

# UNBC Environmental Science

## Undergraduate Student Handbook

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Revised: 2019-10-09

### Introduction

Welcome to UNBC's Environmental Science Program! 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 written for undergraduate students studying Environmental Science at UNBC; it is a supplement and companion to the more formal information contained in the UNBC Calendar<sup>1</sup>. It is designed to help students efficiently navigate their way through the 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 Program faculty.

The document begins by overviewing 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 in a timely manner. 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 <http://www.unbc.ca/environmental-science>.

### Program Requirements

#### BSc Environmental Science Major

Focusing primarily on understanding both natural and human-made environments, the

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<sup>1</sup> The information in the UNBC Calendar, available at [http://www.unbc.ca/calendar/undergraduate/environmental\\_science.html](http://www.unbc.ca/calendar/undergraduate/environmental_science.html) is the official source of information, and supersedes this document in case of discrepancies.

Environmental Science degree incorporates the study of the physical, chemical and biological processes that take place on Earth, as well as the social, political and cultural processes which impact the planet. 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. Students will graduate 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. It provides a solid background for careers in environmental protection and resource management and research, in both the public and private sectors.

The first year of the degree is comprised of general science courses that underlie an understanding of the environment, including physics, chemistry, biology, and mathematics. The second year core curriculum develops a cross-disciplinary understanding of the biophysical environment through integrative environmental systems courses focusing on water, land, atmospheric and living systems, as well as developing techniques to analyse these systems. In the third and fourth years students take a core curriculum that includes environmental impact assessment, law, and ethics, as well as modelling, 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).

Environmental science is an interdisciplinary academic field that integrates physical, chemical and biological and information sciences, as well as social sciences. Due to this special diversity, the degree requirements make sure that students have not only studied in depth (through their program of study and Minor) but also have exposure to a range of fields through the [UNBC Academic Breadth Requirement](#). This requires completion of at least one course from each of four quadrants as outlined in the UNBC Calendar. Courses from three of the four quadrants are already built into the Environmental Science degree, however students must select an elective course from the Arts and Humanities quadrant to meet this requirement. For most students, we recommend selecting ENGL 170-3 *Writing and Communication Skills*.

While the curriculum for the degree is set out in the [UNBC Calendar](#), in some circumstances adjustments to the degree requirements (e.g. substituting courses) are possible with program approval. If you have questions about degree requirements, you will need to seek the advice of a UNBC Academic Advisor well in advance of degree completion.

For more information on the UNBC Environmental Science degree and its specific course requirements, refer to [the UNBC online Calendar](#).

## Minors

In order to develop expertise in a concentrated area, all Environmental Science majors must choose a specialization that meets the requirement of any UNBC Minor. In order to

ensure sufficient time to meet the requirements of the Minor, students will normally choose their minor by the end of second year. The Environmental Science program itself offers minors in these 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, it is explicitly included by the requirement to complete either an Internship (ENSC 440-3) or an Independent Study (ENSC 499-3) for the Majors degree, or the Undergraduate Thesis (ENSC 430-6) in the case of 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 BSc Honours in Environmental Science program. It is designed to provide a research experience for student planning to proceed to 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

The objective of ENSC 440-3 *Internship* is to enrich the learning experience of students in an area related to environmental science. The Internship allows students to gain hands-on exposure to an environmentally related field in industry, government, academia or non-governmental organizations. Among others, experiential learning will be an opportunity to immerse in the nature, tasks, and requirements involved with certain types of work and research activities. With the Internship experience, our graduates will likely be more attractive to potential employers because of the work-like experience required to complete the degree. 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 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 course and when we plan to offer them, please refer to Appendix II.

Since the Environmental Science BSc requires a Minor, it will be important to choose your Minor early – usually in 2<sup>nd</sup> year of your program or before, so that courses needed by the Minor can be integrated into the courses required in your Major. Environmental Science Program faculty members 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. Additionally, 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

### Scholarships, Bursaries, and Financial Aid

The UNBC Awards and Financial Aid office (<http://www.unbc.ca/financial-aid>) helps students obtain the funds necessary to finance their UNBC 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.

### Environmental Science Program Academic Advising

Students are encouraged to seek general academic advice from Environmental Science Program faculty members. Faculty members can provide general advice on topics such as careers, research and graduate studies in the Environmental Sciences and specific advice on choosing electives, Minors and courses within a student's program of study. Initial points of contact for Faculty advising could be through the required course ENSC 111-1, that is normally taken in first year, through the Environmental Science Student Coordinator, [Dr. Michael Rutherford](#), or through the Environmental Science Curriculum Committee Chair, [Dr. Peter Jackson](#).

### UNBC Student Advisors

The UNBC Registrar's Office has a group of Student Advisors to assist all UNBC students in planning their degree programs. Students are highly encouraged to maintain communication with the Environmental Science Student Advisor 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 Student Advisor.

The contact information for student advising is:

Phone: 250-960-6306

Email: [advising@unbc.ca](mailto:advising@unbc.ca)

Fax: 250-960-5280

Office: Agora 7-726

For more information, please consult the UNBC Student Advising webpage:

<http://www.unbc.ca/advising>.

### **UNBC Academic Success Centre**

The UNBC Academic Success Centre (ASC) is a valuable resource for students who could benefit from some support with their course materials. The ASC is able to provide students 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. Please note that all services offered by the ASC are free to UNBC students.

The UNBC ASC can be contacted as follows:

Phone: 250-960-6367

Email: [asc@unbc.ca](mailto:asc@unbc.ca)

Fax: 250-960-5425

Office: 10-2584

For more information, please consult the UNBC Academic Success Centre webpage:

<http://www.unbc.ca/academic-success-centre>.

### **UNBC Access Resource Centre**

The UNBC Access Resource Centre (ARC) provides support for students with disabilities with the goal of creating and maintaining physical, intellectual and social access to the University. Of note, the UNBC 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.

The UNBC ARC can be contacted as follows:

Phone: 250-960-5682

Email: [arc@unbc.ca](mailto:arc@unbc.ca)

Fax: 250-960-5775

Office: 10-1048

For more information, please consult the UNBC Academic Resource Centre webpage:  
<http://www.unbc.ca/access-resource-centre>.

### **UNBC Wellness Centre**

The UNBC Wellness Centre, managed through Counselling Services and Health Services, 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.

The UNBC Wellness Centre can be contacted as follows:

Phone: 250-960-6369 (Counselling Services)

Phone: 250-960-6370 (Health Services)

Email: [wellness@unbc.ca](mailto:wellness@unbc.ca)

Office: 5-196 (Counselling Services)

For more information, please consult the UNBC Wellness Centre webpage:  
<http://www.unbc.ca/wellness-centre>.

### **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.

The UNBC Career Centre can be contacted as follows:

Phone: 250-960-6426

Email: [hirestudents@unbc.ca](mailto:hirestudents@unbc.ca)

Fax: 250-960-6065

Office: 7-160

For more information, please consult the UNBC Career Centre webpage:  
<http://www.unbc.ca/career-centre>.

### **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, please consult the NUGSS website at: <http://nugss.unbc.ca>, email at [nugss-hello@unbc.ca](mailto:nugss-hello@unbc.ca) or visit their office in 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, please consult the Northern Women's Centre website at: <http://www.northernwomenscentre.ca/> or email: [empower@unbc.ca](mailto: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 see the Northern Pride Centre facebook page at: <https://www.facebook.com/northernpridecentre/> or email [prideunbc@gmail.com](mailto:prideunbc@gmail.com).

### **League Of Environmental Science Students (LOESS)**

The League of Environmental Science Students (L.O.E.S.S.) is a way to meet all of the Environmental Science students and build our community. In the club, members work to engage students interested in environmental science through tours of local industry, talks from guest lecturers, and holding socials to network in the field of environmental science. This club was recently re-established in 2015 and has reached "Good Standing" with NUGSS. For more information see the webpage: <http://loess.unbc.ca> or email [unbc.loess@gmail.com](mailto:unbc.loess@gmail.com).

### **Web, Social Media and Electronic Mail lists**

The official UNBC Environmental Science Program Webpage is at <http://www.unbc.ca/environmental-science>. UNBC Environmental Science news is broadcast on Twitter: [@UnbcE](https://twitter.com/UnbcE), and on our Facebook page:

<https://www.facebook.com/UnbcE>. In addition, we host an email list for occasional communication of important notices, job opportunities, etc. To join the list send an empty email message to [env-sci-join@unbc.ca](mailto:env-sci-join@unbc.ca).

## After Your Environmental Science Degree

### Careers in Environmental Science

There are many possible careers within the environmental sciences that include: private organisations, consulting firms, government agencies and departments, NGOs, and universities and colleges, to name a few. In fact the list is almost endless. In each case, the requirements to secure a position may 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 taking certain courses or experiential learning (e.g. practical or field courses). While good grades are always useful (especially for going to graduate school), most employers tend to look for additional experiences and skills that help candidates stand out from the crowd, or demonstrate resourcefulness.

If you have a reasonable idea of the career that you would like to follow (e.g. working for an environmental consultancy) then it is worth finding out the likely needs and requirements that are expected. There are several websites that can help (see below), in addition it is worth talking to those already in this particular profession; most employees welcome the opportunity to discuss their job and how they got to where they are. The Environmental Science faculty at UNBC would be happy to help describe their experiences and also offer advice as to other people that can help.

Below are some useful websites that offer information about careers and jobs within the Environmental Science field. Other can be found by typing appropriate words into a search engine like Google.

<http://www.eco.ca/viewjobs/>

<http://www.environmentalscience.org/careers>

<http://ca.indeed.com/Environmental-Science-jobs>

<https://www.egbc.ca/Careers>

<https://www.bcia.com/about-bcia/what-does-agrologist-do>

### Accreditation and Certification

In order to secure some jobs or to progress within a chosen field, there may be a need to get some form of professional accreditation or certification, which will vary according to the specific position. Government and consulting companies often require such accreditation. Professional accreditations are typically specific to a particular province. Examples of accreditation and certification include:

- Environmental Professional Certification (EP): <http://www.eco.ca/Certification/> (this is a Canada-wide voluntary accreditation)



- Engineers & Geoscientists British Columbia, Professional Geoscientist (P.Geo): <https://www.egbc.ca/>
- BC Institute of Agrologists (BCIA) Professional Agrologist of BC (P.Ag): <https://www.bcia.com/>
- Association of Professional Biology and the College of Applied Biology (R.P.Bio): <https://professionalbiology.com/> and <https://www.cab-bc.org/>

In order to become accredited or certified there are usually certain requirements, such as courses and / or professional development. If 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.

In the case of becoming a Professional Geoscientist (P.Geo) there is a need to pass certain courses in addition to other requirements. Most of these are offered at UNBC, while others can be obtained from other institutions like UBC. See:

<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, (P.Ag) are specified at <https://www.bcia.com/members/membership-criteria> and are available as requirements or electives within the Environmental Science major at UNBC. If you wish to become a Professional Agrologist you should consider the academic requirements when planning your B.Sc. Environmental Science program of study.

The courses required to become a BC Professional Biologist (R.P.Bio) 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. If you wish to become a Professional Biologist, in order to complete the academic requirements within the Environmental Science major, you will need to plan your courses carefully.

### **Graduate Studies**

Several professions require a graduate degree (e.g. MSc, MEng, PhD). In other cases, while such a degree may not be required to enter that profession, a higher degree may be required for promotion. In the case of most universities and colleges, a PhD is required to become a professor. Undertaking a graduate degree can be very rewarding. Usually most students start a master's degree. In some cases, especially outside Canada, it is possible to register for a PhD without a master's degree. In Canada, most master's degrees take 2 years and involve a combination of coursework and research; the latter results 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 overseen by a professor who acts as a “supervisor”, ensuring that the student does appropriate courses and that the research is of a suitable standard. The supervisor may be able to provide funding or offer advice as to opportunities. Many graduate students obtain funding as a teaching (TA) or research assistant (RA). Others secure fellowships or awards for funding their degree. 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. A good way to find a potential supervisor is via university websites or academic search engines such as Web of Science, others include: <http://scholar.google.ca/> or <https://www.researchgate.net/>

UNBC has a very 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: <http://www.unbc.ca/graduate-programs> and <http://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.

**Appendix I – Internships [starts on next page]**

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"> <li>• consults with IC and IS</li> <li>• finds appropriate IS and identifies potential project with IS</li> <li>• prepares documentation required by program (e.g. Internship Agreement) and by the IS</li> </ul>	<ul style="list-style-type: none"> <li>• consults with Intern on goals and outcomes for work with IS</li> <li>• acts as a liaison between Intern and IS</li> <li>• ensures academic objectives are met</li> <li>• ensures consistency in workload and expected</li> </ul>	<ul style="list-style-type: none"> <li>• develops potential projects for internship</li> <li>• selects suitable candidates</li> <li>• provides the resources required by the Intern to conduct and complete the Internship</li> <li>• supervises the Intern's activities</li> </ul>

<ul style="list-style-type: none"> <li>• obtains necessary signatures and proper registration; submits necessary documentation</li> <li>• follows workplace guidelines at the IS work site (i.e. safety regulations, confidentiality, etc.)</li> <li>• conducts agreed-upon duties in a timely fashion</li> <li>• submits documents/reports as required, within agreed upon timelines</li> </ul>	<p>outcomes among various Interns within the program</p> <ul style="list-style-type: none"> <li>• in consultation with IS, will decide on a grade (pass/fail) for the Intern; and, will submit grade to Program Chair</li> </ul>	<ul style="list-style-type: none"> <li>• ensures that the Intern is made aware of any workplace guidelines (e.g. safety regulations; proper protocols, etc.)</li> <li>• in consultation with the IC, decides on a grade (pass/fail) for the Internship</li> </ul>
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### 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.worksafefbc.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: 2019-10-09

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.

		F20	W21	F21	W22	F22	W23	F23	W24	F24	W25
ENSC	111-1	X		X		X		X		X	
ENSC	201-3		X		X		X		X		X
ENSC	202-3	X		X		X		X		X	
ENSC	250-2		X		X		X		X		X
ENSC	302-3	X				X				X	
ENSC	303-3			X				X			
ENSC	307-3	X		X		X		X		X	
ENSC	308-3	X		X		X		X		X	
ENSC	312-3	X				X				X	
ENSC	325-3		X				X				X
ENSC	404/604-3		X		X		X		X		X
ENSC	406/607-3		X		X		X		X		X
ENSC	408/608-3			X				X			
ENSC	412/612-3		X				X				X
ENSC	418/618-3	X		X		X		X		X	
ENSC	425/625-3	X		X		X		X		X	
ENSC	435/635-3				X				X		
ENSC	440	X	X	X	X	X	X	X	X	X	X
ENSC	450/650-3	X		X		X		X		X	
ENSC	452/652-3		X				X				X
ENSC	454/654-3		X		X		X		X		X
ENSC	498/698-3										