

The UNBC logo is rendered in a bold, dark green, sans-serif font with a slight 3D effect, positioned in the upper left corner of the cover.

UNBC

Environmental Science

The background of the cover is a photograph of a wooden bridge with railings, crossing a river. The bridge is made of weathered wood and leads into a dense forest of tall evergreen trees. The water in the river is a clear, bright blue-green color.

Student Handbook

2023

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UNBC

ENVIRONMENTAL SCIENCE

UNDERGRADUATE STUDENT HANDBOOK

Revised: 2023-01-25

INTRODUCTION

Welcome to UNBC's Environmental Science B.Sc. Program in the [*Faculty of Environment's Department of Geography, Earth and Environmental Sciences*](#)! At the undergraduate level, we offer the Bachelor of Science degree in *Environmental Science* (Major and Honours), as well as Minors in *Environmental Science*, *Aquatic Science*, *Atmospheric Science* and *Soils and the Environment*. Environmental Science faculty also participate in graduate education (MSc, MNRES, and PhD) through the [*Natural Resources and Environmental Studies*](#) graduate program.

This document is for undergraduate students studying Environmental Science at UNBC; it supplements the more formal information the UNBC Calendar¹. It is designed to help you navigate your degree, leading into environmental careers or further study. It supplements the face-to-face advising that is available through UNBC Academic Advisors (see below) or by meeting directly with Environmental Science [faculty](#).

The document overviews the Major, Minors, and Honours degree. It then discusses important points to consider when planning your degree so that you can successfully and efficiently complete your program. It highlights important student resources, and then concludes by discussing career and further study options to consider after completion of your undergraduate degree. Important information on Internships and course timetabling are contained in appendices.

This is a living document; if you are reading it as a hard copy, there are active web links that can be accessed using the online version that is accessible from the UNBC Environmental Science web page at <https://www.unbc.ca/environmental-science>.

¹ The information in the UNBC Calendar, available at https://www.unbc.ca/calendar/undergraduate/environmental_science.html is the official source of information, and supersedes this document in case of discrepancies.

PROGRAM REQUIREMENTS

BSC ENVIRONMENTAL SCIENCE MAJOR

The BSc Environmental Science degree:

- Is interdisciplinary, focusing on understanding both natural and human-made environments.
- Examines Earth's physical, chemical and biological processes as well as the Social, political and cultural factors which impact the planet.
- Builds depth (through the Major and Minor) and breadth through the [UNBC Academic Breadth Requirement](#).

As an environmental science student, you'll:

- strive to understand the complex relationships between people and the environment, drawing on a diverse range of disciplines.
- graduates from this major ready to address diverse problems such as
 - threats to and conservation of air, soil and water,
 - climate change, and
 - movement of chemicals in the environment.
- have a solid background for careers in environmental protection and resource management and research, in the public, private, and non-governmental sectors.

The degree structure:

- 1st year has general science courses that underlie an understanding of the environment, including physics, chemistry, biology, and mathematics. To complete the [UNBC Academic Breadth Requirement](#) students must select an elective from the Arts and Humanities quadrant; ENGL 170-3 *Writing and Communication Skills* is recommended for most students.
- 2nd year core curriculum develops a cross-disciplinary biophysical environmental understanding through integrative environmental systems courses on ● water ● land ● atmospheric and ● living systems, as well as ● techniques to analyse these systems.
- 3rd and 4th years students take a core curriculum that includes ● environmental impact assessment ● environmental law and ● ethics, as well as ● modelling and ● measurement ● data analysis and ● environmental contamination.
- In addition, students develop a specialization through completion of a Minor and gain practical experience through the Internship or Thesis (Honours students).

While the curriculum is in the [UNBC Calendar](#), sometimes adjustments are possible (e.g. substituting courses) with program approval. If you have questions about degree requirements, talk to your Academic Advisor (see below) well in advance of degree completion.

MINORS

The Environmental Science degree requires completion of any UNBC Minor in order to develop expertise in a concentrated area. The Environmental Science program itself offers minors in three important Earth Systems: *Aquatic Science*, *Atmospheric Science* and *Soils and the*

Environment, as well as a Minor in Environmental Science to serve the needs of students from other majors.

EXPERIENTIAL LEARNING

“Tell me and I forget. Teach me and I remember. Involve me and I learn.”

-- Benjamin Franklin

Experiential learning, is “learning by doing” and then subsequent reflection. While many Environmental Science courses incorporate experiential learning through class activities and assignments, labs and field trips, the degree requires either an Internship (ENSC 440-3) or an Independent Study (ENSC 499-3) for the Majors degree, or the Undergraduate Thesis (ENSC 430-6) for the Honours degree. These elements are incorporated to give students a “real world” experience that can assist in future careers or study.

UNDERGRADUATE THESIS AND THE HONOURS DEGREE

The Undergraduate Thesis ENSC 430-6 (or NRES 430-6) is required in the Environmental Science BSc Honours in program providing a research experience for students planning postgraduate studies. The Undergraduate Thesis must be conducted under the supervision of a faculty member, and students are responsible to find a faculty supervisor willing to supervise them. This contact and agreement should be done during the academic year prior to the semester of first registration in the Undergraduate Thesis.

INTERNSHIP

ENSC 440-(2-3) *Internship* allows students to gain hands-on exposure to an environmentally related field in industry, government, academia or non-governmental organizations. For further details please see [Appendix I](#).

CO-OPERATIVE EDUCATION

The Co-operative Education program integrates academic study with practical work experience through an alternating sequence of four-month work and study semesters. For more information, refer to the [Co-op section](#) in the UNBC Calendar. Students who have successfully completed at least one co-op placement may, with advanced Program approval, be waived from the Internship requirement in the Major.

PLANNING YOUR DEGREE

Your time at UNBC will be most productive and efficient if you plan your degree and courses early. Some courses in the program have pre-requisites that must be taken first; while some courses, especially optional ones, are only offered in alternate years. For a tentative list (subject to change) of ENSC courses and when we plan to offer them, please refer to [Appendix II](#).

Since the Environmental Science BSc requires a Minor, you should choose it early – usually in 2nd year of your program, so that courses needed by the Minor can be integrated into the courses required in your Major. Environmental Science Program faculty and UNBC Academic Advisors can provide advice on selecting and sequencing courses required in your Major and Minor and in choosing elective courses most relevant to your interests and future career. If accreditation is

important for your desired career, it will be important to know this early in your program so that appropriate course choices can be made. (Refer ahead to the section on accreditation).

STUDENT RESOURCES AND CONTACTS

DEPARTMENT OF GEOGRAPHY, EARTH AND ENVIRONMENTAL SCIENCES (GEES)

Environmental Science is a GEES program. For more information, consult the program (<https://www.unbc.ca/environmental-science>) and departmental (<https://www.unbc.ca/department-geography-earth-and-environmental-sciences>) webpages.

Contacts

Phone: 250-960-5832

Email: environmental-science@unbc.ca

Department Chair email: Dr. Catherine Nolin catherine.nolin@unbc.ca

ENVIRONMENTAL SCIENCE PROGRAM ACADEMIC ADVISING

Students can seek general academic advice from [Environmental Science Program faculty members](#) who can advise on topics such as Minors, courses, electives, careers, research and graduate studies. Initial points of contact for Faculty advising could be through the required ENSC 111-1 course, that is normally taken in first year, through the Environmental Science Student Coordinator, [Dr. Peter Jackson](#), or through the Environmental Science Curriculum Committee Chair, [Dr. Philip Owens](#).

UNBC STUDENT ADVISORS

Students should maintain communication with the Faculty of Environment Student Advisor who advises Environmental Science majors, to ensure all program requirements are met. For instance, technical inquiries about transfer credits, course substitutions, the possibility of taking courses at other institutions through a letter of permission, and ensuring graduation requirements are met, should be directed to the Faculty of Environment Student Advisor. For more information, consult the UNBC Student Advising webpage: <https://www.unbc.ca/advising>.

Contacts

Phone: 250-960-5680

Email: fe.advising@unbc.ca

Fax: 250-960-5280

Office: Agora 7-710

SCHOLARSHIPS, BURSARIES, AND FINANCIAL AID

The UNBC Awards and Financial Aid office helps you finance your education as well as providing advice on budgeting. There are many scholarships and bursaries available, some for all majors and some targeted toward specific majors (e.g. there are at least 8 awards targeted toward environmental majors), but most of them require an application. Some awards are not given because no one applies – so pay attention to the list of awards and application deadlines. For more information, consult the Awards and Financial Aid webpage:

<https://www.unbc.ca/financial-aid>

UNBC ACADEMIC SUCCESS CENTRE

The UNBC Academic Success Centre (ASC) is a valuable resource to support your learning and success as a student. The ASC provides one-on-one and drop-in tutoring services, which may include online support. Special services and resources are offered to students learning English through peer-learning programs. There are also further resources on communication skills development, physics, math and statistics, computer literacy skills, and effective studying approaches and exam preparation. All services offered by the ASC are free to UNBC students. For more information, consult the ASC webpage: <https://www.unbc.ca/academic-success-centre>.

Contacts

Phone: 250-960-6367

Email: asc@unbc.ca

Fax: 250-960-5425

Office: Geoffrey R. Weller Library, first floor

UNBC CO-OPERATIVE EDUCATION

The UNBC Co-op Program offers undergraduate students the tools and supports necessary to be successful in gaining relevant, paid work experience, before graduation.

Contacts

Phone: 250-960-5447

Email: co-op@unbc.ca

Office: 7-153

UNBC ACCESS RESOURCE CENTRE

The UNBC Access Resource Centre (ARC) supports students with disabilities to create and maintain physical, intellectual and social access to the University. ARC is mandated to reduce physical, altitudinal and systemic barriers faced by students with disabilities. Services are provided to students with documented learning disabilities, facilitating access to resources and providing reasonable accommodations. Services offered by the ARC include, among others: assessment of student needs, assistive technology and services coordination, time management and study skills development. For more information, consult the ARC webpage:

<https://www.unbc.ca/access-resource-centre>.

Contacts

Phone: 250-960-5682

Email: arc@unbc.ca

Fax: 250-960-5775

Office: 5-157

UNBC WELLNESS CENTRE

The UNBC Wellness Centre offers both professional and general support to ensure student success and well-being. Support is provided to students to be healthy in both body and mind for successful accomplishment of their personal and professional goals. The UNBC Wellness Centre works closely with students, staff, faculty and community organizations to fulfill its obligations. For more information, consult the UNBC Wellness Centre webpage: <https://www.unbc.ca/wellness-centre>.

Contacts

Phone: 250-960-6369 (Counselling Services)

Phone: 250-960-6370 (Health Services)

Email: wellness@unbc.ca

Office: 5-161 (Counselling Services)

UNBC CAREER CENTRE

The UNBC Career Centre offers students resources and services to students, alumni and employers. Among services provided, it holds workshops to assist students in preparing to gain employment, arranges employer recruiting and information sessions to students, hosts annual career fairs, and posts employment and career opportunities for students and alumni. For more information, consult the UNBC Career Centre webpage: <https://www.unbc.ca/career-centre>.

Contacts

Phone: 250-960-6426

Email: hirestudents@unbc.ca

Fax: 250-960-6065

Office: 7-232

NORTHERN UNDERGRADUATE STUDENT SOCIETY

The Northern Undergraduate Student Society (NUGSS) is a student-lead organization focussed on improving the quality of student life at UNBC. NUGSS also administers a Health and Dental plan. For more information, consult the NUGSS webpage: <https://www.nugss.ca/>.

Contacts

Phone: 250-960-6427

Email: nugss-hello@unbc.ca

Office: 6-370

NORTHERN WOMEN'S CENTRE

The Women's Centre houses information and educates on women's issues as a service to the whole community. They focus on providing options and sharing strategies for women who seek to overcome barriers that they may face in the academic arena, in the workplace and at home. For more information, consult the Northern Women's Centre Facebook page at: <https://www.facebook.com/NorthernWomensCentre/> or email: empower@unbc.ca.

NORTHERN PRIDE CENTRE

The mission of The Northern Pride Centre Society is to promote public understanding and acceptance of people of all gender expressions or sexual orientations, regardless of class or ability. The Centre is created to foster and enhance the well-being, unity and visibility of LGBTQ persons and allies with related identities. The Centre is committed to providing the community with education, and resources and a safe space in an open and supportive environment to eliminate prejudice and discrimination in our communities. The Northern Pride Centre is 100% volunteer operated and is fully free to join. For more information consult the Northern Pride Centre Facebook page at: <https://www.facebook.com/northernpridecentre/> or email: prideunbc@gmail.com.

GEOGRAPHY, EARTH, AND ENVIRONMENTAL SCIENCES CLUB (GEES CLUB)

The GEES Club is a way for all of the Geography and Environmental Science students to meet and build our community. In the club, members work to engage students interested in geography, earth and environmental sciences through career-related gatherings with industry professionals, talks from guest lecturers, and social outdoor activities. GEES Club members believe that interacting with likeminded people is necessary when it comes to academic success. This club was recently re-established in 2021. For more information email: gees-club@unbc.ca.

WEB, SOCIAL MEDIA AND ELECTRONIC MAIL LISTS

Internet: <https://www.unbc.ca/environmental-science>

Twitter: GEES = @UNBC_GEES

Facebook: GEES: @UNBCGeographyENSC

Instagram: @unbcgeography_ensc

Email list: env-sci@lists.unbc.ca for occasional communication of important notices, job opportunities, etc. To join the list, send an empty email message to env-sci-join@lists.unbc.ca.

AFTER YOUR ENVIRONMENTAL SCIENCE DEGREE

CAREERS IN ENVIRONMENTAL SCIENCE

There are many possible careers within the environmental sciences including: ● private organisations, ● consulting firms, ● government agencies and departments, ● NGOs, and ● universities and colleges. In fact, the list is almost endless. In each case, the requirements vary; some may require an additional degree (such as an MSc or a PhD), some may require professional accreditation (see next section). Other careers may require skills obtained through certain courses or experiential learning (e.g. practical or field courses). While good grades are always useful (especially for graduate degrees), most employers tend to look for experience and skills that help you stand out, or demonstrate resourcefulness.

If you have career ideas (e.g. working for an environmental consultancy) then find out what is required. Several websites can help (see below). In addition, talk to those already in that profession; most employees welcome the opportunity to discuss their job and how they got to where they are. [Environmental Science faculty](#) would be happy to describe their experiences and point out others that can help. Below are some useful websites with information about Environmental Science careers and jobs. Find others by web searching.

● <https://www.eco.ca/viewjobs/> ● <https://www.environmentalscience.org/careers> ● <https://ca.indeed.com/Environmental-Science-jobs> ● <https://www.egbc.ca/Careers> ●

<https://www.bcia.com/about-us/about-bcia/profession-agrology>

ACCREDITATION AND CERTIFICATION

In order to secure some jobs or to progress within a career, professional accreditation or certification may be beneficial. Government and consulting firms often require it. Professional accreditations are typically specific to a particular province and may have legislated rights and responsibilities. Examples of accreditation and certification include:

- BC Institute of Agrologists (BCIA) Professional Agrologist of BC (PAg): <https://www.bcia.com/>
- Engineers & Geoscientists British Columbia, Professional Geoscientist (P.Geo.): <https://www.egbc.ca/>
- Association of Professional Biology and the College of Applied Biology (RPBio): <https://professionalbiology.com/> and <https://www.cab-bc.org/>
- Environmental Professional Certification (EP): <https://www.eco.ca/Certification/> (this is a Canada-wide voluntary accreditation)

In order to become accredited or certified there are usually certain requirements, such as courses and / or professional development. If certain courses are required for accreditation, then it is worth finding out what these are early in your program so that they can be built into your schedule.

Professional Geoscientist (P.Geo.) accreditation requires certain courses in addition to other requirements. Most of these are offered at UNBC, while others can be obtained from other institutions like UBC (note this list is currently being revised):

<https://www.egbc.ca/getmedia/7972d845-1ba0-4fed-a9c1-5be22d86aae9/APEGBC-UNBC-Geo-Course-Equivalency-Environmental-Geoscience-2011.pdf.aspx>

The courses required to become a BC Professional Agrologist, (PAg) are specified at <https://www.bcia.com/resources-publications/resources/public-resources/approved-course-listings-application> and are available as requirements and electives within the Environmental Science major.

The courses required to become a BC Professional Biologist (RPBio) are specified at <https://www.cab-bc.org/file-download/rpbiobit-academic-worksheet> and are available as requirements and electives within the Environmental Science major, combined with an appropriate selection of courses in a Biology minor.

GRADUATE STUDIES

Some professions require a graduate degree (e.g. MSc, MEng, PhD). In other cases, while not required to enter the profession, a higher degree may be required for promotion. Universities and colleges normally require a PhD to become a professor. Undertaking a graduate degree can be very rewarding. Most students start with a master's degree. In some cases, it is possible to enter a PhD without a master's degree. In Canada, most master's degrees take 2 years and involve a combination of coursework and research resulting in a thesis. Some master's degrees only involve course work, and are often for shorter periods; these programs are often aimed at certain professions and may not be suitable if you want to undertake a PhD.

The degree is supervised by a professor who ensures appropriate courses are taken and that the research is of a suitable standard. The supervisor may be able to provide funding or offer advice on funding opportunities. Many graduate students obtain funding as a teaching (TA) or research assistant (RA). Others secure fellowships or awards. While there are various ways of deciding what degree to take and where to do it, the most common approach is to find a suitable professor or department/program that has a good reputation. University websites or academic

search engines such as Web of Science are good ways to find a supervisor, others include:
<https://scholar.google.ca/> or <https://www.researchgate.net/>

UNBC has an active graduate program, offering several graduate degrees, such as the MA, MSc, MNRES and PhD programs in Natural Resources and Environmental Studies (NRES). Environmental Science faculty supervise graduate students in the NRES graduate program and are members of the NRES Institute, one of three UNBC research institutes. For further details see: <https://www.unbc.ca/graduate-programs> and <https://www.unbc.ca/nres>.

Universities normally have specific entrance requirements (such as a GPA) and timelines. Once a suitable supervisor or program has been identified it is worth contacting that supervisor and/or program and determining the next stages.

University of Northern British Columbia

Guidelines for ENSC 440 (2-3) Internship

Updated October 9, 2019

Background

The goal of ENSC 440 is to allow students to gain hands-on experience working in an environmental-related field with industry, government, academia or non-governmental organizations. It is expected that this experiential learning will enrich the student experience in an area related to environmental science. The Internship is likely to be an attractive option to potential employers as it demonstrates that a student has some practical, work-like experience in the discipline. It also provides an opportunity for a student to investigate the nature of tasks and requirements involved with certain types of work and research (i.e. graduate school) activities.

Eligibility of Students for Internship

The Intern must be an Environmental Science BSc Major or Honours student that is currently registered and has 60 credit hours prior to registering for ENSC 440. There are no prerequisites. Permission of the Environmental Science program chair is required prior to the Internship being initiated. In addition, an Internship requires the availability of an Intern supervisor associated with the Internship project and the availability of an Internship placement. Students may arrange their own Internship opportunities that will be subject to the approval of the Environmental Science Program. Students may volunteer their time during an Internship; or, they may be employed. The Internship may occur at any time throughout the year.

Required Academic Component of Internship

The Internship is intended to give students hands-on experience but it also needs to have an academic component. The academic component permits students to address a problem, task or challenge which is of interest to their employer/supervisor. Positions that only utilize students as a source of labour do not qualify for Internship. A position that only uses students to collect samples or generate data does not qualify for an Internship. A position that requires students to analyze, synthesize/interpret and present results (e.g. produce a report) does qualify as an Internship. Not all projects require data collection. In many cases, the project may be a subproject of the position in which the student tackles a specific problem.

Credit Hours

ENSC 440 may range between 2 and 3 credit hours. Students will spend the equivalent of 50 and 75 hours working on the academic components of their Internship for ENSC 440-2 and, ENSC 440-3, respectively. Normally, not more than 3 credit hours are to be designated per 4-month period (approximately equivalent in length to an academic semester). ENSC 440 may be repeated for up to a total of 6 credit hours that can be applied toward the major in Environmental Science.

The BSc (Major) in Environmental Science requires that students obtain either ENSC 440-3 or ENSC 499-3 (Independent Study) to meet degree requirements of the Major. Students who have successfully completed at least one co-op placement, or who have extensive experience related to the environment, may be waived from this degree requirement with approval from the Program. Co-op students may receive credit for ENSC 440-3 at the same time as they are

completing a co-op work term with the following conditions: students must register in ENSC 440-3 before the co-op term starts, and meet both the co-op and the ENSC 440-3 requirements. The BSc (Honours) in Environmental Science does not require ENSC 440-3 or ENSC 499-3 because students are required to obtain ENSC 430-6 (Undergraduate Thesis).

Fees and Expenses

Students participating in the Internship shall be liable for such tuition fees and charges as required by UNBC. The Environmental Science program is not obligated to cover any expenses related to the Internship.

Internship Coordinator

In order to maintain consistency among students taking ENSC 440, one person within the Environmental Science Program will coordinate the various student Internships. This Internship Coordinator is not responsible for supervising the students, or for finding projects for students interested in pursuing an Internship. The Internship Coordinator may help liaise between off-campus Internship Supervisors and the Environmental Science program. Other faculty members at UNBC may be involved in the liaison between an off-campus Internship Supervisor and the Environmental Science program.

Roles and Responsibilities

The Internship will involve a minimum of three individuals: Intern, Internship Supervisor (IS), and Internship Coordinator (IC). The Internship Supervisor may be on campus (e.g. a UNBC faculty member) or off campus (e.g. a professional within government or industry). Other faculty members may assist in the Internship. For example, an Intern may be co-supervised by a UNBC faculty member and an off-campus (e.g. industry or government) professional. Each of the above individuals has different roles in making sure the course is beneficial to all. Below is a non-inclusive list of what the roles are for each. These are meant as guidelines.

Intern	Internship Coordinator (IC)	Internship Supervisor (IS)
<ul style="list-style-type: none"> • consults with IC and IS • finds appropriate IS and identifies potential project with IS • prepares documentation required by program (e.g. Internship Agreement) and by the IS • obtains necessary signatures and proper registration; submits necessary documentation • follows workplace guidelines at the IS work site (i.e. safety regulations, confidentiality, etc.) • conducts agreed-upon duties in a timely fashion • submits documents/reports as required, within agreed upon timelines 	<ul style="list-style-type: none"> • consults with Intern on goals and outcomes for work with IS • acts as a liaison between Intern and IS • ensures academic objectives are met • ensures consistency in workload and expected outcomes among various Interns within the program • in consultation with IS, will decide on a grade (pass/fail) for the Intern; and, will submit grade to Program Chair 	<ul style="list-style-type: none"> • develops potential projects for internship • selects suitable candidates • provides the resources required by the Intern to conduct and complete the Internship • supervises the Intern's activities • ensures that the Intern is made aware of any workplace guidelines (e.g. safety regulations; proper protocols, etc.) • in consultation with the IC, decides on a grade (pass/fail) for the Internship

Acceptance into the Internship

Three documents need to be completed in order to be accepted into an Internship: (i) the Internship Agreement, (ii) the Internship Project Details (accompanies internship agreement) and (iii) the Undergraduate Course Approval form (with signatures).

The Internship Agreement (Appendix A) must be completed and approved by the Internship Supervisor, Internship Coordinator and Environmental Science Program Chair prior to the Internship being initiated.

An important component of the Internship Agreement is the section entitled “**Internship Project Details**”. This section (1 to 2 pages in length) will be written by the student (with guidance and final approval from the IC and IS), and will contain the following:

- project title,
- general overview of the project,
- specific objectives of the project, and the roles of the Intern and Internship Supervisor,
- anticipated outcomes/deliverables of the Intern's work on the project,
- schedule/timeline for project completion, including dates of specific milestones; it is highly recommended that the Intern, IC and IS schedule a mid-project meeting (can be teleconference) to assess progress on the project,
- expected content and length of the final report to be completed by the Intern,
- brief description of how the Internship will contribute to the student's career and educational goals.

The final report needs to be of an academic nature (not just a “diary” of the Internship), and is described in more detail below.

Grading

ENSC 440 is pass/fail. The decision of pass/fail is based on the quality of a final report submitted to the Coordinator upon completion of the Internship, and on an interview of the Internship Supervisor. The interview will be used to help determine if the Intern met his/her obligations, and if the Intern's performance was satisfactory. Together the Coordinator and Supervisor will decide on the assigned grade.

The final report is a document whose content and length is clearly identified in the “Internship Project Details” of the Internship Agreement. It should be appropriate for a senior-level undergraduate course. For example, if the Internship involved a literature review and survey of cosmetic pesticide use for the Regional District, the final report would include the literature review and survey results. If the Internship was to provide options to a restaurant for managing food waste, the final report would include the report presented to the restaurant. The Internship Coordinator's involvement will help ensure consistency among the various student Internships within the Environmental Science Program.

Frequently Asked Questions (and answers)

1. I would like to do an Internship with a Senior Lab Instructor outside of the Environmental Science Program. Is it OK to do so?

Answer: Yes. It is possible to be supervised by someone in government, industry, a non-government organization, or any academic, as long as the Internship opportunity meets the proper criteria. The Environmental Science Internship Coordinator will work with you and your supervisor throughout the entire Internship process (from application to completion).

2. I started a summer job several months ago and I think it meets the criteria for being a good Internship. My summer job only has a few weeks left before I am back to classes for the upcoming fall semester. May I register retroactively for ENSC 440, backdating my ENSC 440 registration to earlier in the summer?

Answer: No. The UNBC Registrar's Office discourages us from backdating Internship registrations. You need to register for ENSC 440 before you can start the Internship.

3. I see that ENSC 440-3 can be taken twice for a total of 6 credits that may be used towards my BSc (Major) in Environmental Science. This year, I will be working for an environmental consulting company from May 1 to August 30. May I take two back-to-back Internships this spring-summer to give me 6 credits towards my Major in Environmental Science?

Answer: No. The May to August time period is considered to be one semester (i.e. 4 month period). No more than 3 credit hours can be used for ENSC 440 in one semester (or any other consecutive 4 month period).

4. It is late October and I have an excellent Internship opportunity available to me. Can I register and start my internship before January (i.e. before the Winter semester)?

Answer: Yes. Internships can run anytime during the year. The Undergraduate Course Approval form will need to indicate what the official start/end dates are for your Internship. For example, the start date could be in early November and finish in February of the next year.

5. How do I find an internship? Can anyone at UNBC help me out?

Answer: Talk to your professors to see if there is a project that would qualify. Talk to the Environmental Science Internship Coordinator to see if any Internships are currently available. If you volunteer, or are working (e.g. working part-time during school year, or, summer employment), talk to your supervisor/employer and find out if there is a project that you can do that is of an environmental nature. Don't hesitate to make suggestions to them if you have some ideas. Talk to other students in the Environmental Science club (or other clubs). Run your ideas by the Environmental Science Internship Coordinator.

6. I spoke to my boss at work about a possible internship. She wanted to find out more and I gave her the Internship Guidelines. She still has lots of questions. What should I do?

Answer: Get in touch with the Environmental Science Internship Coordinator. That person can meet with you and your boss to describe the Internship details, including what deliverables (e.g. report) you need to complete, and how many credit hours the Internship is worth (e.g. 2

credit hours or 3 credit hours). The Internship Coordinator can also make sure all the UNBC paperwork is in order and that Internship expectations are clear to all involved.

7. I have an opportunity to work with a pest control company this summer. Does that qualify as a suitable Internship?

Answer: It depends. No, if you are just providing skilled (or unskilled) labor for the organization. Yes, if there is an academic component to your position. An example of a suitable academic component would be a project that results in the development of an environmental safety protocol for the company; this might be presented to the company in the form of a report. If you work full-time for the company all summer, the academic component might only require you to work on it a day a week (or an hour a day). Talk to the Internship Coordinator about what things qualify for an Internship and what things do not qualify.

Internship Appendix A – ENSC 440 Internship Agreement (print 2-sided page)

ENSC 440- _____ (indicate credit hours, either 2 or 3 depending on total hours dedicated)

Student Information

Student:	UNBC ID:
E-mail:	Telephone:

Internship Supervisor

Supervisor:	Position:
Organization and Address:	E-mail:
	Telephone:
	Fax:

Internship Supervisor (additional Supervisor, if appropriate)

Supervisor:	Position:
Organization and Address:	E-mail:
	Telephone:
	Fax:

Internship Coordinator (Environmental Science Program)

Coordinator:	E-mail:
	Telephone:
	Fax:

Internship Project Details

Proposed Title:	
Project Description: <i>Attach a 1 to 2-page statement of intent that provides: project title, an overview of the project, project objectives including roles of Intern and supervisor, anticipated outcomes of student work, timeline of project milestones (including mid-project meeting), approximate content and length of final report, and, a brief description of how the Internship will contribute to the career and educational goals of the student.</i>	
Start Date:	End Date:
Average number of hours per week to work on project:	

Signatures: We agree to the Internship Project Details and to the information, safety training and grading scheme outlined on the reverse.

Student

Supervisor(s)

Coordinator

Date: _____

Date: _____

Date: _____

Please attach the one-page "Internship Project Details" to this form. Then, submit both along with the Undergraduate Course Approval Form to the Environmental Science Program Chair for Approval.

Fees and Expenses

Students participating in an ENSC 440 Internship shall be liable for such tuition, fees and charges as required by UNBC. UNBC faculty and the Environmental Program are not obligated to cover any expenses related to the Internship. Normally, expenses are to be covered by the student and/or by the Internship Supervisor or the Supervisor's organization. Budget details need to be discussed and understood by the Student, Supervisor and Coordinator before the Internship is initiated.

Grading

ENSC 440 is pass/fail. The decision of pass/fail is based on the quality of a final report submitted to the Coordinator upon completion of the Internship, and on an interview of the Internship Supervisor. The interview will be used to help determine if the Intern met his/her obligations, and if the Intern's performance was satisfactory. Together the Coordinator and Supervisor will decide on the assigned grade.

The final report is a document whose content and length is clearly identified in the "Internship Project Details" of the Internship Agreement. The report should be appropriate for a senior-level undergraduate course, and describes the major outcomes of your internship project. For example, if your Internship involved a literature review and survey of cosmetic pesticide use for the regional district, the final report would include the literature review and survey results. If your Internship was to provide options to a restaurant for managing food waste, the final report will include the findings presented to the restaurant. The report should be of an academic nature and for that reason the final report should not be a general "diary-type" report of the Internship experience. The Internship Coordinator's involvement will help ensure consistency among the various student Internships within the Environmental Science Program.

Safety

Whether the Internship is paid or unpaid, it is the joint responsibility of the Intern and Supervisor to ensure that there is a safe and healthy workplace for the Intern, and that appropriate safety training is provided, according to the standards for paid employees (e.g. <https://www.worksafebc.com/en/health-safety/create-manage/getting-started>).

Student Checklist for Registering in ENSC 440

- ✓ Student works with supervisor and coordinator to complete "Internship Agreement Form" and the 1 to 2-page "Internship Project Details"; the two documents are stapled together;
- ✓ the "Internship Agreement Form" is signed off by student, supervisor and Internship Coordinator;
- ✓ the UNBC "Undergraduate Course Approval" form is completed with appropriate Internship start and end dates indicated, a brief project title (30 characters or less, including spaces) that will appear on the student's transcript, signatures from Internship Coordinator and Environmental Science Program Chair;
- ✓ Take above documentation to the Internship Coordinator so that he/she may scan/copy to keep on file; the coordinator will send scans to student and supervisor;
- ✓ Student submits above documentation to Registrar's Office.

APPENDIX II – TENTATIVE ENVIRONMENTAL SCIENCE COURSE OFFERING TIMETABLE

Revised: 2023-01-25

NOTE: The courses listed below are presented for planning purposes only. They will certainly change over time and do not constitute any kind of guarantee that the courses will be offered as listed. All course offerings are subject to change based on enrolments, faculty availability, and budgets to hire sessional instructors, etc. Beyond the next academic year, the information is even more uncertain. Use this information at your own risk.

ENSC	F22	W23	F23	W24	F24	W25	F25	W26	F26	W27	F27	W28	F28	W29
111-1	X		X		X		X		X		X		X	
201-3		X		X		X		X		X		X		X
202-3	X		X		X		X		X		X		X	
250-2		X		X		X		X		X		X		X
302-3	X				X				X				X	
303-3							X				X			
307-3	X		X		X		X		X		X		X	
308-3	X		X		X		X		X		X		X	
312-3	X				X				X				X	
325-3		X		X				X				X		
404/604-3		X				X				X				X
406/607-3		X		X		X		X		X		X		X
408/608-3	X		X				X				X			
412/612-3		X				X				X				X
418/618-3	X		X		X		X		X		X		X	
425/625-3	X		X		X		X		X		X		X	
435/635-3						X				X				X

ENSC	F22	W23	F23	W24	F24	W25	F25	W26	F26	W27	F27	W28	F28	W29
440-(2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
450/650-3	X		X		X		X		X		X		X	
452/652-3		X				X				X				X
454/654-3		X		X		X		X		X		X		X
498/698-3														