

Environmental Science (ENVSC) Graduate Program Handbook

2020-2021

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Introduction

This handbook is intended to provide information and guidance about important policies and procedures relating to your study in the Environmental Science (ENVSC) Graduate Program. As policies are subject to revision, this handbook cannot fully and finally address all issues. The ENVSC program will keep you advised of new developments, but we urge you to seek advice and direction from program and university administrators. We are dedicated to your success and will do our best to ensure that your time at ISU will be productive and enjoyable.

For questions relating to the EnSci Graduate Program:

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camelot@iastate.edu

Thomas Isenhardt
Chair and DOGE
334 Science II
515.294.8056
isenhardt@iastate.edu

For questions relating to Graduate College policies and deadlines:

Graduate College
1137 Pearson Hall
515.294.4531
grad_college@iastate.edu
<http://www.grad-college.iastate.edu/>

For questions relating to registration and tuition:

Office of the Registrar
214 Alumni Hall
515.294.1840
registrar@iastate.edu
<http://www.registrar.iastate.edu/contacts.html>

For questions relating to assistantship appointments, students should contact their home department.

Program Overview

Mission Statement

Through training and mentoring of exceptional graduate students we foster understanding of managed ecosystems and the global environment as they relate to the world, the US, and the State of Iowa.

The Graduate Program in Environmental Science (ENVSC) provides graduate education of the highest quality leading to a deeper understanding of human-environment interactions in both aquatic and terrestrial environments, taking into account the complex relationship of people to the environment. Because we are situated in one of the world's preeminent institutions of agricultural science, our mission emphasizes basic and applied research at the interface of agriculture and the global environment.

Our faculty is drawn from among colleges and departments throughout the university to integrate disciplinary excellence in ecology, agriculture, engineering, geology, atmospheric science, and biology, thus facilitating interdisciplinary research. We strive to strengthen scientific problem solving, science with practice, and understanding of global environmental issues by assembling a critical mass of faculty expertise across the spectrum of natural sciences at Iowa State.

We provide strong mentoring relationships that enhance the retention, career placement, and overall professional success of our students. Environmental Science graduates have successfully secured careers in government, research, education, and industry, assuming leadership positions in high-visibility, influential organizations throughout the world.

Learning Outcomes

All students will demonstrate:

- ☐ an ability to identify and develop research problems,
- ☐ the capacity to think critically and solve problems,
- ☐ an ability to provide a critical review of relevant literature/studies in environmental science that are central to their studies,
- ☐ proficiency in data analysis (e.g., data mining, data synthesis),
- ☐ an aptitude to quantitatively assess and interpret a wide-range of environmental data, and
- ☐ an ability to effectively communicate research problems and research findings in oral and written forms to both the scientific and lay communities.

In addition, PhD students will demonstrate:

- a deep and robust understanding of the relevant literature and problems related to their research,
- a broad understanding of the relevant issues in environmental science and related disciplines, and
- an ability to design and conduct independent research that informs decision making.

Program Structure and Administration

The ENVSC program is administered by an elected chair (who also serves as the Director of Graduate Education – DOGE), an elected Supervisory Committee, and a program coordinator. ENVSC includes two additional standing committees whose members are appointed by the Supervisory Committee – Admissions Committee and Seminar Committee.

Program Chair & DOGE

The chair is responsible for overall program management and leadership, works with standing committees to establish policies, and discharges various duties related to daily program operation. As DOGE, the chair also oversees graduate admissions and reviews the programs of study of all Environmental Science graduate students.

Program Coordinator

The program coordinator serves as one of students' primary on-campus resources. The program coordinator communicates with prospective and current students, assists in recruiting, manages graduate applications, maintains current and past student records and databases, maintains the program website, and performs duties related to the daily operations of the program.

Supervisory Committee

Members of the Supervisory Committee are elected from departments participating in ENVSC. The committee also includes one graduate student representative. The Supervisory Committee establishes program policies, oversees admissions, reviews and approves changes in the curriculum, and conducts other executive business.

Admissions Committee

Members of the Environmental Science Admissions Committee (ESAC) are appointed by the Supervisory Committee and drawn from departments participating in ENVSC. The committee reviews, evaluates, and ranks new graduate applications and makes admission recommendations to the Supervisory Committee. The ESAC reviews and evaluates applications for transfers and co-majors.

Seminar Committee

Members of the Seminar Committee are appointed by the Supervisory Committee and are responsible for planning and implementing the course 'Seminars in Environmental Science' (ENSCI 698).

Cooperating Departments

ENVSC is an interdepartmental program offered through eight cooperating departments – Agricultural and Biosystems Engineering (ABE); Agronomy (AGRON); Animal Science (ANS); Civil, Construction, and Environmental Engineering (CCEE); Ecology, Evolution, and Organismal Biology (EEOB); Geological and Atmospheric Sciences (GEAT); Horticulture (HORT); Natural Resource Ecology and Management (NREM).

Students are admitted to the program as an ENVSC major. As an ENVSC major, students are concurrently admitted to the department of their faculty advisor. This department serves as the home department for a student. Students have an academic relationship with the ENVSC program, meaning students follow the program curriculum and requirements and ENVSC reviews and approves each step towards a degree. The home department is responsible for providing students with office space, mailbox, access to support staff, and help with payroll and assistantship appointments. Students should be given equitable access to other forms of discretionary departmental support – RAs, TAs, and travel and research funds.

As departmental resources vary, the level of administrative support in home departments may not be identical for all students. It is important that all ENVSC students feel that they are valued members of their home departments and that the departments are committed to their success. If problems arise associated with home departments, please contact the program coordinator.

Admissions

Applicants must have at least a bachelor's degree (completed or scheduled for completion by the first term of graduate study) from an accredited institution in one of the biological, chemical, physical, or engineering sciences.

A three-year bachelor's degrees offered through international institutions does not meet the ISU institutional requirement for entry to graduate-level study. Applicants with such degrees must complete one year of master's-level training in addition to the three-year degree in order to be eligible for graduate admission consideration.

Admission Standards

To obtain full admission status into the ENVSC program as an MS or PhD student, applicants must meet the admission standards.

MS applicants must meet the following requirements:

- ☐ an undergraduate GPA of 3.0/4.0 or better;
- ☐ GRE scores of 151 verbal, 149 quantitative, and 4.0 analytical writing (tests taken on or after August 1, 2011) OR scores of 460 verbal, 620 quantitative, 4.0 analytical writing (tests taken prior to August 1, 2011); and
- ☐ research readiness.

PhD applicants must meet three of the following requirements:

- ☐ an undergraduate GPA of 3.0/4.0 or better;
- ☐ a graduate GPA of 3.3/4.0 or better;
- ☐ GRE scores of 151 verbal, 149 quantitative, and 4.0 analytical writing (tests taken on or after August 1, 2011) OR 460 verbal, 620 quantitative, 4.0 analytical writing (tests taken prior to August 1, 2011); and
- ☐ research readiness.

Research Readiness

The Environmental Science Admissions Committee will evaluate applicants' commitment and readiness to conduct graduate-level research. Evidence of research readiness may include

- ☐ letters of recommendation that clearly describe research performance or suitability to pursue research;
- ☐ strong performance in undergraduate research experiences and/or capstone projects;
- ☐ related internships/work experience;
- ☐ strong performance in upper-level undergraduate and/or graduate-level courses;
- ☐ a well-crafted statement of purpose that clearly describes research interests and goals;
- ☐ unique life/work experience;

Applicants with only a bachelor's degree may request admission directly to the PhD program. These applicants must demonstrate significant research experience and accomplishments. Evidence of research experience and accomplishments may include

- ☐ peer-reviewed publications accepted or in print,
- ☐ evidence of high-quality research aptitude and/or performance documented in letters of recommendation from faculty supervisors and/or employers,

- active participation in national professional association conferences and symposia, including presentation of peer-reviewed research, abstracts, and posters, and
- significant documented laboratory and/or field research conducted independently by the applicant.

Provisional Status

Provisional admission may be recommended for promising applicants with gaps in their academic preparation. The specific conditions for granting provisional admission will be determined by the ESAC with input from the applicant's faculty adviser. The ESAC consider individual factors for each applicant when determining provisional requirements.

Typical examples of requirements for provisionally admitted students are:

- MS students must complete 6 credit hours of graduate coursework with a grade of B or higher in each course within the first semester of entry;
- PhD students must complete 12 credit hours of graduate coursework with a grade of B or higher in each course within two semesters after entry into the program.

Admission Cycle

ENVSC accepts new students in the fall, spring, and summer terms. Applications are accepted on an ongoing basis, therefore, there are no fixed deadlines. Applicants seeking financial support from the program and/or ISU are encouraged to submit complete application packages as early as possible prior to the planned term of entry. Applying early ensures full consideration for all possible financial awards. The deadline to be considered for all financial support opportunities is January 15 in the desired year of entry.

The typical fall admissions cycle proceeds as follows:

- As complete application packages arrive, they are made available to ENVSC graduate faculty for review.
- Highly qualified applicants may be invited to visit campus at program expense to interview with prospective faculty advisers. Any interested applicant is welcome to schedule a visit at her/his own expense. Please contact the program coordinator for details.
- New students must be matched with a faculty adviser in order to be admitted. The chances for admission are much improved if potential students research the background of potential faculty advisers on the Environmental Science website and contact those with common research interests and backgrounds. The ESAC will not review an application until a faculty adviser nominates an applicant for admission. Applications must be complete at that time.

- Admission offers may be made at any time. The ESAC does not observe a specific timetable but makes every attempt to issue offers as early as possible. For fall entry, most offers are made in February and March.
- The ESAC makes decisions about financial awards after an applicant is approved for admission.
- The fall admission review period is normally held open until mid May. Applicants who cannot be placed by the end of the review period will be sent denials or may be considered for entry in a different term.

What to Expect from Us

Applicants can expect the following communications from us:

- We generally respond to emails and telephone calls within 24 hours, excluding weekends, holidays, illness, and/or emergencies.
- We will contact applicants by email to confirm that we have received a complete application package.
- We will contact applicants by email or telephone if problems or questions arise.
- We will contact applicants selected for admission by email, telephone, and/or standard mail to make an offer.
- We will contact applicants by email to inform them if we can not place them in our program.

Applicants can contact the ENVSC program coordinator at any time with questions.

Faculty Nominations

Admission to the ENVSC program is based upon an applicant meeting established admission standards. The Environmental Science Admissions Committee (ESAC) is responsible for ensuring that applicants admitted to the program meet established standards, are matched with a supervisor who is a member of the Environmental Science graduate faculty, and that the supervisor offers a plan for financial support of the applicant. The ESAC will not evaluate the fit of an applicant's proposed MS or PhD research project as a condition for admission.

ENVSC faculty who wish to accept a student in the program must provide the ESAC with a written admission nomination. This nomination should

- state the member's commitment to advise the student in ENVSC,
- highlight the applicant's qualifications,
- describe how the applicant will fit into the member's research group, and
- describe the funding plan to support the student (requests for ENVSC funding should be made at this time).

If the ESAC denies the admission of an applicant, the nominating faculty member may appeal the decision to the ENVSC Supervisory Committee. The member must present the appeal to the Supervisory Committee in writing. The committee may invite the member to meet in-person to discuss details. In the case of such appeals, the decision of the Supervisory Committee is final and will not be subject to further review or appeal.

Admission Offers

Once an applicant has been approved for admission by the ESAC, the Graduate College and Office of Admissions will review an applicant for a final admission decision. In the meantime, the program will send

- ☐ an offer letter indicating the degree and term of admission, and
- ☐ a letter of intent outlining the terms of any associated financial award.

Upon admission approval by the Graduate College and Office of Admissions, the Office of Admissions will send an institutional letter of admission confirming an applicant's admission as an Iowa State graduate student. The International Student Services Office will send additional documents to international admits relating to visa status and employment in the US.

ENVSC normally sends admission offers and letters of intent by email as pdf files. The electronic documents constitute a formal, legal offer.

Iowa State University is a signatory to the Council of Graduate Schools "Resolution Regarding Graduate Scholars, Fellows, Trainees, and Assistants." This resolution affirms that students receiving offers of financial assistance are not obligated to accept them prior to April 15 in the year of admission. Applicants may choose to accept the offer before this date. Should an admit later choose to withdraw their acceptance, a written resignation letter must be sent prior to April 15.

If an admit chooses to accept the offer or withdraws a prior acceptance after April 15, the applicant is committed to the offer and may not accept an offer from another institution without first obtaining a written release from ENVSC.

To accept an offer of financial support, student's must sign the letter of intent sent with the offer letter and return it to the ENVSC program coordinator by the date indicated. Students should retain a copy for their records.

Financial Awards

Assistantships

All students receive financial support through a graduate assistantship, either as a research assistant (RA) or teaching assistant (TA). Assistantships are through faculty-supported research grants and/or a student's home department. Assistantships pay a monthly stipend, include a tuition scholarship (50% MS, 100% PhD), and provide health insurance at no charge. Assistantships are identified during the admission process.

ENVSC does not apply a standard stipend rate and defers to the stipend policy of the student's home department. Tuition balances after the tuition scholarship has been applied are calculated at the Iowa resident rate. Students on assistantship pay the standard activity, health, and technology fees.

Detailed information on stipends and tuition scholarships is available on the Graduate College website.

RAs are the most common form of financial support offered through ENVSC. TAs may be offered through a student's home department.

RAs and TAs are normally structured as a ½-time appointment, based on a forty-hour work week. Thus, a ½-time appointment involves approximately 20 hours of work per week at the direction of a student's faculty adviser for RAs or at the direction of the department or course instructor for TAs. Students may hold 12-month or 9-month appointments. Assistantships are renewed on an annual basis, dependent on performance as an assistant, the continued availability of funding, and the student making satisfactory progress in their program of study.

RA duties may include lab work, field data collection, data analysis, literature searches, and other activities at the discretion of a student's supervisor. TA duties may include instructing lab sections, proctoring and grading exams, preparing course materials, and other activities at the discretion of the primary instructor for the course.

Fellowships

Students entering in the fall are eligible for an Environmental Science Fellowship. Fellowships are awarded during the admission process. The major professor nominates a student for a fellowship award and the Admissions Committee ranks students based on the overall application package. After the initial fellowship ranking by the Admissions Committee, the Supervisory Committee will determine fellowship awards based on the following:

- ☐ Overall excellence of the applicant.

- ☐ Number of fellowships previously awarded to students of the major professor. Preference will be given to students of major professors that have not received funding in the past.
- ☐ Success of all fellowship awardees under the major professor.
- ☐ Success of all students in the program under the major professor.
- ☐ Evidence of funding by the major professor to support continued research and the student.
- ☐ Preference is typically given to PhD students.
- ☐ The Supervisory Committee encourages nomination of students that would increase the diversity of the program.

Transfers, Co-Majors, and PhD-Track Requests

A formal admission review is required for all transfers and co-majors, and current MS students (ENVSC or other) seeking to pursue a PhD. The ESAC will apply the same review standards that are used for external applicants. Students requesting admission to the program must submit

- ☐ a statement of purpose that outlines the reasons for pursuing a transfer, co-major, or PhD and describes specific research interests and background/experiences related to environmental science;
- ☐ a copy of current ISU transcript (from AccessPlus);
- ☐ a Graduate College approval form*;
- ☐ a current CV or resume; and
- ☐ a memo from the proposed ENVSC faculty adviser endorsing the request. The memo should include information on how the student will be financially supported.

The program coordinator will obtain a copy of the student's original ISU graduate application. Materials should be emailed to the program coordinator. The Graduate College form can be delivered to the program coordinator in 1009 Agronomy Hall or sent to 1126 Agronomy Hall.

In cases where 1) a student's current program did not required GRE scores, or 2) a student does not otherwise meet the admission standards, the ESAC may defer the final admission decision until additional documentation of performance is submitted. The ESAC will determine if a student needs additional documentation on a case-by-case basis.

**Current ENVSC majors should complete the 'Masters Student on PhD Track in Same Department' form. Students from other majors should complete the 'Two Concurrent Graduate Degrees' form.*

Curriculum

Degrees Offered

Students may earn an MS and/or PhD degree with an Environmental Science major. MS students complete a research-based thesis. PhD students complete a written dissertation that is based upon creative and original research contributions to the discipline.

Changing in Degree-Seeking Status

Degree-seeking status, MS or PhD, is determined at the time a student is admitted; however, students may request a change in degree-seeking status. Students should discuss such a request with their faculty adviser and POSC. If a student's adviser and committee endorse the change, the student should email the ENVSC program coordinator and chair with the requested status change.

Degree Requirements

MS Degree

Majors and co-majors pursuing an MS with the thesis option must successfully complete at least 30 graduate credits of coursework and research. At least 22 credits must be earned at Iowa State. Students must also write a thesis that demonstrates the ability to conduct independent and creative research. The minimum number of credits required to complete an MS degree with a thesis are:

- Environmental Science courses – 12 credits
- Focus area courses – 6 credits
- Thesis research – 6 credits
- Elective courses or research – 6 or more credits

PhD Degree

Majors and co-majors seeking the PhD must successfully complete 72 graduate credits of course work and research. At least 36 credits, including all dissertation research, must be completed at ISU. The minimum number of credits required to complete a PhD are:

- Environmental Science courses – 18 credits
- Focus area courses – 12 credits
- Dissertation research – 15 credits
- Elective courses or research – 27 or more credits

Seminar

All ENVSC graduate students are required to register for the Environmental Science seminar course (ENSCI 698) each time offered. ENSCI 698 is offered every spring semester and counts towards the required number of Environmental Science credits.

Public Presentation

All ENSCI graduate students are required to give a public presentation on their graduate research project prior to completion of their degree. Presentations may take place during the Environmental Science seminar (ENSCI 698) or a separate research seminar associated with the final MS or PhD defense.

Making Progress in Your Degree Program

Program of Study Committee

Before the end of your first academic year, you should, in consultation with your faculty advisor, select your Program of Study Committee. The committee is composed of faculty who assist you in selecting appropriate courses and direct your overall progress towards your degree. Your faculty advisor will be the chair of this committee. It should also include faculty whose research interests will complement your personal research and whose expertise will help ensure that you acquire the breadth and depth of knowledge needed to graduate.

In selecting the members of your committee, you should seek the advice of your faculty advisor. Plan to meet individually with each prospective committee member to formally introduce yourself and describe your goals and research. When you find suitable matches, formally invite those faculty members to join your committee.

The committee for MS students must have at least three members, with no less than two members holding graduate faculty status in ENVSC. The committee for PhD students must have at least five members, with no less than three members holding graduate faculty status in ENVSC. Both MS and PhD committees should include members from different majors or different departments so as to ensure diversity of perspective. Additional information and rules relating to the composition of the committee can be found in the Graduate College Handbook.

Detailed information on submitting the POSC form is available on the Graduate College website.

Program of Study

Soon after you have formed your committee, you should schedule a meeting, with all members present, to discuss your research plans and compose a Program of Study (POS). The POS is one of the most important steps you will complete in your progress towards your degree. It is a contract between you and the ISU Graduate College that lists the coursework that must be completed to obtain an MS and/or a PhD. The content of the POS

is determined by discussion and review by you, the members of your committee, and the Graduate College.

Detailed information on submitting the POSC is available on the Graduate College website.

Preliminary Examination

A preliminary examination is required of students for admission to candidacy for the PhD degree. Doctoral students must take the preliminary exam no later than the fourth semester of their program in order to be judged as making satisfactory progress. The rationale for the exam is not to unduly distress the candidate but to evaluate the likelihood of her/his success in the program and to propose action to better assure success if any training deficiencies are identified.

The purpose of the preliminary examination is to test

- ☐ breadth of knowledge in environmental science,
- ☐ depth of knowledge in a student's particular research focus,
- ☐ critical thinking skills, especially as they pertain to scientific methods and approaches,
- ☐ understanding and proficiency in experimental design, analysis, and interpretation of data, and
- ☐ the student's preparedness to proceed in the program and with her/his research, identifying areas needing improvement and providing guidance as how to proceed.

The ISU Graduate College requires that all PhD students complete an oral preliminary exam. The ENVSC program requires a written component that meets the agreed objectives of the POS committee. Examples of this component could include a research proposal, written questions, standard departmental examinations, or portfolios.

The individual POS committee determines the nature of the oral and written components and the details of the exam's administration. For this reason the structure, length, and subject of questions can vary among exams for individual students.

It is strongly recommended that each PhD student speak with all of her/his committee members about expectations and areas of emphasis to be included in the exam well in advance of the exam date.

To officially schedule your preliminary exam, a "Request for Preliminary Oral Examination" form must be completed and submitted to the Graduate College no later than two weeks before the scheduled exam date. The online form can be found here: <https://secure.grad-college.iastate.edu/exam/> After processing your request, the Graduate College will email the "Report of Preliminary Oral Examination" form to the program coordinator who will then complete it and forward it to your major professor. The results of the preliminary examination will be recorded on this form and it will be signed by all committee members

and sent to the Graduate College.

All committee members are expected to participate in this examination. In some cases, it may only be possible to convene the committee in a timely manner if one of the committee members participates at a distance. This is permitted if the distance participation is agreeable to all committee members, if the mode of communication permits the full participation of the committee member at a distance, and if the Graduate College is notified in advance of the examination in writing by the major professor and is advised who will sign for the distant committee member at the conclusion of the examination.

Writing Your Thesis or Dissertation

ENVSC accepts theses and dissertations for MS and PhD degrees in one of two forms:

- ☐ a single written composition that contains results of original research on an approved topic, or
- ☐ a composition that consists of multiple journal papers that contain the results of original research on a single, approved topic.

In either case, you must observe the style, content, and formatting directions set down by the Graduate College. Detailed thesis/dissertation information is available on the Graduate College website.

Preparing for Graduation

Each semester, the Graduate College publishes deadline dates for submission of appropriate forms and paperwork required for graduation available here: <https://www.grad-college.iastate.edu/calendar/>

Early in the semester in which you expect to graduate, you must submit an Application for Graduation in Access Plus under the Student tab. Click on Graduation at the left hand side. The application link is at the top of the left hand column. After you have completed your thesis or dissertation and all coursework requirements, you should consult with your major professor and POS Committee to arrange a time for your final research seminar and final examination. The Graduate College REQUIRES THREE WEEKS prior to your defense to submit the "Request for Final Oral Examination" online here: <https://secure.grad-college.iastate.edu/exam/>

Final Research Seminar

All students are required to present a formal, public seminar describing their completed research as part of their thesis or dissertation defense. The seminar must be announced at least two weeks in advance to the ENVSC faculty and students. Please notify your major professor of the time and place of the seminar.

Final Examination

The final examination for the MS and PhD degrees is an oral defense of your thesis or dissertation, delivered by you before your POS committee. The ENVSC program supports the addition of a written component at the discretion of the individual student's POS committee. This examination comprehensively reviews your knowledge and the research presented in your thesis or dissertation. The results of the examination are reported on the "Report of Final Examination" form, which will be distributed by the Graduate College to your faculty advisor or the ENVSC program coordinator after receiving the Request for Final Examination form. Additional information is available in the Graduate College Handbook.

Benefits

Student and Scholar Health Insurance Program (SSHIP)

Single student coverage under the SSHIP is provided free-of-charge to all graduate assistants at ISU. Enrollment is automatic. The SSHIP office generally mails out informational packets describing the insurance package during the first week of August. Graduate assistants may enroll spouses, partners, and dependents for a fee. More information can be found on the SSHIP web page: <https://sship.hr.iastate.edu/>

ISU requires all nonimmigrant international students and their dependents to purchase and maintain coverage through the SSHIP for the duration of their tenure at the university. Insurance plans purchased outside the university may be used for supplemental coverage but cannot be substituted for the ISU plan.

Thielen Student Health Center

As a student, you are eligible to use the Thielen Student Health Center. A health fee is assessed of all students registered for five or more credits that pays for some services offered at the center. More information can be found on their web page: <https://health.iastate.edu/>

Vacation and Sick Leave

Vacation and sick leave policies relative to graduate assistants are established by departments. To find out whether you earn vacation and/or sick days, please consult with the graduate coordinator in the administrative office of your home department.

Injuries and Injury Reports

If you are injured in the course of performing your duties as a graduate assistant, you should report the injury immediately to your supervisor. In turn, s/he must file a "First Report of Injury" with Human Resource Services. Employment-related injuries usually qualify for treatment under the Worker's Compensation program. You should seek treatment, if

necessary, in an approved facility for Worker's Compensation claims, otherwise you may be personally liable for the cost of treatment.

Graduate and Professional Student Senate

The Graduate and Professional Student Senate (GPSS) is a group of elected graduate students from all disciplines whose main purpose is to handle student questions and complaints concerning formal policies, to disperse funds derived from the graduate student activity fees, and to act as a liaison among students and the Graduate College and university administration. The GPSS usually holds meetings the last Monday of the month to discuss ideas, projects or grievances students may have.

GPSS Professional Advancement Grants

GPSS Professional Advancement Grants (PAGs) are available to any ISU graduate student who is currently enrolled full-time. PAGs may be made to students to attend a professional meeting, defined as a gathering of an organized society of professionals for the purpose of presenting research papers. PAGs may also be approved for attending professional workshops that provide "hands-on" experience not available at ISU.

ENVSC Professional Development Grants

The ENVSC program offers currently enrolled students the opportunity to apply for a Professional Development Grant (PDG) to support professional development activities.

PDGs are intended to support participation in

- ☐ professional association and/or scientific conferences or
- ☐ workshops and short courses that offer special training.

To qualify for support, applicants must be directly participating (i.e., presenting a research paper or poster) in a national- or international-level conference, or must be attending training that assists in their professional development as a scholar but is not a formal component of their program of study or a formal requirement to complete an MS or PhD degree in the major or a co-major.

Grant applications must be submitted in complete form to enscigrad@iastate.edu at least four weeks prior to the scheduled start date for the activity for which the support is requested, although earlier submission is strongly encouraged. Applications submitted on or after the start date for an activity/event will not be considered.

Financial need may be taken into consideration as a condition for awarding a grant. Please include any relevant information of this nature in the application. The ENVSC Supervisory Committee also strongly encourages applicants to draw upon other sources of financial

support, e.g., GPSS Professional Advancement Grants (PAGs), to co-fund their professional development activities.

Upon completion of the experience, grant recipients must submit a brief report to the ENVSC program coordinator.

Grants may be used to pay for travel expenses (air tickets, ground transport, lodging, food, registration) or other related expenses. Expenditures of grant funds must conform to ISU rules for allowability. Grant recipients must provide documentation in the form of receipts, invoices, or billing statements for any expense claimed.

There are no specific deadlines for submission; applications are accepted on an ongoing basis until all budgeted funds are expended. The maximum amount awarded in a single grant is \$200.00.

Further information and the application can be found here:

<https://www.enscigrad.iastate.edu/academics/professional-development-grants>

ENVSC Student Organization

ENVSC students are encouraged to participate in the Environmental Science Graduate Organization (ENSCISU). ENSCISU is a student-led campus organization, membership in which is open to all ENSCI students and faculty as well as other interested students. The goal of ENSCISU is to encourage interaction between graduate students and faculty in the ENVSC program in an effort to increase interdepartmental communication and provide a forum for the exchange of scientific information. The organization also promotes and sponsors social events for students and faculty.

Rights and Responsibilities

Responsibilities of ENVSC Chair and Faculty Advisers

It is the responsibility of the ENVSC chair and faculty advisers to create an environment that provides a reasonable expectation for student success and to counsel students who are having academic difficulties. If a student is unable to overcome these difficulties, the ENVSC chair will help the student identify and apply to other appropriate degree programs. In cases of disputes between the student and supervisor or the chair of the ENVSC program, the Graduate College will provide mediators.

Responsibilities of ENVSC Students

All students must make satisfactory progress to maintain their academic standing in ENVSC. It is strongly recommended that students meet with their POS Committee at least once each academic year to review their progress. Students are expected to

- ☐ form their Program of Study Committee by the end of their first semester,
- ☐ develop their Program of Study by the end of their second semester,
- ☐ successfully complete their preliminary oral exam no later than their fourth semester (PhD students only),
- ☐ enroll in ENSCI 698 every time offered (unless excused),
- ☐ maintain a cumulative GPA of 3.0 or higher,
- ☐ enroll in 9 credit hours each fall and spring semester, and
- ☐ complete their degree within the required years (3 or less years for MS; 5 or less years for PhD).

Students will be evaluated on these performance measures. The ENVSC Supervisory Committee will conduct a review of all active students, applying these performance indices, no less than one time per year. In cases where deficiencies are noted, the student and her/his faculty adviser will be advised in writing of the results of the review. The student will be allowed two semesters to correct the noted deficiencies.

At the end of this period, an additional status review will be conducted. If no action has been taken or if the remedy is insufficient, the chair/DOGE will advise the student and faculty adviser of the program's final evaluation and, barring any evidence of mitigating circumstances, will initiate action to dismiss the student from the program. (See the following section for the related dismissal policy.)

The definition and application of the performance indices noted above does not preclude faculty advisers from establishing separate standards of performance and milestones for progress related to specific work and research assignments made to a given student, e.g., standards for performing duties assigned through an assistantship appointment.

Dismissal Policy

Students may be dismissed from the ENSCI program for the following causes:

1. Failure to make satisfactory progress in a degree program – Such failure may include lack of research progress, a lack of aptitude, or a failure to maintain satisfactory academic standing, as outlined in the previous section of this handbook and as defined by the Graduate College Handbook.
2. Academic dishonesty – Dishonesty in the classroom or in the conduct of research is considered a serious offense, and cases of such misconduct will be dealt with according to the procedures outlined in the ISU Catalog and the Graduate College Handbook. If found guilty, a student may be dismissed from the program. In issues regarding research, graduate students are held to the same conduct standards as faculty.

Dismissal Procedures

A student's POS Committee or, if the student has no committee, a student's faculty adviser may recommend dismissal for

- ☐ failure to maintain the minimum GPA set by the Graduate College and the program,
- ☐ failure to pass within the time frame designated by the relevant academic program any required examinations, including preliminary and/or final oral examinations,
- ☐ failure to complete required coursework or a thesis/dissertation within the time frame designated by the program,
- ☐ failure to demonstrate scholarly and professional competence,
- ☐ academic probationary status for two years (see above),
- ☐ failure to comply with graduate student responsibilities or requirements discussed in the Graduate College Handbook and/or in the relevant program's student handbook,
- ☐ a finding by an ad hoc investigatory committee of academic misconduct in research and scholarly activity as outlined in the Faculty Handbook, Section 7.2.2.3, or
- ☐ personal conduct that violates the Regents Uniform Rules of Personal Conduct and General University Regulations discussed in the ISU Student Information Handbook and the Student Disciplinary Regulations.

The dismissal process includes the following steps:

1. An informal conference among the appropriate departmental or program officials (including the major professor) and the graduate student to seek resolution.
2. An informal conference with the dean of the Graduate College if the situation cannot be resolved at the program/department level.
3. A written warning to the student, clearly spelling out the perceived shortcomings and the steps that must be taken by the student and any deadlines that may apply; reasonable time must be given to correct deficiencies.
4. A written notification, if no resolution is reached, that includes a clear statement of the reasons for dismissal and the effective date.

Students may appeal dismissal decisions. For complete details and procedures, please see the Graduate College Handbook.

Termination of Financial Support

Although students in ENVSC are normally supported on graduate assistantships, financial support is not a requirement for continued participation in ENVSC; however, because assistantship support requires that a student be a member of a graduate program, dismissal from ENVSC will likely result in termination of an appointment.

Termination of support may be for cause, e.g., failure to maintain minimum registration credits, neglect of duties, incompetence, persistent refusal to follow reasonable advice and counsel of faculty supervisors, failure to maintain minimum GPA, failure to comply with employee responsibilities, academic misconduct, personal misconduct, or by reason of loss of funding, i.e., withdrawal of the funding source by its sponsor.

Full details relating to termination procedures may be found in the Graduate College Handbook.

Appeal Process

The University has established appeal processes for student grievances stemming from dismissal proceedings or termination of support. These are described in detail in the Graduate College Handbook. Reasonable attempts must be made by all parties involved in a grievance to resolve the situation at the program level first. Appeals may be taken further through the university administration if no resolution is possible to achieve by the program.

Professional Ethics

It is imperative that you understand the ethical standards of science and conduct your scholarly activities accordingly. Scientists who commit unethical acts, whether from carelessness, ignorance, or malice, lose the respect of the scientific community and/or are prevented from practicing science.

Ethical misconduct includes such activities as

- ☐ falsification and/or fabrication of data;
- ☐ deceptive and/or selective reporting of results;
- ☐ purposeful omission of conflicting data, with the intent to falsify results;
- plagiarism, including representation of another's work as one's own and misappropriation of the ideas of others;
- ☐ unauthorized use of privileged information;
- ☐ misappropriation of funds or resources for personal gain; and
- falsification of one's credentials.

At ISU, these acts are taken very seriously and constitute "academic misconduct."

Individuals found guilty of academic misconduct may suffer a variety of penalties, up to and including expulsion from the university.

Occasionally, you may be faced with situations in which you are tempted to act in a manner you think might be unethical. If this occurs, we recommend discussing the situation with your faculty advisor, or another faculty member whom you trust, to determine whether the actions you are considering are unethical. S/he should be able to provide reasonable counsel.

Unfortunately, not all people understand or care about ethical issues and, at sometime in your career, you may be witness to an act you believe to be unethical. When the individuals committing the presumed unethical acts are members of your own laboratory, or worse yet, individuals with power over you, such as your faculty advisor, the situation can be very awkward and you must proceed cautiously. You will find yourself torn between a

fear of retribution and a desire to stop the unethical behavior before it hurts you and other members of your laboratory.

If you believe that unethical behavior is going on in your laboratory, we recommend that you first attempt to discuss the situation informally with the person whom you think might be behaving unethically. Sometimes friendly questions will resolve the problem.

If you feel uncomfortable in this approach, or if you have tried this approach and it didn't resolve the problem, we recommend that you discuss the situation informally with a professor whom you trust. You may also go directly to the chair of ENVSC or a member of the ENVSC Supervisory Committee. All discussions with the chair and committee members are considered confidential.

Nondiscrimination, Affirmative Action, and Sexual Harassment

Iowa State University maintains a strong commitment to creating an environment free of discrimination and harassment. ISU's non-discrimination, affirmative action, and sexual harassment policy applies to all university-sponsored programs and activities, as well as those that are conducted in cooperation with the university. Any person who feels s/he has been the target of discrimination or harassment may bring the problem to the attention of her/his supervisor and/or the Office of Equal Opportunity.

Miscellaneous

University Resources

Iowa State has many resources available to students – child care, counseling, financial, housing, international, information technology, medical, etc. To learn more about the resources available, visit the New Graduate Student Online Orientation website.

Student Contact Information

Students should immediately update Workday with changes in address, telephone, and emergency contact information. This will ensure that important announcements and documents issued by the university are received.

Group Email Lists

The program maintains e-mail lists for the below groups to facilitate easy communication among program personnel. These lists are not public. Please contact the program coordinator for list information.

- ☐ Graduate students and faculty
- ☐ Graduate students
- ☐ Graduate faculty

Appendix

Resolutions of the Environmental Science Supervisory Committee

The following section records formal resolutions adopted by a majority vote of the Environmental Science Supervisory Committee. These resolutions are recorded as clarification of and/or elaboration upon program policies and as such are included as part of the ENVSC Handbook rather than the governance document.

Resolution 20100913-1 – Concerning Co-Major Admissions

The Environmental Science program has historically accepted co-majors and will continue to accept co-majors consistent with Graduate College policy. It is the purview of the ENVSC Admissions Committee to ensure that students who are admitted to the program meet minimum requirements, have an academic supervisor who is a member of the Environmental Science graduate faculty, and a plan for financial support. It is the purview of the program of study committee to judge whether a given program of study meets the curricular rules governing co-majors.

Resolution 20100913-2 – Concerning Program Fit

Historical precedent exists within the Environmental Science program for admission to be based upon meeting the academic requirements of the program. As provided for in the ENVSC governance document, the Admissions Committee is responsible for ensuring the students admitted to the program meet minimum requirements, have an academic supervisor who is a member of the Environmental Science graduate faculty, and a plan for financial support. The fit of a student's research project shall be judged by the student's program of study committee.

Resolution 20120328 – Concerning the Definition of "Consensus"

(Note: The ENVSC governance document instructs that "most issues before the Admissions Committee will be resolved by consensus.")

Consensus shall be understood to constitute broad-based agreement but not necessarily unanimity. In the case of immovable dissent expressed in certain circumstances, the dissenting committee member(s) may present a minority opinion for the record. Per the governance document, any issue upon which the Admissions Committee may become deadlocked will pass to the Supervisory Committee for review and resolution.

Petition to be excused from the Environmental Science seminar (ENSCI 698)

All graduate students are required to enroll in ENSCI 698 each spring semester, hence it is the expectation of the program that all graduate students take the class each time it is offered. However, under extraordinary circumstances, a waiver may be granted by the Supervisory Committee for a student to be excused from ENSCI 698 for one semester.

Graduate Student's name: _____

Major Professor: _____

In fewer than 500 words, please describe the reason you are asking for a waiver to be excused for the required ENSCI 698 seminar. Provide specific details and supporting reasons in your request. Your request will remain confidential among the Supervisory Committee members and your major professor. You will need to get approval from your major professor prior to submitting this waiver.

Signature Graduate Student: _____ Date: _____

Signature Major Professor: _____ Date: _____

Signature Department Chair: _____ Date: _____

Supervisory Committee Action: Approve Deny Date: _____

Comments: