

Professional Science Master's in Fisheries and Wildlife Administration (PSMFWA) Project Requirements (FW 510 Professional Internship, 5-10 credits)

An essential component of Professional Science Master's is an internship or cooperative educational experience with a natural resource agency, business, non-governmental organization, or research institute that is directly related to your area of study. This should be an integrative learning experience, engaging in real world work situations that involve technical problems, diverse professional interactions, teamwork, communication skills, and decision-making. The internship experience and project occurs in lieu of a Master of Science research project and thesis, and is, therefore, an extremely important part of a PSM student's graduate program. The experience should be new and add to your current set of skills. Previous work experience cannot substitute for the internship experience, and your project should be a problem-solving exercise that is beyond the scope of your current work.

The purpose of the PSMFWA Internship is to provide you with experience working within a natural resource organization (most likely a government agency, private firm or non-governmental organization). The internship component should be designed to let you participate in the planning meetings and day-to-day operations of the organization, thereby allowing you to observe its structure and functioning. The final project will be designed by you with assistance from your major professor and your internship mentor at the internship site, and your Project Plan should also be approved by your graduate committee and the PSM Directors. The project write-up and outreach product that you complete during or after your internship will be your PSMFWA Project, which you will present and defend as part of your degree requirements.

All students must participate in an internship experience designed to last three months or more fulltime, about 500 hours. Many students will already be employees of an organization, and their internships may be a special assignment (e.g., develop a management or recovery plan, develop and lead a public process, etc.) or temporary training in another position or division within their organization. In some cases, it may also be possible for a student to be assigned temporarily to another organization. The three month minimum does not require residency away from home, but is a guideline for the time commitment expected for the experience and development of the required products for degree defense. Part-time involvement in an internship is acceptable as long as the total effort is about 500 hours, including project write-up and development of an outreach product (see below).

Your major professor and the local mentor will work with you to develop an appropriate internship experience and project, with advice as needed from your graduate committee and the PSMFWA Director. There are several required project components for you to complete and for your major professor to review. These include:

1. Internship and Project Plan (approved by major professor, committee, PSM Program Directors and local mentor)
2. Internship or Project Journal
3. Project Paper (literature review, white paper, or similar)
4. Outreach Product
5. Final Internship Evaluation

Each of these components is described in more detail below. All will be reviewed by your major professor and graduate committee and will form part of basis of your final oral examination.

Learner Outcomes

Students who complete their Internship Project through PSMFWA will:

1. Identify the science, management, and human dimensions components of a problem or issue in natural resource management, from the perspective of an agency, non-governmental organization, or private firm.
2. Experience on-the-job problem solving and group interactions, and document those interactions and project progress in a weekly journal.
3. Understand relationships and organization within an agency or business involved with natural resource management or research.
4. Demonstrate good writing skills through proper organization and referencing of a project paper.
5. Identify critical stakeholders and design an outreach product that conveys biological or social science information related to policy to the public in a productive way.
6. Critically evaluate how the agency, organization, or firm is operating and accomplishing its tasks, and provide useful feedback to the internship mentor.

Course Descriptions

PSMFWA students must register for a minimum of 5 internship or credits, FW 510 Professional Internship. In rare circumstances, FW 506 Projects may be substituted¹.

FW 510 Professional Internship (variable credit). Pass/No Pass. Students must complete their Internship Plan and an Internship Journal to receive a grade. Course is supervised by the PSMFWA Director, who will consult your major professor about your experience and degree progress before issuing a Pass.

FW 506 Projects (variable credit, usually 3 credits per term). Pass/No Pass, requires completion of a product to receive a grade. This is the same course taken by students in the Fisheries Management or Wildlife Management Certificate Programs. Instructor for the course provides feedback on the project plan or outline and the final product. PSMFWA students may complete all or part of their final products for credit in this course.

¹ The products for the PSMFWA degree are the same, regardless of which course you register for. In most cases, students should register for FW 510. If your home state restricts online internship experience and credits, you may need to register for FW 506 and design an internship that is not “work experience”; students and their advisors should work with the PSM Internship Coordinator or the FW Graduate Programs Coordinator to determine if this step is needed.

FW 506 or 510 can also be used as “blanket” credits for students who need to maintain a minimum number of credits for scholarship or financial aid purposes.

Internship and project credits may be spread over multiple terms. Incompletes are available upon request to the respective course supervisor. Once your Internship and products are complete and approved by your major professor and committee, and your Program of Study is complete, you should be ready to defend and receive your degree.

Finding an Internship and Mentor

Your PSMFWA Internship should not be fulfilled with a project that is part of your regular job, nor based on previous work experience. However, we understand the need for flexibility, given that many PSMFWA students are currently working professionals. There are 3 basic options:

- 1) Volunteer or work at an agency, private firm, or NGO that is not your normal employer,
- 2) Get a duty transfer to a different department/unit/division in your current agency, or
- 3) Work with your current agency supervisor to develop a project that is substantially different from your “normal” duties.

The PSMFWA Director and our Internship Coordinator can work with you, your major professor, and your employer to identify an appropriate Internship opportunity. If you register for FW 506 Projects, you still need to identify a local organization and mentor to work with you and approve your project. A Guidelines for Internship and Projects Mentors will be available on our website in early 2014.

Your Internship Mentor can be the project leader, your employer, or other person in your company, institution or agency that can provide you with advice and feedback on your experience and final products. This mentor can serve on your graduate committee if he or she meets certain qualifications set by OSU’s Graduate School; please contact the PSMFWA Director for more details on this.

PSMFWA Products

Project Plan

The PSMFWA Project Plan is your proposal for the project, which you will present to your advisor, your committee, and your internship mentor. Typically, this Plan will be 10-15 pages including references and graphics. It should paint a clear picture of your project and include the following:

- Title Page
- Problem Statement
- Background information
- Project outline, with
 - goals and objectives
 - methods
 - expected results
 - product descriptions
- Opportunities for Observing Agency Operations

- Timeline with expected completion dates for product milestones

Once the Plan is finalized and approved by your advisor and committee, a copy should be sent to the PSMFWA Director (Selina Heppell) and the PSM Director (interim director Barbara Taylor). These program directors will be happy to review drafts of the Plan as necessary.

Opportunities for Observing Agency Operations includes any planning meetings, program reviews, or working group meetings that you may be able to attend; your candid observations of these meetings should be recorded in your Journal.

Your major professor should be your first point of contact if you need to make changes to your Project Plan. Some flexibility is allowed, and some changes are to be expected. You should discuss these changes with your professor and internship mentor, and if the changes are substantial, your committee and the PSM Director.

Project Journal

Throughout the internship or project experience, you are required to maintain a journal. This should include a regular recounting of activities related to the project, including meetings and planning exercises. Problems encountered and how they were resolved should be recorded in this journal. The journal is designed to facilitate development of effective work habits, but also professional development through your observations of efficiency and effectiveness at the organization. As such, it should also include notes on agency organizational structure, project planning and execution, and interactions with the public, along with your creative suggestions for improvements. Your journal should end with a section on lessons learned and how your experience will contribute to your professional development.

If a student is required to sign a disclosure agreement with the organization where they are doing the internship, their major professor and graduate committee should sign the same agreement so that the journal can be appropriately reviewed at the end of the internship. Personal or confidential information should not be included in the journal, as it will be part of your final PSMFWA Project (stored in Scholar Archives and, hence, available to the public). The journal should also be made available to the local project mentor.

Project Paper and Outreach Product

The Project Paper and Outreach Product are required in lieu of a thesis for PSMFWA. The written product would typically be in the form of a “white paper” for a science and/or management audience, and include relevant scientific and policy information pertaining to the “problem” identified as the subject of your internship project. Proper citations and use of scientific evidence are expected for this paper, which will be reviewed by your major professor and committee as well as the internship mentor.

You will also prepare an outreach product for a targeted audience, such as a stakeholder group affected by the issue under study. Examples of outreach products include brochures and flyers, public presentations or workshops, websites, or short videos. The audience and purpose of the outreach product should be clearly identified in the Internship Plan.

Final Internship Evaluation

At the conclusion of the internship or project, the on-site mentor will be expected to provide your major professor with a written evaluation of your performance. The student will also evaluate the experience and provide feedback to the internship mentor based on observations recorded in the Internship Journal. The internship products form the core of your defense materials, to be reviewed by his or her graduate committee.

Product Draft Reviews and Feedback

Drafts of internship products should be completed and reviewed by your major professor according to an agreed-upon schedule. Ample time for review and revision must be scheduled; a good way to do this is to create a timeline that works backwards from an anticipated defense date. Final products (project write-up and outreach) must be sent to your committee at least 2 weeks prior to the defense date.

Final Defense

All graduate students earning degrees at Oregon State University must go through a defense of their work. Once your major professor agrees that your final products are ready for defense, you should notify your committee, The FW Graduate Programs Coordinator, the PSMFWA Director, the PSM Director, and the Graduate School of intent to defend and graduate. Any changes to your Program of Study form should be submitted to the department and the Graduate School at least 2 weeks prior to the scheduled defense date. Because PSMs are non-thesis degrees, a representative of the Graduate School does NOT need to be present at the defense. The defense can be conducted through remote access if all committee members can hear the student and see the presentation (Skype, video conference, meeting connect software, or similar).

For PSMFWA, the defense should include a 45-50 minute oral presentation by the student that describes the internship, the project/paper, and the outreach product, as well as a short description of the internship experience. This presentation is public and any member of the OSU community or guests of the student is welcome to attend. It should be held in a conference room large enough to host a small audience, and advertised to the department through the Graduate Programs Coordinator. It will be followed by a closed session where committee members can ask the student questions about his or her project, course materials, and general knowledge about the field of Fisheries and Wildlife science and management. An outcomes assessment questionnaire will be distributed to all committee members to complete after the defense; this is to keep a record of how well our program is meeting its objectives.

Edits to the final internship products should be made prior to the start of the next term to avoid tuition charges for the subsequent term, following the Continuous Enrollment Policy of the Graduate School.

After the final products are submitted, students and advisors will be asked to complete an exit survey about the program and what they gained from it. The PSMFWA Director will give final approval of the PSMFWA products and send a request to the Graduate School to confer the degree.

Resources for Students and Advisors

All PSMFWA students have full access to the OSU library while they are actively enrolled. There are a number of online resources that will be valuable for background information, literature review, and ideas for outreach products.

The FW Graduate Programs Coordinator is your liaison to the Graduate School and can assist with policies and university requirements. The Graduate Programs Coordinator can be reached at fw.gradadvising@oregonstate.edu

Dr. Bruce Dugger, PSMFWA Program Director, is available for questions, advice, and ideas on your project. His office is in Nash Hall 166. bruce.dugger@oregonstate.edu

Checklist of Products and Reviewers

Item	Reviewed by	Complete when?
Program of Study (coursework)	Major professor, graduate committee, Graduate School	By end of second term
Internship and Project Plan	Major professor, graduate committee, local mentor, and PSM Program Directors	Prior to starting internship
Draft Project Paper	Major Professor (draft 1), graduate committee (draft 2 or 3)	Prior to scheduling defense
Internship or Project Journal	Major professor, local organization mentor	By defense date
Project Paper – defense draft	Major professor, graduate committee	By defense date
Outreach Product	Major professor, graduate committee, PSMFWA Director	By defense date
Final Project Paper	Major professor, graduate committee, PSMFWA Director	By two weeks after defense
Final Internship and Program Evaluations	PSMFWA Director	By two weeks after defense