



Master of Science Environmental Sciences

Graduate Student Handbook 2015 – 2016

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1. COURSE WORK

1.1. **GRADUATE PLAN OF STUDY** — required (E-sign)

The "Plan of Study" form is required by the Graduate School outlining the courses you plan to complete for your degree. It identifies minimum curricular requirements and specifies when requirements are due. The Plan of Study should be completed during your <u>first quarter</u>. Failure to submit the Plan will result in a registration hold. Together, you and your adviser identify the appropriate course work.

Required Coursework:

- ESCI 501 Research in Environmental Science (3)
- MESP: Biol 505 Current Research in Marine Science (1)
- 12 credits of ESCI 690 Thesis Research (Can extend to up to 36 credits for Financial Aid purposes)
- 3 specialization courses (see links below)
- Electives to total 45 credits (*Note: Excess Thesis Credits do not count towards requirement)

Additional Coursework Considerations:

- Maximum of 10 credits of 400-level courses allowed
- Maximum of 10 credits of Directed Independent Study (ESCI 500) allowed
- Maximum of 9 guarter or 6 semester credits of transfer courses allowed

After completing the e-form, email it to your adviser who will sign it and send it along the correct pathway, eventually making it to the Graduate School. You and your adviser will receive a copy when the Plan is approved by the Graduate School. The WWU Financial Aid office refers to the approved plan of study to determine eligibility for financial aid (having an approved Plan on file by the second quarter ensures they can determine your eligibility). **Changes to the Plan of Study require an amendment.** When you apply for your degree, the Plan is compared with courses completed for the degree evaluation

1.1.1.AMENDMENT TO THE GRADUATE PLAN OF STUDY (E-sign)

If it becomes necessary to make changes to your Plan of Study, the Graduate School requires an amendment listing all courses to be added and/or dropped. The form is initiated by you and signed by your adviser, the graduate program adviser and the Graduate Dean.

1.2. INDEPENDENT STUDY CONTRACT AND REGISTRATION APPROVAL (E-sign)

Graduate independent study courses (ESCI 500) are available to enable students to pursue educational experiences not available through the regular graduate courses listed in the catalog. Specific guidelines for development and restrictions from the Graduate School are listed at: http://www.wwu.edu/gradschool/independent-study.shtml

- 1.3. **SPECIALIZATION COURSES** -- Select at least **three courses** from your chosen area of specialization and list them on your Plan of Study:
- Environmental Science, Environmental Toxicology & Chemistry, Thesis, MS
- Environmental Science, Freshwater Ecology, Thesis, MS
- Environmental Science, Marine and Estuarine Science (MES), Thesis, MS
- Environmental Science, Regional, Global and Terrestrial Ecosystems, Thesis, MS

1.4. GRADES AND GRADING

Students *must* maintain a 3.0 GPA in courses listed on the Plan of Study. Classes with satisfactory/ unsatisfactory (S/U) grading are allowed, but <u>not</u> computed in your GPA. A maximum of 10 credits of C+ or U grades are allowed; however, required courses graded "unsatisfactorily" (S/U) must be repeated. Pass/no pass grades are <u>not</u> applicable toward a graduate degree. Incomplete (K) grades *must* be completed within one calendar year from quarter posted, an incomplete received in fall must be removed by the end of the following fall or convert to a failing grade of Z (ideally the student and instructor will have a written agreement as to when the work will be complete). Incomplete (K) grades received for thesis credits are an <u>exception</u> to the one-year time limit. Your adviser will change the K grades after completion of thesis defense and Degree Recommendation.

2. THESIS AND TIMELINES

2.1. THESIS / RESEARCH PROPOSAL:

You should plan to meet with your adviser early and often to begin discussing a thesis topic. You should pursue a research hypothesis that is particularly intriguing to you that is within your capability and the expertise of your adviser. Your adviser and committee members are useful for guidance and questions about various aspects of your thesis project. Consider time requirements (experiment and writing, availability of equipment, and projected budget. Students whose research involves human subjects (including surveys) or live vertebrate animals must comply with University policies regarding these types of research. Approval must be obtained before research begins.

2.2. PROPOSAL FORMAT:

Faculty may expect to see a written proposal before agreeing to serve as a committee member and approving the Thesis Topic Approval. There is no set format for a proposal, but it should include the following:

- Specific hypothesis or hypotheses
- A brief statement on the research hypothesis and its scientific significance
- Methods that will be used to test the hypothesis, with explanations of how the tests will be concluded
- Expected results
- A statement of the applications and importance of the research
- A review of the relevant literature
- References
- Project budget

NOTE: This type of proposal, with minor modifications, can be submitted to the Graduate Program Committee for Huxley research funds both fall and spring, and to the Office of Research and Sponsored Programs (RSP) for university research funds available each spring for the following year.

2.3. THESIS COMMITTEE:

Your thesis committee will advise you, approve the proposed research topic, and conduct the final oral examination. They are a great resource throughout your graduate program. The committee consists of three members: the chair and second member must be graduate faculty in Huxley, whereas the third committee member can be from Huxley, WWU or the professional community. **MESP** students can create a committee with <u>one</u> graduate faculty member from Huxley College, <u>one</u> research professor from Shannon Point Marine Center, and a <u>third</u> member from Huxley, WWU, or the professional community, upon approval from the Graduate School. All members must attend your oral defense (keep this in mind when considering out-of-town members).

- 2.3.1. Special Requirements for "Off Campus" committee members: Email the Graduate School (gradschool@wwu.edu) with the Name, Environmental Science Program, his/her title, preferred email address
- 2.3.2.Considerations when selecting your thesis committee: What are their research interests and expertise? Can they provide guidance necessary to complete your thesis? Will you be comfortable with the scientific approaches they are likely to recommend? What will they be like to work with? Are they supportive, reliable, constructively critical, and able to communicate well with you? How busy are they? How well do they work with other faculty members on your committee? Are they likely to be helpful in getting you a job or into a Ph.D. program? What is their reputation in their field? How strongly will they support you when writing letters of recommendation?

2.4. THESIS TOPIC APPROVAL [E-sign] – required

Before registering for thesis credits, your topic and committee must be approved. This form indicates you have a thesis committee and research topic, and also demonstrates you have been in communication with your adviser and are making progress in your graduate research. This form must be approved by your entire thesis committee. Generally, this happens after your thesis committee members have reviewed your written research proposal, and you have met with your committee to discuss the proposal.

2.5. ESCI 690 - THESIS RESEARCH (12 credits) -- [registration]

To register for thesis credits, you must be in the Advanced to Candidacy stage, meaning:

- Your Plan of Study has been approved by the Graduate Dean and is on file in the Graduate School
- You have completed a minimum of 12 cr. of coursework listed on your Graduate Plan of Study while maintaining a 3.0 (B) grade point average
- The Thesis Topic Approval is completed and on file in the Graduate School

Once these criteria are met, you can start taking thesis credits. A minimum of 12 thesis credits are required (repeatable to 36 credits for financial aid purposes). You must register for the final two credits the quarter you defend your thesis.* You can register for 699--Continuous Enrollment credits if you have completed all coursework, including 12 cr. of thesis, and if you have submitted the Application for Degree. Thesis credits are graded incomplete (K) until the Degree Recommendation. Your adviser will submit the appropriate S or U to the Graduate School. In environmental science 12 credits will convert to S (satisfactory) or U (unsatisfactory) following submission of the Degree Recommendation. If you have registered for more than 12 thesis credits, they will either be awarded at the same time, or may remain incomplete on your transcript (If extra credits are not needed for graduation).

*Note: if you are registered in the spring and defend by fall quarter deadlines you do <u>not</u> have to register again

2.5.1. **Graduate School guidelines to register for thesis credits**: If you want to register for thesis credits, you will need to receive overrides from both your academic department and the Graduate School. Thesis Topic Approval must be on file for overrides to be issued.

2.6. ANNUAL REVIEW OF GRADUATE STUDENT PROGRESS

Environmental Science has developed a procedure to assess our graduate students' overall research progress prior to the final defense. This is an objective method to identify students who are not making satisfactory research progress and a systematic way to notify students concerning their progress in developing and completing their thesis research.

2.6.1 Approach: The Graduate Program Committee (GPC) will meet annually with each M.S. student annually for a short (ten minutes), scheduled appointment to discuss the student's progress toward the M.S. degree. Prior to each meeting the student's advisor will be asked to submit an assessment of whether the student is making satisfactory progress toward the M. S. degree, based on the following minimum guidelines:

<u>Timeline</u>	<u>Criteria for satisfactory progress</u>
Year 1	Completion of 12 credits of 400- and 500-level classes with a grade of 3.0 or better
	Acceptance of the Plan of Study
	Selection of a thesis committee, approval of the research proposal and Thesis Topic
	Approval e-sign (upon meeting with committee)
Years 2-5	Satisfactory research progress will be determined by the student's committee

Following the meeting each graduate student will receive an email from the GPC stating whether they are making satisfactory progress toward their thesis research. If not, the email will list deficiencies noted by the GPC, and the student will be advised to meet with the advisor and the thesis research committee as soon as possible.

- **2.6.2 Termination from the Graduate Program**: Students who fail to make satisfactory progress for two consecutive years will be terminated from the graduate program unless the student's advisor recommends in writing to the GPC that the student be retained in the program.
- **2.6.3** Appeals: Students who receive an unsatisfactory rating on their research progress may appeal that finding to the GPC in writing within five working days. The GPC will notify the advisor and the student of its decision within ten working days after receipt of the student's appeal. If the unsatisfactory rating is not overturned, the student may submit a written appeal to the Dean of Huxley College within ten working days of notification from the advisor. If the unsatisfactory rating is not overturned by the Dean of Huxley College, the student may then submit a written appeal to the Dean of the Graduate School within ten working days of the notification of the decision by the Dean of Huxley College.

2.7. TIMELINE FOR COMPLETION OF DEGREE

All requirements must be completed within 5 years. Students who have not completed their program after 3 years are required to file a plan for completion within the 5-year limit. Otherwise it is understood that the student has decided to withdraw from the program. Below is a sample timeline to submit to the Graduate School due to (a) not graduating after 3 years or (b) excess registration of thesis credits. Specific dates or quarters are required for everything you have **not** completed.

TIMELINE FOR COMPLETION OF DEGREE				
PRINT OR TYPE YOUR NAME	PRINT OR TYPE THESIS CHAIR NAME			
Action Item	Date/Quarter Completed or Projected			
Completion of all program prerequisites and/or admission stipulations				
Completion of remaining courses on Plan of Study				
Submission of thesis topic approval				
Completion of research				
Completion of literature review				
Completion of analysis				
Submission of first thesis draft				
Submission of subsequent drafts				
Anticipated Quarter of Graduation				
Submission of Oral Defense Schedule				
Registration for 2 cr. during qtr degree is awarded (or qtr prior)				
Tentative date of Public Presentation				
Tentative Date of Oral Defense				
Submission of defended thesis to Graduate School				
Submission of Master's Degree Application				
Student's Signature:	Date:			
Thesis Chair's Signature	Date:			

2.8 EXTENSION OF GRADUATE PROGRAM

You can request an extension (1-3 quarters) for completing the degree requirements if you are unable to finish within the 5-year requirement. The following steps should be taken in making this request: Discuss, then request, an extension with your thesis chair. Your thesis chair and the program adviser determine if they will support the request. You and your adviser work to develop a mutually agreed upon timeline if the extension is supported. The request, faculty statement of support, and detailed timeline are submitted to the Graduate School.

2.9 THE THESIS

The thesis is the culmination of your graduate work and the purpose of the Master's degree. It demonstrates you are capable of completing an original and independent research project: designing and implementing a research plan and reporting on the investigation in a proper scientific manner--all in a timely fashion. Writing a thesis teaches how to plan and carry out a research project, how to negotiate work through revisions and how to manage your time. If difficulties arise, or modifications are necessary, it is important that you discuss the matter with all committee members--preferably as a group rather than individually. A thesis can get out of hand - longer does not necessarily mean better! The outline of the thesis should be developed early and revised often--with frequent review by your adviser. The style of the thesis should be discussed with and approved by your adviser. One style is to write a portion of the thesis in journal publication format, which can help in the development of a manuscript for publication.

The Graduate School provides **Thesis Guidelines** on their website. Your *first draft* should be completed and presented to your adviser during the quarter **prior to the quarter you wish to graduate**. When the thesis has undergone sufficient revision and when your adviser agrees, a draft of the thesis is circulated to your entire committee. The committee should have at least *two - three weeks* to read it **before the date you have scheduled for your oral defense**. Some rewriting should be anticipated at each stage of this review process.

2.10 MASTERS DEGREE APPLICATION [E-sign] – required

The application for degree must be submitted by the **last day of classes (end of dead week) in the quarter prior** to the quarter you intend to graduate. Double-check to be sure all graduation requirements have been met <u>before</u> submitting the application. The non-refundable graduation fee will be billed to your student account each time your file is evaluated for degree completion. If you don't meet the deadlines for the quarter you applied, **you will have to apply again**.

2.11 PUBLIC PRESENTATION – required

A public presentation of the data, analysis, logic, philosophy and conclusions of the thesis must be given to a Huxley College audience. This is carried out in the form of a seminar. You should complete your public presentation when college is in session unless you have special approval from your thesis committee. Ideally, your entire committee will be in attendance and you can then adjourn to your oral defense.

2.12 ORAL DEFENSE – required

An oral defense with all of your thesis committee present is required and must be scheduled within an academic quarter. The oral defense may cover any aspect of your education, but usually the questions are concerned with the thesis itself. You should discuss with your adviser the nature of the oral defense and prepare accordingly.

SCHEDULING & PREPARING FOR DEFENSE

Two weeks before your defense:

- Schedule your public presentation and oral defense
- Submit the Oral Defense Schedule to Graduate School

• Send copy of thesis to committee members

One week before your defense:

- Deliver the latest draft of your thesis to the Graduate School for review by the Graduate Council representative. The role of the Graduate Council representative at your defense is that of student advocate-to insure impartiality.
- Give your thesis chair the latest draft for review

Day of public presentation and oral defense:

- Take a minimum of <u>four</u> signature pages to your defense (you will probably need seven)-- <u>two</u> of the
 four thesis copies are delivered to the Graduate School, <u>one</u> is given to your thesis chair, <u>one</u> remains
 in Huxley College. You may need additional copies for your thesis adviser, other committee members
 and yourself.
- Some committees prefer not to sign your thesis until corrections are completed and reviewed. That is
 generally decided by the committee at the conclusion of the defense. If this occurs, you will work with
 your adviser to correct the thesis to the satisfaction of the committee members then obtain the required
 signatures on the final document.

Next Steps to Graduating:

 A final copy of the corrected thesis (addressing comments raised by committee members during the oral defense) should be turned into the graduate school by the specified deadline (found here: http://www.wwu.edu/gradschool/graduation.shtml)

Thesis Submission Instructions http://www.wwu.edu/gradschool/thesis-project.shtml

Beginning Winter 2015, master's thesis submission and approval will be handled through <u>CEDAR</u>. This will allow more streamlined communication and processing between students, the Graduate School, and Western Libraries.
CEDAR will also provide greater exposure and findability of thesis work. Authors will receive monthly usage statistics for their work, even after they leave Western.

Final Step for Degree

• The student initiates the <u>Degree Recommendation Thesis Option</u> via e-sign. All actions for completion of your degree should be completed by this time (All grades resolved, thesis approved, etc...)

2.13 DEGREE DEADLINES

See published deadlines on the Graduate School website:

- You must be enrolled for at least <u>2 cr.</u> in the quarter the degree is awarded <u>OR</u> the preceding quarter.
- In order to receive your degree, it is imperative that you complete all program requirements within 5 years. *After 5 years, your computer account, library privileges and all other technology services will be discontinued, all associated files will be purged, and you will be withdrawn from the Graduate School
- You may participate in commencement <u>only</u> in the quarter in which your degree requirements are met

2.14 DELIVERING THESIS FOR COPYING AND BINDING

When the Graduate Dean has signed the **minimum two (or more)** original signature pages, the Graduate School will notify you so you can deliver the signed pages to the <u>Haggard Hall Campus Print and Copy Services</u> (<u>HH 110</u>, Phone: <u>360-650-3762</u>). The Copy Services staff will <u>not</u> accept any thesis without the Graduate Dean's signature.

 You are encouraged to submit the text of your thesis electronically to Campus Print and Copy Services. The files must be in PDF format. The Student Technology Center (Haggard Hall 121, <u>www.wwu.edu/techcenter</u>, x4300) will provide support and expertise to students who need assistance in converting text files into **PDF format**; they say the process works best if you take your thesis to HH121 and sit down with their staff

- The signature page (with your thesis committee and the Graduate Dean's signatures) must still be delivered in hard copy. If you choose to submit electronically, contact Campus Print and Copy Services (x3762) before to make sure the files are compatible--they will require you to proof one copy before they proceed with making multiple copies.
- If you ask another person to submit your thesis for printing/binding the following is required:
 - ✓ Your email address and phone number
 - ✓ The number of hard- and soft-bound copies you want
 - ✓ Any special instructions regarding photos, maps, graphs, etc.
 - ✓ Delivery instructions
 - ✓ Payment in full must be submitted in advance for all services regardless of who delivers your manuscript to Campus Print and Copy Services.
- We do <u>not</u> require the **copying** be done on campus, although they provide this service very inexpensively.
- We <u>do require</u> that the **binding** be done with them. This insures that all bound theses are of standard size, color, title lettering, etc.
- At the time you place your copying/binding order, the costs for the copying, hard binding, soft binding and lettering must be <u>paid in full</u>. Call Campus Print and Copy Services for current charges (x3762).
- When you place your order, the type for the gold stamping of the front hard covers will be ordered. Once the type has been ordered, changes may <u>not</u> be made in the title, or additional fees will be charged for the re-order. Title length on the cover can be no more than 50 spaces per line (including punctuation and spacing), with a maximum of 4 lines, <u>or</u> 3 lines with 1 line of underlining; <u>or</u> 2 lines with 2 lines of underlining. (If your title is longer than this, it must be shortened for the cover, but may remain in its original length on the pages of your thesis.)
 - Have Campus Print and Copy Services deliver 1 copy to the Graduate School and the others to any on-campus office (you can have all others delivered to Ed Weber in ES 539/545A).
 - Allow six (6) weeks for the completion of your thesis copying/binding order.

2.15 ORDER BINDING AND PRINTING:

- Two (2) hard-bound copies are required; additional copies made at your discretion
 - Graduate School
 - Huxley College (deliver to Graduate Program Coordinator)
 - Soft- or hard-bound copies may be provided to chair and each committee member (ask them if they want one)
 - You should be prepared to bear the cost of duplicating and binding (approximately \$27 for each hard-bound cover, approximately \$19.00 for each soft-bound cover, 5 cents/page for copying, 30-45 cents/page color copies -- they accept Visa and MasterCard). As always, prices are subject to change.
 - Voluntary placement of a digital copy of the thesis for online access is encouraged—The hard-bound copies of the thesis for the Grad School and Huxley College are still required, (for placement in the library, available for check-out).

2.16 DIPLOMA and DEGREE POSTING

Your <u>diploma will be mailed</u> and your <u>degree posted to your official transcript **after** ALL the hard-bound copies have been delivered to:</u>

- Thesis Chair (optional)
- Huxley College (one)
- Graduate School (one)

Note: Outstanding fines or campus parking tickets must be paid before the diploma is issued.

3. FUNDING, SAFETY, TRAVEL AND MISCELLANEOUS

3.1 FUNDING OPPORTUNITIES FOR GRADUATE STUDENTS:

Teaching Assistant (TA), Research Assistant (RA), and other funding options:

3.1.1 ACADEMIC LOADS (<u>Graduate School</u> and <u>Financial Aid</u> requirements) Enrollment requirements for **GRADUATE SCHOOL** purposes

A full-time Graduate Student is enrolled in 8 cr. minimum / 20 cr. maximum

3.1.2 Teaching Assistant (TA):

- TAs must be enrolled in 8 credits (Full-Time) to be eligible to hold a TA-ship and receive tuition waivers and STIPENDs.
 - Exception: If you have completed ALL academic requirements (other than Thesis Credits) on your Graduate Plan of Study you may be_enrolled for a minimum of two credits
- TAs are eligible for health benefits through the Graduate School
 - o If you want to participate in the Student Health Care Plan, you have to sign up for health benefits -- they're not automatic because you're eligible or because they're provided -- contact the Graduate School at 360-650-3170.

3.1.3 Research Assistant (RA):

- RAs are <u>required</u> to register for a minimum of <u>2 cr.</u> each quarter (<u>except</u> summer)
- Graduate student employees who have completed all course work on their approved
 Graduate Plan of Study, except for thesis or research work, will be considered full-fee
 paying for Student Healthcare costs if enrolled for a minimum of two credit hours of thesis
 or research
- If you decide not to register you must be employed in an exempt position (non-student)
- RAs may receive a partial tuition waiver; check with your faculty sponsor
- RAs may be eligible for health benefits; check with your faculty sponsor
- You have to sign up for health benefits -- [see TAs above]

3.1.4 Temporary Exempt Staff:

These positions exist primarily to accommodate a graduate student who has RA support but is <u>not registered</u> for the minimum <u>2 cr.</u> required for an RA. These positions may or may not provide a tuition waiver or health benefits; check with your faculty sponsor. You **CANNOT** be both a Temporary Exempt Staff and hold any type of "Student Employment" at the same time.

3.2 Enrollment requirements for FINANCIAL AID (Non-TA/RA) purposes

- <u>Full financial aid</u> award requires registration of <u>8 credits</u> or more each quarter
- Students on financial aid (those with graduate work-study and/or RA support) can work up to 40 hrs/wkduring intercession—the time period when school is not in session (i.e., during the Christmas break between fall/winter quarters and during spring break, but cannot submit time for actual holidays when the University is closed, i.e., Christmas Day, New Year's Day, etc.) weekends included as long as the 40 hrs/wk is not exceeded
- You may attempt up to 125% of the credits required for completion of your program of study (however, these credits are expected to be on your approved Plan of Study)
- Students enrolled in thesis option programs are eligible for federal financial aid for the number of credits allowed by the program for thesis (Environmental Science = 12-36 credits)

You are encouraged to plan your academic course loads efficiently to reduce excessive student loans;
 in other words, you cannot receive financial aid indefinitely

3.3 Grants and Research Funds

- **3.3.1 Huxley Small Grants** Each fall and spring Huxley provides a limited number of small grants to foster and facilitate graduate research in environmental science and geography. These grants are intended only to cover small expenses, such as expendable supplies (chemicals, glassware), travel to field sites, or attendance to present results at a professional meeting. Awards are competitive and have averaged \$715 over past 10-years. Maximum duration to spend funds without requesting an extension is 18 months. Deadlines for applying are mid-October and mid-April. Your Thesis Topic Approval card must be on file in the Graduate School before these research funds will be made available. You can apply for a Huxley Small Grant more than once, however each proposal will be evaluated on its own merit and must show research progress from last grant.
- **3.3.2 Research and Sponsored Programs (RSP)** The Fund for the Enhancement of Graduate Research, sponsored by the Office of Research and Sponsored Programs (RSP) and the Graduate School, awards students currently enrolled in graduate programs research support in amounts up to \$1,000. Students <u>must</u> apply in the spring for funding the following year, therefore first year students are encouraged to apply. Awards are designed to assist students in accomplishing their thesis work (equipment, computer software, consumable items). Travel is supported only in exceptional circumstances.

3.4 USING GRANTS FOR THESIS RESEARCH (on-campus sources)

If you apply for a "small grant" through Huxley College or a Research and Sponsored Programs (RSP) grant for thesis work, the funding will be deposited into the department account. Purchases can be made with WWU purchase forms or through Purchasing, or reimbursements using services/reimbursement forms.

- Some items, such as computer software and chemicals, have specific acquisition rules that must be complied with prior to purchase. Failure to follow these rules may result in you not being reimbursed. Please consult WWU Purchasing Office or Ed Weber prior to agreeing to buy.
- All "Non-expendable" purchases become property of Western Washington University and must be turned in when you are complete with your project.
- There are various ways to spend your grant--see Ed Weber for assistance.
- Refer to the travel section below for grant money of any sort being used for travel to seminars, research sites, and any type of travel. In all cases, **keep your receipts**.

3.5 USING GRANTS FOR THESIS RESEARCH (off-campus sources)

Grants administered through RSP must follow guidelines. If you are overseeing a grant with your faculty adviser, all paperwork will <u>require</u> his/her signature. If you or anyone else (other students) are to be paid out of grant monies, you <u>must</u> have a Payroll Appointment form in the university payroll system <u>before</u> you begin working on the grant. Grants all have a designated five-digit number beginning with a "5." See Rose Kawczynski to be placed on the payroll, for travel, for purchases, and for reimbursements.

3.6 Ross Travel Grant

Provides support for students to travel to present papers at professional meetings and conferences. The awards cover the amount equivalent to the minimum airfare or other public transportation cost to the conference city, with a maximum of \$500 granted to any single applicant. Ground transportation, lodging, per diem and registration fees are generally not covered.

3.7 HEALTH INSURANCE AND ON-CAMPUS MEDICAL CARE INFORMATION

3.7.1 STUDENT HEALTH CENTER - website at http://www.wwu.edu/chw/student_health/index.shtml Graduate students taking at least 3 credit hours have the option of paying the Health Services fee for the

quarter so they can utilize services if they choose to. A signed authorization form, available from a Health Center receptionist, is necessary. In general, students enrolled in 6 or more credits are automatically billed the fee for the quarter.

If you are serving as a graduate TA or an RA, you may be enrolled for as few as three (3) credits and still be eligible for services from the Student Health Center (notify the Graduate School so your account can be manually charged)

3.7.2 WWU STUDENT HEALTH INSURANCE PLAN -- See Student Health Center website above

This insurance plan is available to any WWU student who meets eligibility requirements as stated in the plan brochure; however the Graduate School will pay your premiums on a quarterly basis if you are a Graduate Teaching Assistant.

3.8 **SAFETY TRAINING**

The University has a responsibility to provide safety training to new employees and students who will be working with chemicals and performing hazardous tasks. It is the responsibility of each faculty member to ensure that his or her employees and students are trained. Contact Environmental Health & Safety (x6582) for the safety orientation checklist and the specific job safety orientation for new employees including student workers.

Graduate students who perform research in the field and laboratory should be trained in issues such as transport of chemicals in vehicles (personal and university) and the potential risks if they transport chemicals in luggage via air. In addition, personal protective equipment, hazard communication, lab safety and hazardous waste are among the other topics that should be reviewed.

Environmental science TAs are <u>required</u> to contact Scott Wilkinson (<u>Frasier.Wilkinson@wwu.edu</u>) ES 422, x3667) <u>prior to</u> the beginning of each quarter for lab safety training information.

3.9 TRAVEL--Regulations and Procedures

First, consult your department manager Rose Kawczynski (X2844) about procedures. A Travel Authorization form is required prior to traveling to seminars, research sites, etc. A Travel Expense Voucher is required upon your return. You will need a Travel Authorization number in order to book your travel. Airline travel must go through a state-qualified travel agent. Do not charge airfare to your private credit card. Refer to the WWU Travel Desk site on-line for the currently-approved local travel agencies.

For day travel involving your personal vehicle, a new form is available on-line at the Travel Desk site. For the current reimbursement rate for private vehicle expenses, see www.gsa.gov/travel.htm. For overnight travel when lodging and meals are authorized, see Rose Kawczynski for information. In all cases, keep your receipts.

3.9.1 Van Rentals from ENTERPRISE(12-Passenger) - Regulations and Procedures

3.9.1.1 Vehicle Reservations

As a TA, or when conducting research, you may be asked to reserve a 12-passenger van from Enterprise and drive the van for the class. Contact department manager, Rose Kawczynski as early as possible for complete instructions and van rental procedures. Information you will need to provide:

- Date of trip
- Time of pick up and return of vehicle

- Destination
- Purpose of Trip
- Driver's Name

Vehicles must be reserved for individual trips. Please cancel vehicle reservations if plans change.

3.9.1.2 Van Training

Any driver, faculty, staff, student or volunteer, operating a 12-passenger van on behalf of WWU must at least age 21, have 5 years driving experience and complete both the state required large passenger van training every two years. Drivers and their supervisors are responsible for monitoring this. It's a 4-part course involving a PowerPoint presentation, quiz and completion of two state forms that need to be printed, completed and signed by the driver and her/his supervisor. The completed forms stay with departmental files. Secure training early in the year in order to be prepared for potential TA assignments. Van training is provided by Risk Management (x6582). Training is available on Canvas.

3.9.1.3 International Travel with Van

Vans larger than 10-passenger may not be driven into Canada. Multiple smaller vans would need to be driven if taking more than 10-persons.

3.11 HUXLEY GRADUATE FACULTY

A faculty member from this list has agreed to serve as your research adviser and will serve as the chair of your thesis committee. Faculty marked with an [*] generally serve as faculty advisers for environmental science graduate students. For all specializations other than MESP, at least two faculty members from this entire list will serve on your thesis committee. If you want to change advisers, you need to find another faculty member who agrees to fill that role.

Troy Abel -- environmental policy, conservation politics, civic environmentalism, policy analysis, globalization and environmentalism

Andy Bach -- physical geography, geomorphology, soils and weathering, water resources, geoarcheology, Elwha Dam removal and restoration, landforms of the Missoula Floods

Charles Barnhart -- applications in energy production

Gigi Berardi -- all-hazards planning, resource management, agroecology, food security, international development

*Brian Bingham -- invertebrate biology, marine ecology, experimental design

*Leo Bodensteiner -- fisheries biology, aquatic ecology, fish ecology

Pat Buckley -- optimization modeling, economic and development geography, quantitative/qualitative methods

*Andy Bunn -- climate change, paleoecology, energy, ecological modeling

*Rebecca Bunn -- belowground ecology, toxicology, restoration, energy

Aquila Flower – long-term roles of climatic variability, human land use patterns, and natural disturbances in shaping forest ecosystem dynamics

*Jim Helfield -- ecology of rivers and riparian forests, terrestrial-aquatic ecosystem linkages, watershed management and restoration

Steven Hollenhorst – land use policy and management; land trusts and conservation easements; and environmental leadership

*Peter Homann -- biogeochemistry, soil sciences, forest ecology

Nabil Kamil – Uneven urban development, social/environmental justice, urban informality and disaster recovery

*Wayne Landis -- environmental toxicology, population biology, risk assessment

*Brooke Love -- ocean acidification, and its effects on food webs, and the role of marine vegetated areas in marine chemistry

*Robin Matthews -- freshwater ecology, aquatic toxicology, statistical ecology

*John McLaughlin -- terrestrial ecology, population biology, conservation biology

*Erika McPhee-Shaw -- Director of the Shannon Point Marine Center, physical oceanography, coastal oceanography, ecology, sediment transport, internal wave interactions on the continental shelf

Mike Medler -- biogeography, GIS, remote sensing, forest fire and wilderness management **Jean Melious** -- environmental and land use law and policy, international environmental policy **Gene Myers** -- environmental education, conservation psychology, evaluation, environmental ethics, human ecology

Mark Neff -- understanding and improving the policies governing science to better serve the public interest, and the use and uptake of scientific information in formal and informal environmental decision making. I have a particular interest in controversies involving dynamic social-ecological systems and comparatively static policy structures and knowledge systems.

Rebekah Paci-Green -- community-based risk communication for disaster risk reduction and planning; integrating hazards assessment, culturally-appropriate construction, and disaster planning into schools in less-developed countries; built environment and natural hazards in less-developed countries; science communication

David Rossiter -- cultural-historical geography, political-ecology, Canada

*John Rybczyk -- wetlands ecology and management, ecosystem modeling, global climate change
*David Shull — structure and function of marine benthic communities, pollution and marine ecosystems
*Ruth Sofield — aquatic toxicology, biochemical and genetic toxicology, and environmental chemistry
Nick Stanger — environmental education, sense of place, indigenous education, environmental refugees,
curricular studies, complexity theory, resiliency, eco-critical thought, post-structuralism, and existentialism
Paul Stangl -- pedestrian planning, New Urbanism, urban landscapes, memory and meaning; Europe and
Berlin

*David Wallin -- terrestrial ecology, forest ecosystems

Grace Wang -- natural resource policy, cultural resources management, community-based forestry **Thomas Webler** -- bringing local and expert knowledge together in collaborative, democratic ways to
produce innovative solutions to controversial problems or collective action. Current research: (1) To
characterize the energy system transition at state, national, and global levels. (2) To develop and implement
analytic-deliberative processes for community-based climate adaptation planning and for risk governance of
a broad range of hazards.

Nick Zaferatos—community and sustainable development, environmental planning, EU policy, Native American political development

Master of Science – Environmental Science Program Requirement Checklist

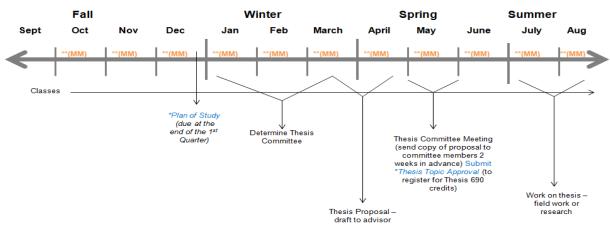
*Plan of Study	Complete during first quarter. Submit Amendment to Plan of Study every time coursework changes.
Form Thesis Committee	All members of thesis committees shall be designated or approved as graduate faculty. For a thesis committee, two members (including the committee chair) must be tenured or tenure-track graduate faculty in the student's academic department.
Submit Research Proposal	Develop in consultation with faculty advisor and submit to thesis committee
*Thesis Topic Approval Form	Prior to 690 Thesis Registration - Approved by all committee members, Grad Program Advisor, Department Chair and Graduate Dean
Apply for Huxley research funds (Optional)	Mid-November / Mid-April
Apply for RSP research funds (Optional)	Apply in Spring Qtr for funding in summer/next year
Apply for Ross Travel Funds (Optional)	Application Dates: 1 Oct, 15 Nov, 15 Mar, and 15 May
*Register for Thesis Credits (Need overrides)	After satisfactory completion of 12 credits on Plan of Study, completion of prerequisites <u>and</u> approval of Thesis Topic by the Graduate School
Thesis Drafts (Usually 3-4 draft versions) <u>Thesis Manuscript Format</u>	First draft to faculty adviser at least one quarter prior to quarter of graduation—make revisions as necessary. Entire committee should have thesis to read at least two weeks before oral defense is scheduled
*Masters Degree Application	Due by end of quarter prior to your graduation
*Masters Degree Oral Defense Schedule	Submit to Graduate School no later than 2-weeks prior to your defense date. You will need to know your date/location for your public defense and oral defense schedule to complete.
*Degree Recommendation - Thesis Option	The approved recommendation must be received by the Graduate School no later than Friday one week before the beginning of finals week.

Note: All graduate students must be registered for at least 2 credits ESCI690 or ESCI699 continuous enrollment in the quarter of graduation or in the quarter immediately prior to graduation (not including summer quarter)

Attachment 1

Ideal Timeline (Assumes 2 Year Degree Completion)

Year 1

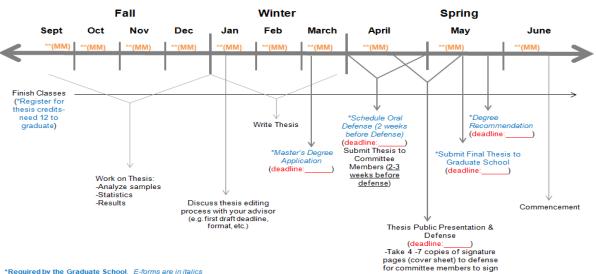


*Required by the Graduate School. E-forms are in italics

**(MM)-It is suggested that graduate students meet monthly (MM) with their

Many of the requirements listed above (Year 1) are suggested timeframes, with flexibility in the due dates.

Year 2***



*Required by the Graduate School. E-forms are in italics

**(MM)-It is suggested that graduate students meet monthly (MM) with their advisors for continuous communication

***If you plan on graduating in the Summer, Fall, or Winter Quarter, use the timeline as a template and add the correct dates into the deadlines above. Deadlines are published on the graduate school website: http://www.wwu.edu/gradschool/graduatlon.shtml. For all graduate students: the last two quarters are the most important in terms of meeting deadlines and completing e-sign forms.

Attachment 2

ESCI Graduate Program Points of Contact

Position	Contact	Assists with:
Graduate Program Coordinator	Ed Weber 360-650-3646, ES 545B Ed.Weber@wwu.edu	Questions about environmental science program specifics, required forms, timelines, deadlines, TA assignments, room requests, payroll, stipends, tuition waivers, office space, registration and course overrides, thesis copying and binding, etc.
Department Manager	Rose Kawczynski 360-650-2844, ES 522 Rose.Kawczynski@wwu.edu	Making travel arrangements (before you travel), questions about grant spending.
Scientific Lab Technician	Scott Wilkinson fraser.wilkinson@wwu.edu 360-650-3667, ES 422	Questions about laboratory preparation and availability, research equipment and supplies, and TA needs
Graduate Program Adviser	Ruth Sofield ruth.sofield@wwu.edu 360-650-2181, ES 440	Approving and signing most everything you do toward completion of the degree