PSM Advising

As a PSM advisor, your contact and relationship with your professional science students is an important component in their overall experience at the School of Freshwater Sciences. This document is meant to help guide you in this role.

New Student Orientation

At all New Student Orientation meetings, the Academics office will facilitate student-advisor introductions. During the meetings, students will be encouraged to reach out to their advisors and vice-versa. After the formal portion of the orientation, we will provide time for small group meetings with your new students.

New Student Advisor Meetings

Please work to set-up the initial meeting with your PSM student(s) during (or before) their first semester at SFS. In addition to helping the student develop an academic plan of study early on, this first meeting also solidifies the relationship between you and the student.

Regular Meetings

After the initial meeting, students are required to meet with their advisors each semester to discuss 1) expectations of the program, 2) Plan of Study form, 3) electives, 4) professional skills courses, 5) possible internships or group project experiences. Involving long-term goals in this process is helpful, and if students are unsure of career goals, please encourage them to set-up a meeting with Lindsay Frost (lgfrost@uwm.edu). Students can coordinate follow-up meetings with you as needed (these can be very brief meetings).

Internship/Experiential Learning Requirement

All PSM students are required to complete an internship or other experiential learning project to fulfill degree requirements. The Academics Office will host an “Internship Requirement” meeting at the beginning of each semester, but here are the basic requirements; during your first meeting with your PSM student, please briefly explain the following components:

- Students are responsible for securing their own internships.
- The Academics Office will work to provide several internship and project options, but they WILL NOT match students with internships. Making connections, searching for internships, and going through multiple application and interview processes will help students in preparing for future job searches.
• Internships must be formally proposed by the student and accepted by their faculty advisor and by Professor Carvan before the student can start their project. Forms and guidelines for students can be found on the SFS website and on the bulletin boards in the Academics hallway.

• As part of the internship requirement, students must enroll in Frshwtr 980 for a TOTAL of 3 credits, although they need not take all 3 credits at the same time. All students must be enrolled in at least 1 credit in the semester they plan to graduate. Depending on their expected graduation and expected completion of their internship project, students can plan this credit load accordingly (similar to how Thesis and PhD students can use a research credit in the semester they graduate when not taking other courses).

• All PSM students have access to the Freshwater 980 D2L site at all times, even if they are not enrolled in the course. All internship documents should be uploaded to this site by the student. This is required for graduation.

Outside Mentors

In addition to academic advising, students can also make use of mentoring from an outside water professional. This is not mandatory but is encouraged. If a student has an outside mentor, please consider meeting as a group with the student and their mentor at least annually. The purpose of this triangular relationship is to provide employer-based input into academic planning.

Any students (PSM, Thesis, PhD) interested in having an outside mentor can contact Lindsay for more information.

Questions can be directed to:
Lindsay Frost
Freshwater Office 1033
lgfrost@uwm.edu
<table>
<thead>
<tr>
<th>Name</th>
<th>First Name</th>
<th>Last Name</th>
<th>Degree</th>
<th>Semester</th>
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<td>Smith</td>
<td>MS Prof</td>
<td>Fall 2014</td>
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# SFS MS PROFESSIONAL SCIENCE TRACK PLAN OF STUDY
(admit term spring 2014 and beyond)

Complete this form annually, with your advisor, and submit one copy to your advisor and one copy to the academic administrator.

Student Name: 

Major Advisor: 

Admit Term: 

## Required Coursework (21 credits)

### Science Core: (12 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Semester Taken</th>
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<tr>
<td>Frshwtr 502</td>
<td>Aquatic Ecosystem Dynamics</td>
<td>3</td>
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<tr>
<td>Frshwtr 504</td>
<td>Quantitative Freshwater Analysis</td>
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And two of the following:

<table>
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<th>Semester Taken</th>
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<tr>
<td>Frshwtr 508</td>
<td>Freshwater Engineering</td>
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<tr>
<td>Frshwtr 510</td>
<td>Economics, Policy, &amp; Mgmt of Water</td>
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### Professional Core: (choose 9 credits)

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<th>SemesterTaken</th>
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<td>BusMgt 706</td>
<td>Managing in Dynamic Environment</td>
<td>3</td>
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<tr>
<td>BusMgt 715</td>
<td>Leadership, Team Building, &amp; Effective Mgmt</td>
<td>3</td>
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<tr>
<td>BusMgt 723</td>
<td>Managing &amp; Negotiating Across Cultures</td>
<td>3</td>
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<tr>
<td>Frshwtr 461</td>
<td>Politics and Policy of Sustainability</td>
<td>3</td>
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<tr>
<td>Frshwtr 650</td>
<td>Coupling Science &amp; Business Ingenuity</td>
<td>3</td>
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<tr>
<td>Frshwtr 650</td>
<td>Creative Communication for Scientists</td>
<td>3</td>
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<td>Philos 337</td>
<td>Environmental Ethics</td>
<td>3</td>
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<td>PubAdm 620</td>
<td>Budgeting &amp; Finance in the Public Sector</td>
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### Others as approved:

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<th>Credits</th>
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## Electives (12 credits)

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## Internship (3 credits)

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<tr>
<td>Frshwtr 980</td>
<td>Graduate Internship</td>
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Total: 36

Advisor Signature: 

Date: 

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The SFS Mentoring Program pairs water professionals (mentors) with graduate students (mentees) and is supported by the SFS Career Development Manager. The Mentoring Program:

- Increases awareness of freshwater sciences workforce needs among students
- Facilitates in the identification of a student’s professional goals
- Helps students achieve their professional goals
- Promotes interaction between SFS programs and leaders in the freshwater industry
- Provides opportunities for students to find the best fit jobs upon graduation

**Is the Mentoring Program right for me? Are you:**

- Enthusiastic about the freshwater industry and committed to working in the water field?
- Interested in learning about best career strategies?
- Open to suggestions and discussions with a water leader?
- Willing to follow through with ideas provided by mentors?

**If yes, consider being a mentee! You will interact closely with and get advice from a water professional who can:**

- Give you details on positions at different companies, skills required, what a typical workday is like, and what it takes to succeed
- Discuss career options and help you focus your career path
- Share insights about what’s happening in the field—crucial information that can only come from leaders in the field

**Student Responsibilities**

- Identify and share your skills, characteristics, and professional and undergraduate experiences—self-reflection is key!
- Discuss relevant projects, papers, and classes
- Evaluate your short-term and long-term career goals
- Develop and implement your plan for achieving career goals
- Interact regularly and in a respectful manner with your mentor

**Students should contact Lindsay Frost at lgfrost@uwm.edu if interested in the mentoring program, or for more information.**
Masters of Science Degree – Professional Science Track

Internship Guidelines

An essential component of the School of Freshwater Sciences Professional Science MS track is an internship or group project with a water-related business, industry, government agency, or research institute that is directly related to your area of study. Previous work experience does not exclude you from this requirement. Your internship experience occurs in lieu of a master's research project and thesis. Your internship should be an integrative learning experience, engaging you in real world work situations involving technical problems, teamwork, communication skills, and decision-making. The experience should be new and add to your current set of skills.

We encourage you to explore internship opportunities as soon as you've been accepted into the MS program. Your major advisor, internship coordinator, and other professional contacts can all facilitate your efforts, but you are responsible for securing your own internship. It is generally not acceptable to do your internship with the same company you work for or have worked for in the past, unless you can clearly demonstrate what new skills you will acquire through the experience. Similarly, it is generally not acceptable that you do your internship on-campus, unless you are purposefully learning new skills that cannot be obtained elsewhere.

It is strongly suggested that students complete two semesters of coursework (15-24 credits) before starting their internship.

The following documents must be reviewed and receive approval at least three weeks prior to the anticipated start date of the internship:

- Internship cover sheet, approved by site supervisor, faculty supervisor and Professor Michael Carvan
- Internship proposal
- Resume

Proposals will be reviewed by your advisors and the Frshwtr 980 instructor Michael Carvan, and will be approved based on how the internship experience meets program goals, the feasibility of the proposed plan, and the qualifications of the internship supervisor.
The following items must be included in your Written Internship Proposal (3-5 pages):

1. **Internship Site**: include a brief summary describing the company, complete work address, site supervisor phone and e-mail contact details, and any compensation provided.

2. **Timeline**: list specific beginning and ending dates, number of work hours/week, and total number of hours you will spend on this internship. Minimum length of time is 3 months full time/480 hours or equivalent.

3. **Internship Position Title**

4. **Job Description**: describe in detail the position including your key responsibilities and your role within the company/project

5. **Learning Outcomes**: explain what new skills and/or knowledge you will be acquiring through this internship, and how this experience will move you forward along your career path.

6. **Evaluation Criteria**: include a detailed assessment plan for how your site supervisor will be evaluating you. This can be an existing template already in use at the internship site, or it can be a new evaluation method for this internship.

**REQUIREMENTS FOR COMPLETION**

The following requirements must be met to receive full credit for the internship:

1. Complete coversheet and proposal and get **approval signatures** from site supervisor, faculty advisor, and Dr. Michael Carvan

2. Upload approved coversheet, proposal, and your resume to **980 D2L site (all PSM students have access to this site at ALL times)**

3. Enroll in **FRSHWTR 980** (3 credits total, 1-3 credits can be taken at a time depending on the timing of your internship experience and your planned graduation date. If you have questions, please ask your advisor or Lindsay)

4. **Mid-term and final evaluations** submitted by site supervisor

5. **Mid-term student self-evaluation**, uploaded to D2L for grading

6. Final written **internship report** submitted to your advisor

7. **Oral presentation** given to the public and SFS community

*For further information contact:*
Lindsay Frost
UW-Milwaukee School of Freshwater Sciences
600 E Greenfield Ave
Milwaukee, WI 53204
lgfrost@uwm.edu
Masters of Science Degree – Professional Science Track
Internship Proposal Cover Sheet

Student Name:  
Student ID:  

Phone Number:  
Email:  

Date Submitted:  

Semester:  
[ ] Fall  
[ ] Winter  
[ ] Spring  
[ ] Summer  

Academic Year:  

Internship Start Date:  
Internship End Date:  

Position Title:  

Estimate, by types of activities, the percentage of science content as well as professional skills content involved in your internship. Include the activities you will be engaged in. E.g., research, storm water management design, monitoring water quality or fish populations, compliance issues, communications, business skills.

Science Content %  
Professional Skills Content %

List activities:  
List activities:  

Organization:  

Address:  
(complete address information required)  

Supervisor Phone:  

Site Supervisor:  
Supervisor Email:  
1. **Prepare the following documents:**
   - Internship Proposal
   - Internship Proposal Cover Sheet
   - Resume

2. **Internship Approval by Site Supervisor**

   I have read the internship guidelines and attached proposal and agree to act as field supervisor for this internship.

   Site Supervisor's Signature: _____________________________________________________

3. **SFS Approvals:**

   I have read the attached proposal and approve of the internship as described.

   Faculty Advisor Signature________________________________________________________

   Frshwtr 980 Course Instructor Signature ____________________________________________

4. **Enroll in 980 and upload all documents to the Freshwater 980 D2L site** (you have access to this site even if you are not yet enrolled in the 980 course)

For more information contact:
Lindsay Frost
Career Development Manager
Freshwater Office 1033
lgfrost@uwm.edu
Masters of Science Degree – Professional Science Track

Group Project Guidelines

An essential component of the School of Freshwater Sciences Professional MS track is an internship or group project with a water-related business, industry, government agency, or research institute that is directly related to your area of study. Previous work experience does not exclude you from this requirement. The group project occurs in lieu of a master’s research project and should provide students with training and experience in performing professional-level work that involves managing group dynamics and applying technical expertise to solve complex, multidisciplinary water related problems. Group Projects also give businesses, government agencies, NGOs, and individuals the opportunity to have a group of students tackle a water problem and make specific and meaningful recommendations.

Project proposals should have a clear, problem-based objective and be multidisciplinary in nature including both science and management components. Projects should be manageable for a group of 3-5 students to address in 9 months’ time with the guidance of a group project faculty advisor and client sponsor. If a proposed project requires financial support, the client will need to include a commitment to provide funding in the written proposal or as an attachment to the written proposal.

We encourage you to explore group project opportunities as soon as you've been accepted into the MS program. All interested in doing a group project are encouraged to contact Lindsay Frost (lgfrost@uwm.edu). She can offer assistance in proposal development, and make suggestions for faculty advisors and potential client sponsors. Some clients may have already proposed group projects for the school, so please contact Lindsay first to discuss existing options, or see postings on the D2L SFS Student Forum (postings are listed under “Content”).

It is strongly suggested that students complete two semesters of coursework (15-24 credits) before starting their group project.

The following documents must be reviewed and receive approval at least three weeks prior to the anticipated start date of the group project:

- Group project cover sheet (each student must complete this document)
- Resume (each student)
- Group Project proposal (one proposal should be submitted for the group)

Proposals will be reviewed by the group project faculty advisor, students’ individual advisors, and the Frshwtr 980 instructor Michael Carvan. Proposals will be approved based on how the project experience meets program goals, the feasibility of the proposed plan, and the qualifications of the client.
Please submit one (1) proposal for the group. The following items must be included in your Written Group Project Proposal (3-5 pages):

1. **Group project site**: include a brief summary describing the company, complete work address, client phone and e-mail contact details, and any compensation and/or funding provided.

2. **Timeline**: list specific beginning and ending dates, number of work hours/week, and total number of hours you will spend on this group project. Minimum length of time is 9 months, with each student spending an average of 1 day per week on the project. Also include regular meetings with group project faculty advisor in the timeline.

3. **Group Project Title**: include with the title a 1-2 sentence description of each group member’s primary responsibilities.

4. **Project Description**: describe in detail the overall project including a description of the opportunity, project rationale, objectives, methodology, and anticipated outcomes.

5. **Learning Outcomes**: explain what new skills and/or knowledge you will be acquiring through this project, and how this experience will move you forward along your career path.

6. **Evaluation Criteria**: include how the client will be evaluating your group as a whole, and how the client will evaluate group member performance individually.

**REQUIREMENTS FOR COMPLETION**

The following requirements must be met to receive full credit for the internship:

1. Complete coversheet and proposal and get **approval signatures** from site supervisor, faculty advisor, and Dr. Michael Carvan

2. Upload approved coversheet, proposal, and your resume to **980 D2L site** (all **PSM students have access to this site at ALL times**)

3. Enroll in **FRSHWTR 980** (3 credits total, 1-3 credits can be taken at a time depending on the timing of your internship experience and your planned graduation date. If you have questions, please ask your advisor or Lindsay)

4. **Mid-term and final evaluations** submitted by site supervisor

5. **Mid-term student self-evaluation**, uploaded to D2L for grading

6. **Final written internship report** submitted to your advisor

7. **Oral presentation** given to the public and SFS community

*For further information contact:*
Lindsay Frost
Career Development Manager
Freshwater Office 1033
lgfrost@uwm.edu
Masters of Science Degree – Professional Science Track
Group Project Proposal Cover Sheet

Student Name: ____________________________  Student ID: ____________________________
Phone Number: ____________________________  Email: ____________________________
Date Submitted: ____________________________  Faculty Advisor: ____________________________

Semester:  
[] Fall  
[] Winter  
[] Spring  
[] Summer  

Academic Year: ____________________________

Project Start Date: ____________________________  Project End Date: ____________________________

Project Title: ____________________________

Estimate, by types of activities, the percentage of science content as well as professional skills content involved in your group project. Include the activities you will be engaged in (e.g., research, storm water management design, monitoring water quality or fish populations, compliance issues, communications, business skills).

Science Content %  
List activities:

Professional Skills Content %  
List activities:

Host Agency: ____________________________

Address: ____________________________  Sponsor Phone: ____________________________
(complete address information required)

Client Sponsor: ____________________________  Sponsor Email: ____________________________
1. Each student prepares the following documents:
   - Group Project Proposal
   - Group Project Proposal Cover Sheet
   - Resume

2. Project Approval by Client Sponsor and Faculty Supervisor

   I have read the group project guidelines and attached proposal and agree to act as supervisor for this project. This includes being actively engaged and meeting regularly with the group to track progress and provide guidance.

   Client Signature: ____________________________________________________________

   Group Project Faculty Advisor Signature: __________________________________________

3. SFS Approvals:

   I have read the attached proposal and approve of the group project as described.

   Student’s Faculty Advisor Signature: __________________________________________

   Frshwtr 980 Course Instructor Signature: _________________________________________

4. Enroll in 980 and upload all documents to the Freshwater 980 D2L site (you have access to this site even if you are not yet enrolled in the 980 course)

For more information contact:
Lindsay Frost
Career Development Manager
Freshwater Office 1033
lgfrost@uwm.edu