

## **Ph.D Degree Proficiencies:**

A candidate for a Ph.D degree in Natural Resources is expected to demonstrate a broad based knowledge in Natural Resources Management and demonstrate a mastery of knowledge in one of the following sub-disciplines:

- Applied Ecology
- Conservation Biology
- Ecosystem Biology and Biogeochemistry
- Fishery and Aquatic Science
- Forest Science
- Quantitative Ecology
- Wildlife Science
- Community-based Natural Resources Management
- Human Dimensions of Natural Resource Management
- Policy and Institutional Analysis
- Program Development and Evaluation
- Risk Analysis and Management

Furthermore, the Ph.D candidate should demonstrate their ability to create new knowledge, as well as make an original and substantial contribution to the focal sub-discipline in a timely fashion.

## **Proficiencies**

1. Demonstrate broad-based knowledge in the discipline of Natural Resources Management.
2. Make an original and substantive research contribution to one of the twelve sub-disciplines represented by concentrations in the Field of Natural Resources
  - Think originally and independently to develop new knowledge, concepts and methods in this sub-discipline
  - Identify new research questions in this sub-discipline
3. Demonstrate advanced research skills
  - Be knowledgeable of historical developments in natural resource management and able to articulate, discuss, and synthesize concepts and evidence in a sub-discipline within this field.
  - Master observational, experimental and analytical methods required for executing research
  - Interpret and evaluate research findings
  - Demonstrate ability to communicate research findings, through oral presentation and written publications.
  - Demonstrate ability to write proposals for fellowships and research funding
4. Develop teaching and professional skills

- Be effective in educating others about natural resources management and affiliated sub-disciplines
- Be able to evaluate contributions made by others to natural resource management and affiliated sub-disciplines
- Develop collaborative skills
- Show commitment to professional development
- Be involved in departmental and university organizations
- Be involved in outreach activities

## **M.S. Degree Proficiencies:**

A candidate for a M.S. degree in Natural Resources is expected to demonstrate the ability to develop a mastery of knowledge in one of the following sub-disciplines:

- Applied Ecology
- Conservation Biology
- Ecosystem Biology and Biogeochemistry
- Fishery and Aquatic Science
- Forest Science
- Quantitative Ecology
- Wildlife Science
- Community-based Natural Resources Management
- Human Dimensions of Natural Resource Management
- Policy and Institutional Analysis
- Program Development and Evaluation
- Risk Analysis and Management

Furthermore, the M.S. candidate should demonstrate their developing ability to create new knowledge in a focal sub-discipline in a timely fashion.

## **Proficiencies**

1. Make a substantive research contribution to one of the sub-disciplines represented by concentrations in the Field of Natural Resources
2. Demonstrate research skills
  - Master some observational, experimental and analytical methods required for executing research
  - Interpret and evaluate research findings
  - Demonstrate ability to communicate research findings, through oral presentation and written publications.

### **M.P.S. Degree Proficiencies:**

A candidate for a M.P.S. degree in Natural Resources is expected to demonstrate knowledge in one of the following sub-disciplines:

- Applied Ecology
- Conservation Biology
- Ecosystem Biology and Biogeochemistry
- Fishery and Aquatic Science
- Forest Science
- Quantitative Ecology
- Wildlife Science
- Community-based Natural Resources Management
- Human Dimensions of Natural Resource Management
- Policy and Institutional Analysis
- Program Development and Evaluation
- Risk Analysis and Management

### **Proficiencies**

- Development of technical skills and capabilities through technical tools, subject matter, and laboratory and/or field studies to enhance student problem solving abilities
- Gaining a system perspective enabling students to think across disciplines (socioeconomic and biophysical)
- Better understanding of global and local perspectives and issues that impact society
- Acquisition of skills to monitor and evaluate projects
- Improved oral and written communication skills, including the ability to write project and funding proposals, and to effectively present project outputs using a variety of media
- Improved skills in critical research and assessment