credit/no-credit only.

Offered: WSpS.

[View course details in MyPlan: B CUSP 199](#)

**B CUSP 203 Undergraduate Peer Instructor Practicum (1-3, max. 12)**

Provides instruction in group leadership and promotion of values and methods of learning within a university setting. For Peer Instructors. Course equivalent to:

GEN ST 470. Credit/no-credit only.

Offered: Sp.

[View course details in MyPlan: B CUSP 203](#)

**B CUSP 270 Negotiation and Persuasion: Theory and Practice (5) SSc**

Examines effective negotiation techniques and prominent theories of persuasion, applying these techniques and insights in simulated negotiation. Students practice bargaining strategies, negotiate business contracts, job offers, interpersonal conflicts, consumer dispute, and ethical dilemmas. Offered: A.

[View course details in MyPlan: B CUSP 270](#)

**B CUSP 295 Study Abroad Pre-Departure Seminar (2) SSc**

Prepares students for the experience of studying abroad by offering a complex look at the industry of global travel. Students also consider various approaches to "responsible travel" and reflect on ways that their own study abroad experience may both mirror and challenge the well-worn image of the "American tourist".

[View course details in MyPlan: B CUSP 295](#)

**B CUSP 296 Study Abroad: CUSP (1-5, max. 15) A&H/SSc**

CUSP related courses for which there are no direct University of Washington Bothell equivalents, taken through a University of Washington study abroad program.

[View course details in MyPlan: B CUSP 296](#)

**WRITING**

**B WRIT 132 Composition Stretch I (5-)**

Extends B WRIT 134 over two

quarters. Provides an extended experience at working with reading and writing. Must complete both B WRIT 132 and B WRIT 133 for composition graduation credit. Course equivalent to: TWRT 120. Prerequisite: UW Bothell composition directed self-placement test. Offered: AW.

[View course details in MyPlan: B WRIT 132](#)

**B WRIT 133 Composition Stretch II (-5) C**

Extends B WRIT 134 over two quarters. Provides an extended experience at working with reading and writing. Must complete both B WRIT 132 and B WRIT 133 for composition graduation credit. Course equivalent to: TWRT 121. Course overlaps with: B WRIT 134. Prerequisite: B WRIT 132. Offered: WSp.

[View course details in MyPlan: B WRIT 133](#)

**B WRIT 134 Composition (5) C**

Offers an interdisciplinary approach to composition, including generating a compelling topic; the articulation of a thesis; the development of supporting evidence; the ability to draw conclusions from the evidence, clear organization of the essay, correct mechanics; awareness of audience, and knowledge of resources for research. Cannot be taken if previously earned a minimum grade of 2.0 in ENGL 131. Course overlaps with: B WRIT 133. Prerequisite: UW Bothell composition directed self-placement test. Offered: AWSpS.

[View course details in MyPlan: B WRIT 134](#)

**B WRIT 135 Research Writing (5) C**

Strengthens performance of college-level argumentative writing and scholarly

research, critical reading and thinking, and the critique and the creation of print and new media texts. Prerequisite: a minimum grade of 2.0 in either B WRIT 133, B WRIT 134, or ENGL 131.

Offered: AWSpS.

[View course details in MyPlan: B WRIT 135](#)

**B WRIT 137 Writing Studio (2, max. 6)**

Develops strategies for improving

academic writing. Focuses on interpreting assignments, developing rhetorical awareness, applying self-assessment, and improving revision.

Credit/no-credit only. Offered: AWSpS.

[View course details in MyPlan: B WRIT 137](#)