



Student Guide 2010-2011

The SELMR Student Guide provides important information about how to successfully complete the SELMR program. We ask that you read it carefully and seek clarification where necessary; preferably sooner rather than later! Some of the information is generic for all University of Alaska Fairbanks (UAF) graduate students, and some is specific to SELMR. For information specific to your *graduate degree*, please consult materials from the department in which you are pursuing your degree.

It is inevitable that you will encounter challenges as you pursue your degree. If you have an issue with UAF, SELMR, or degree program requirements, don't let it fester. Maintain regular communications with your advisor, the SELMR Director, and the SELMR Program Coordinator; work with us to help you succeed. We are here to be helpful, and promise to do our best to support you!

Student Status

SELMR Fellow: UAF MS candidates (Fisheries, Marine Biology, or Oceanography) who receive fellowships from the SELMR Science Master's Program (SMP) grant. Fellows are awarded National Science Foundation (NSF) fellowships for two years, which include a stipend, tuition waiver (9-10 credits/semester, depending on the semester), and health insurance.

If you are on an SMP fellowship and wish to stop receiving your SMP stipend due to leave of absence, or other funding, etc., you must give the SELMR Director six weeks advance notice. Your SMP stipend will be stopped until you request to be reinstated. Please check with the SELMR Program Coordinator to make sure we have the proper information to restart your funding.

SELMR Associate: UAF MS candidates (Fisheries, Marine Biology, or Oceanography) who are accepted into the SELMR program with alternative funding. Associates are expected to participate in all academic components of SELMR. Limited funding may be made available to SELMR Associates to help support participation in the MESAS/SELMR retreat.

Academic Program Information

Major Advisor: A close working relationship with your major advisor is critical to the success of your degree program. An advisor should serve as a mentor, a sounding board, a colleague, and someone to help launch you in your future career. The advisor works closely with you in selecting courses, identifying funding for research and professional development, writing publications, presenting at conferences, and designing and implementing your thesis research. Maintain regular contact with your advisor, especially in the early phases of your graduate studies. Seek her out. Find ways to collaborate. Tell her what you need. Ask for feedback. Keep in mind that it is your responsibility to coordinate meetings and to remain on top of degree and SELMR program requirements and deadlines.

Graduate Committee:

Composition: The selection of the graduate committee should be done in close consultation with your major advisor. Committee composition should: reflect the area of research to be addressed and specific requirements of your degree program; and include one suitably qualified outside (government, NGO, or other) professional. In general, this means that your graduate committee will consist of four members instead of the usual complement of three members. Select your committee as early as possible once your research topic is well defined and no later than the end of your first year. The SELMR Director should be invited to your first committee meeting to provide a brief explanation of the SELMR program and its requirements to the graduate committee.

Function: The graduate committee serves as the primary oversight body in determining your degree program. The committee makes final decisions about your graduate student plan, course work, the comprehensive exam, advancement to candidacy, approval of the thesis proposal, and approval of the thesis. The committee also serves as a resource in developing your research project, executing the research plan, and defending the final product. Committee members are especially important in interdisciplinary studies since no one person on the committee typically has all the necessary background to support you through your degree program. Consequently, interdisciplinary committees require greater participation by the full set of faculty members.

**** Check with your degree program for additional committee process guidelines!**

Thesis Project: Master's research projects are original research contributions. The thesis project should reflect a multidisciplinary perspective and address the theme of marine ecosystem sustainability.

Sample Academic Timetable: (This timetable is specific to the SELMR program only; your degree may have additional course requirements.)

Year 1

- Summer
 - Social, Oceanographic, & Ecological Perspectives in Marine Ecosystems (3 cr) (FISH/MSL 695)
 - MESAS/SELMR retreat
- Fall semester
 - Human Dimensions of Environmental Systems (3 cr) (FISH 411)
 - Marine Ecosystems (3 cr) (MSL 652)
 - Regression and Analysis of Variance (4 cr) (STAT 401)
 - Elective course(s) (0-3 cr)
- Spring semester
 - Bioeconomic Modeling and Fisheries Management (3 cr) (FISH 694)
 - Innovative Approaches to Marine Ecosystem (1 cr) (FISH/MSL 692)
 - Elective course(s) (0-5 cr)
 - Arrange internship
 - Prepare thesis proposal

Year 2

- Summer
 - Research/Stewardship Internship (4-8 weeks)
 - MESAS/SELMR retreat
- Fall semester
 - Fisheries Population Dynamics (4 cr) (FISH 421)
 - Elective course(s) (0-5 cr)
 - Thesis research (0-5 cr)
- Spring semester
 - Innovative Approaches to Marine Ecosystem (1 cr) (FISH/MSL 692)
 - Elective course(s) (0-8 cr)
 - Thesis research (0-8 cr)

General Information

Program Evaluation: You are required to:

- Participate as needed in interviews/questionnaires administered by the external program evaluator
- Complete an annual on-line questionnaire administered by NSF for the Annual Report
- Respond to requests for input to the NSF Annual Report

Internship: SELMR students are strongly encouraged to participate in a 4-8 week internship during the summer following their first academic year. The intent of the internship is to broaden interdisciplinary training, develop new research tools, build expertise outside your home discipline, gain exposure to non-academic careers, gain a unique perspective on research problems as well as an experience outside your degree program. The internship is not intended to be an opportunity to collect data.

Fall Retreat: SELMR students are required to attend a 1-2 day retreat immediately before the start of Fall semester during which incoming SELMR and MESAS students will share their experiences from the summer course, second-year students will present an overview of their internship project, and MESAS students in their third-year and beyond will present research results. The goal of the retreat is to keep students engaged in interdisciplinary activities throughout their graduate career and to facilitate interaction among SELMR and MESAS students and faculty.

Collaboration with MESAS and RAP: The SELMR program complements the Marine Ecosystem Sustainability in the Arctic and Subarctic (MESAS) IGERT. Entering students participate in the same 3-week summer course, participate together in the annual retreat, and share several core courses. Some of these courses are also shared by the Resilience and Adaptation (RAP) IGERT. RAP is terrestrially focused, but shares a focus on sustainability and interdisciplinary research. MESAS and RAP share courses and faculty and encourage student interaction.

Tax Responsibilities: No taxes will be withdrawn from your fellowship payments and you will not receive a 1099 MISC form for this income. Nevertheless, you are required by the IRS to report this income on your tax return. Officially, the University is not a tax adviser and is very hesitant to give tax information. Contact HR Payroll number (474-7700) and ask for fellowship tax information.

SELMR-Funded Travel: Please pay close attention to the following guidelines.

- The Program Coordinator will prepare a Travel Authorization (TA) for your travel from your base campus (Fairbanks or Juneau) to the summer course and summer retreat.
- The Program Coordinator will purchase airline tickets for you. You need to provide her with a preferred itinerary. Be sure to provide your full name as it appears on the ID you will use at airport security.
- The Program Coordinator will arrange for payment of lodging expenses associated with the summer course and retreat.
- During your travel you are responsible for keeping ALL reimbursable receipts and ALL boarding passes. These are necessary for completing the expense report.
- Reimbursement will not exceed per diem rates.
- Upon completion of your travel, you must complete and submit a Travel Expense Report (TER), available in Excel at: <http://www.sfos.uaf.edu/admin/forms>. Your departmental administrative staff or the SELMR Program Coordinator can assist you. Tape original receipts and airline boarding passes to 8 x 11 paper, making sure the date, amount and reason for expenditures are visible. Submit the TER and receipts to the Program Coordinator so she can review and submit it, and you can get reimbursed!

If you will be taking personal time in conjunction with the travel, additional information will be required. Talk with the Program Coordinator.

Important Phone Numbers and E-mail Contacts

<https://edir.alaska.edu> is the UA searchable online directory.

Keith Criddle, SELMR Director 796-5449 kriddle@sfos.uaf.edu

Jan Carlile, Program Coordinator 796-5451 jan.carlile@alaska.edu

Fairbanks:

Center for Health and Counseling 474-7043 fyheaco@uaf.edu

Rasmuson Library 474-7481 fyref@uaf.edu

Registrar's Office 474-6300 registrar@uaf.edu

Office of Admissions 474-7500 admissions@uaf.edu

Christina Neumann, SFOS Academic Program Manager 474-5840 neumann@sfos.uaf.edu

Madeline Scholl, SFOS Academic Programs Assistant 474-7289 m.scholl@sfos.uaf.edu

Office of Information Technology (OIT) 450-8380 helpdesk@alaska.edu

Juneau:

UAS Health Services 796-6000 uas.info@uas.alaska.edu

UAS Student Rec Center 796-6544 rec@uas.alaska.edu

Egan Library 796-6300 egan.library@uas.alaska.edu

Gabrielle Hazelton, Administrative Assistant 796-5443 g.hazelton@alaska.edu



Program and Graduation Requirements

Students enrolled in the National Science Foundation sponsored Science Master's Program (SMP) in Sustainable Ecosystem-Based Management of Living Marine Resources (SELMR) are expected to complete: (1) UAF general and MS degree requirements; (2) specific degree requirements for the MS in Fisheries, Marine Biology, or Oceanography; and (3) SELMR program requirements. These requirements are summarized below; students are encouraged to consult the UAF catalog for updates and revisions of degree requirements.

UAF General and MS Degree Requirements

- Complete required forms
 - Submit Graduate Study Plan and Appointment of Committee forms (by end of first year)
 - Submit Report of Advisory Committee (annually by May 15)
 - Submit Advancement to Candidacy form after: (1) completion of at least 9 credits of graduate courses at UAF; (2) approval of thesis proposal and successful completion of comprehensive exams (for Marine Biology and Oceanography programs only); and (3) approval of GSP. Advancement to Candidacy forms are due by about February 15 for Spring graduation or about October 15 for Fall graduation.
 - Submit application for graduation—must be registered for at least 3 credits in graduation semester. (Due by about February 15 for Spring graduation or about October 15 for Fall graduation.)
- Maintain good standing
 - Register for at least 6 graduate (or 400-level) credits per year (or file a leave of absence)
 - Maintain a GPA above 3.0 (with a minimum grade of 3.0 in 400-level classes)
- **Complete thesis** (must be approved by Advisory Committee, Program Head, Dean, and Graduate Dean)
 - Pass required comprehensive exams and thesis defense
 - Complete a minimum of 30 credits
 - complete at least 21 600-level credits including at least 6 and no more than 12 thesis (699) credits
 - 100-, 200-, 300-, and 500-level credits cannot be applied towards MS degree requirements
 - Complete degree requirements within 7-year time limit

Fisheries MS Degree Requirements

- Complete prerequisite/deficiency courses: calculus, elementary statistics, ichthyology or invertebrate zoology
- Complete UAF general and MS degree requirements
- Complete core course requirements
 - Regression and analysis of variance (STAT 401)
 - Quantitative methods in fisheries (FISH 421 or FISH 601 or FISH 621 or FISH 622)
 - Graduate seminars (e.g., FISH 692)—at least 2 credits
- Complete thesis
 - Thesis committee must include at least three members; the chair and at least one other committee member must hold Academic Rank, Special Academic Rank, or Emeritus status in the Fisheries Division. The committee chair must be tenured or eligible for tenure. Faculty from other universities and other professionals who are not employed by UAF may serve as either core or additional committee members on master's advisory committees, upon expressed approval by the Fisheries Division faculty.
 - pass thesis defense and oral exam
 - post-defense thesis must be submitted to Fisheries Division Academic Program Director not later than March 3 for Spring graduation or June 27 for Summer graduation or November 5 for Fall graduation.

Marine Biology MS Degree Requirements

- Complete UAF general and MS degree requirements
- Complete core course requirements
 - Marine Biology (MSL 610)
 - Physiology of Marine Organisms (MSL 615)
 - Biological Oceanography (MSL 650)
 - Marine Biology field course (MSL 651)
 - MSL seminars (MSL 692)—at least 3 credits
- Complete thesis
 - The advisory committee should include at least two SFOS faculty, and a SFOS faculty member should chair. The third member may be either SFOS or other UAF faculty. Emeritus faculty is considered the same as regular, tenure-track faculty, as long as they remain active in their research. Research faculty may chair or serve as committee members, as may adjunct faculty with at least 1/2-time appointments in SFOS. Affiliate faculty or faculty from outside UAF or nonfaculty (e.g. agency personnel) may serve as additional members beyond the 3 UAF faculty. Affiliate faculty cannot normally serve as a chair, but occasional exceptions are made with GPMSL faculty approval. All 3 required UAF committee members must have at least a M.S., although additional members with extensive, appropriate experience may not.
 - pass thesis defense and oral exam
 - post-defense thesis must be submitted to GPMSL Chair not later than March 3 for Spring graduation or June 27 for Summer graduation or November 5 for Fall graduation.

Oceanography MS Degree Requirements

- Complete UAF general and MS degree requirements
- Complete core course requirements
 - Physical Oceanography (MSL 620)
 - Geological Oceanography (MSL 630)
 - Biological Oceanography (MSL 650)
 - Chemical Oceanography (MSL 660)
 - MSL seminars (MSL 692)—at least 3 credits
- Complete concentration requirements: *Biological*, *Chemical*, *Geological*, and *Physical Oceanography* do not have unique concentration requirements; *Fisheries Oceanography* requires MSL 640.
- Pass comprehensive exam
- Complete thesis
 - The advisory committee should include at least two SFOS faculty, and a SFOS faculty member should chair. The third member may be either SFOS or other UAF faculty. Emeritus faculty is considered the same as regular, tenure-track faculty, as long as they remain active in their research. Research faculty may chair or serve as committee members, as may adjunct faculty with at least 1/2-time appointments in SFOS. Affiliate faculty or faculty from outside UAF or nonfaculty (e.g. agency personnel) may serve as additional members beyond the 3 UAF faculty. Affiliate faculty cannot normally serve as a chair, but occasional exceptions are made with GPMSL faculty approval. All 3 required UAF committee members must have at least a M.S., although additional members with extensive, appropriate experience may not.
 - pass thesis defense and oral exam
 - post-defense thesis must be submitted to GPMSL Chair not later than March 3 for Spring graduation or June 27 for Summer graduation or November 5 for Fall graduation.

SELMR Program Requirements

- Complete UAF and degree program (Fisheries or Marine Biology or Oceanography) MS degree requirements
- Complete core course requirements
 - FISH 693—Social, Oceanographic, and Ecological Perspectives in Marine Ecosystems (August 9-27, 2010 in Juneau.)
 - FISH 411—Human Dimensions of Environmental Systems **or** CCS 612—Traditional Ecological Knowledge **or** PADM 635—Natural Resource Policy
 - FISH 640—Management of Renewable Marine Resources **or** FISH 694—Bioeconomic Modeling and Fisheries Management
 - FISH 421—Fisheries Population Dynamics **or** FISH 622—Quantitative Fish Population Dynamics II (FISH 621—Estimation of Fish Abundance is prerequisite)
 - MSL 652—Marine Ecosystems or MSL 640—Fisheries Oceanography or MSL 610—Marine Biology
 - FISH 692—Innovative Approaches to Marine Ecosystems (2 semesters)
- Engage with MESAS/SELMR faculty and students
 - attend the monthly MESAS/SELMR brown-bag professional development seminars
 - attend and presenting your research in the annual AFS student chapter symposium
 - attend and participate in the annual MESAS/SELMR retreat and forum;
- Complete a research or stewardship internship;
- Complete thesis
 - In addition to degree program specific requirements for the composition of graduate advisory committees, it is expected that each SELMR thesis advisory committee will include one suitably qualified outside (government, NGO, or other) professional.
 - The thesis project should reflect a multidisciplinary perspective.

Course Schedule (tentative)

	cr	Su10	F10	Sp11	Su11	F11	Sp12	Su12	F12	Sp13
FISH 411 Human Dimensions of Environmental Systems	3		X			X			X	
FISH 421 Fisheries Population Dynamics	4					X				
FISH 621 Estimation of Fish Abundance	3		X						X	
FISH 622 Population Dynamics II	3			X						X
FISH 640 Management of Renewable Marine Resources	3						X			
FISH 692 Innovative Approaches to Marine Ecosystems	1			X			X			X
FISH 693 Social, Oceanographic, & Ecological Perspectives in Marine Ecosystems	3	X			X			X		
FISH 694 Bioeconomic Modeling and Fishery Management	3			X			X			X
MSL 610 Marine Biology	3			X			X			X
MSL 615 Physiology of Marine Organisms	3									
MSL 620 Physical Oceanography	4		X			X			X	
MSL 630 Geological Oceanography	3			X			X			X
MSL 640 Fisheries Oceanography	4					X				
MSL 650 Biological Oceanography	3		X			X			X	
MSL 651 Marine Biology Field Course	4				X					
MSL 652 Marine Ecosystems	3		X			X			X	
MSL 660 Chemical Oceanography	3			X			X			X
MSL 692 Seminar	1		X	X		X	X		X	X
STAT 401 Regression and Analysis of Variance	4		X			X			X	
CCS 612 Traditional Ecological Knowledge	3			X			X			X

Suggested Electives

	cr	Su10	F10	Sp11	Su11	F11	Sp12	Su12	F12	Sp13
FISH 427 Ichthyology	4			X			X			X
FISH 630 Natural Resource Modeling	2		X							X
FISH 633 Pacific Salmon Life Histories	3		X						X	
FISH 693 Field Course in Salmon Management	4				X					
FISH 693 Political Ecology of the Oceans	3			X						
FISH 693 North Pacific Fishery Management Council: A Case Study	2	X			X			X		
FISH 694 Law and Fisheries	2		X						X	
FISH 694 Quantitative Analysis of Marine Policy Decisions	3					X				
STAT 611 Time Series	3					X				