



## Master of Natural Resources Student Requirements

Welcome to the Master of Natural Resources (MNR) degree program. This document contains information on the degree's requirements, how students can fulfill them, and timelines for completing the degree.

### I. MNR Course Information

#### MNR Core Requirements

Students in the MNR degree have course work focused around eight core requirements related to natural resource management. The purpose of this interdisciplinary curriculum is to give students enough exposure to these various disciplines to see the “big picture” of natural resource management, and to understand their interrelationship. These core requirements comprise 22 of the 33 credits required for the degree.

*Quantitative Methods (3-credits):* Students will gain an understanding of experimental design and sampling strategies appropriate to their discipline, and be able to identify high quality and meaningful studies.

*Ecological Foundations (3-credits):* Students will learn to understand ecological principles at individual, population, community, and ecosystem levels and apply these principles to management practices.

*Human Dimensions (3-credits):* Students will understand human linkages (such as land use, attitudes, historical context and cultural context) to natural resources and how these linkages affect management decisions.

*Spatial Information management (3-credits):* Students will gain a working knowledge of tools and techniques for representing and analyzing spatial data (e.g., Geographic Information Systems and Analysis).

*Policy (3-credits):* Students will understand differences between treaties, laws, regulations, and policies, and will gain a working knowledge of major federal laws that affect natural resource management.

*Economics (3-credits):* Students will be able to apply economic principles to natural resource management.

*Administration (3-credits):* Students will learn leadership and administrative skills relevant to management positions in resource agencies. Students will learn the natural resource management process and see how this is applied in different areas.

*Technical Writing (1-credit):* Students will learn how to write high quality technical documents.

### **Natural Resource Distance Learning Consortium**

Utah State University is a member of the Natural Resource Distance Learning Consortium (NRDLC) and MNR students are allowed to take up to 15 credits from other Universities within the NRDLC, which can be applied to their program of study. Please note, when taking a course from another University, you are required to register for the course through them, and pay the tuition rate of the University offering the course. Also, please be aware some Universities charge out-of-state tuition, and some charge a \$20-\$30 application fee for registration.

### **Program of Study**

Within the first or second semester students in the MNR degree will submit a completed Program of Study (POS) to the Student Advisor, Melanie Conrad. Melanie will review the POS and submit it to the School of Graduate Studies for signatures and their approval. Prior to submission of the POS, students will have a discussion with the Student Advisor and their committee members for recommendations and approval of their courses. Instructions for creating the POS can be found on the School of Graduate Studies website at: <http://rgs.usu.edu/graduateschool/forms>.

To change your POS after it has been submitted to the School of Graduate Studies contact Melanie Conrad who will submit the request for change to your committee members and the School of Graduate Studies.

## **II. MNR Student Graduate Committees**

### **Graduate Committee Members**

Student's committee members will consist of three faculty members in the Quinney College of Natural Resources (QCNR) or an approved adjunct professor in the QCNR or from another College or University. The Chair of your committee will be chosen based on your MNR goals and area of specialty.

### **Graduate Committee Meetings**

The purpose of the student's first committee meeting is to introduce them to their committee members, review their Program of Study, and begin discussions of possible capstone projects.

- MNR students' first committee meeting will be sometime within the first or second semester they begin the program. This meeting will be held either in-person, using video conference, or as a conference call.

- The student's second committee meeting will be held the semester before they intend to submit their capstone proposal. The purpose of this meeting is to discuss your capstone project, solidify ideas, and help you prepare for writing your capstone proposal. You will submit the initial draft of your proposal to Melanie Conrad by the first week of the semester. It will then be sent to the Chair of your committee for review, who will return it to you for editing.

### **III. Capstone Experience**

The Capstone Experience is a project derived from each student's disciplinary or career interests. The purpose of the project is to demonstrate a student's interdisciplinary knowledge of the MNR's core learning objectives, synthesize and apply them to a specific problem for management purposes. As part of the capstone project a student is required to write a professional report describing the problem analyzed, statistical methods used for the analysis, and any relevant findings. The report should demonstrate a student's competency in communicating ideas, and ability to present this information professionally. Depending upon the project, students are allowed to take 3 or 6 credits of NR 6600 Natural Resources Integrative Experience to be applied to their MNR degree program. Students will receive guidance and approval for their capstone projects, and the number of credits they will receive for the project, during their first or second committee meetings.

#### **Proposal**

Students are required to submit a proposal on the capstone project that includes:

- A cover page with the number of capstone credits the student intends to complete.
- The problem identified for analysis (i.e., Problem Statement).
- The proposed method(s) to be used for identifying both the issues involved.
- Potential management solutions; and, other information suitable to the student's project.

#### **3-credit Requirements**

Students are expected to submit a written report identifying a problem and the issues associated with it. Students must take an interdisciplinary approach to identify the problem, including: a description of the human dimension aspects of the problem; economic concerns; policies and laws affecting it; ecological features; the science used to quantify or qualify the problem; and, administrative considerations. The capstone report should show the relationship between these aspects of the problem and the current management approach.

Students doing a 3-credit capstone project are required to submit the initial report to Melanie Conrad by the first week of the semester they intend to graduate. The report will be sent to the student's Committee Chair within 48-hours of receipt, and the Chair will respond with edits within 2-weeks. Students are required to submit a revised report within 4-weeks of receipt.

## **6-credit Requirements**

Students receiving 6-credits for their capstone project will submit a written report identifying a problem and issues associated with it using an interdisciplinary approach. This will include: a description of the human dimension aspects of the problem; economic concerns; policies and laws affecting it; ecological features; the science used to quantify or qualify the problem; and, administrative considerations. In addition to identifying and analyzing the problem, students will identify solutions, methods of implementation, and expected results. Again, students are expected to approach the solutions from an interdisciplinary management perspective.

Students doing a 6-credit capstone project are expected to submit the initial report to Melanie Conrad by the first week of the semester they intend to graduate. The report will be sent to the student's Committee Chair within 48-hours of receipt, and the Chair will respond with edits within 2-weeks. Students are required to submit a revised report within 4-weeks of receipt.

## **IV. Graduation**

### **Notification of Intent to Graduate**

Students will notify Melanie Conrad of their intent to graduate one semester prior to the semester they intend to graduate. Melanie will work with the student to ensure: their POS is up-to-date; they are on track with submission of their capstone report; and, they are aware of the School of Graduate Studies required paperwork and deadlines for graduation.

### **Exit Interviews**

In the semester a student intends to graduate they will be sent a survey to complete asking about their experiences in the MNR degree program, and its strengths and weaknesses. This survey must be completed no later than the semester after a student has graduated.

## **V. Academic integrity**

Any student discovered to have cheated on an exam or to have plagiarized all or part of a written assignment will be subject to USU disciplinary proceedings. This includes potentially being expelled from the MNR degree program. To learn more about the USU Honor System, read Section V-3 of the USU Student Code at <http://www.usu.edu/student-services/studentcode/>.

Academic dishonesty is defined below as per the Student Code:

(A) Cheating includes intentionally: (1) using or attempting to use or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity; (2) depending upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (3) substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work; (4) acquiring tests or other academic material belonging to a faculty

member, staff member, or another student without express permission; (5) engaging in any form of research fraud.

(B) Falsification includes the intentional and unauthorized altering or inventing of any information or citation in an academic exercise or activity.

(C) Plagiarism includes knowingly representing by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgement. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

Proper behavior for students primarily includes refraining from actions that disrupt the learning environment. These actions include making unnecessary noise, bringing children or pets to lecture, lab, or review sessions, and failing to turn off cell phones.