



# Master of Natural Resources: Fire Ecology & Management Option

## Program Overview

The Master of Natural Resources (MNR) is an interdisciplinary course-based graduate program designed for current and aspiring professionals who wish to enhance their educational credentials for a career in natural resources. The Fire Ecology and Management Option provides depth to address wildfire management challenges facing society. Completing this option will help students advance their professional careers in wildland fire management, fuels management, restoration, and conservation. The degree also reinforces fundamentals in applied ecology, natural resources management, communications, and other career-advancing knowledge and skills.

### Fire Science & Management Core+

14 CREDITS

| COURSE    |                                   | CREDIT | OFFERED       | SEMESTER TAKEN |
|-----------|-----------------------------------|--------|---------------|----------------|
| FIRE 4451 | Fuels Inventory & Monitoring      | 3      | Spring        |                |
| FIRE 5326 | Fire Ecology                      | 3      | Fall / Summer |                |
| FIRE 5484 | Wildland Fire Policy              | 2      | Spring        |                |
| FIRE 5490 | Advanced Fire Behavior            | 3      | Fall          |                |
| FOR 5900  | Science Synthesis & Communication | 3      | Spring        |                |

### Tools & Technology+

4 CREDITS

| COURSE          |   | CREDIT | OFFERED         | SEMESTER TAKEN |
|-----------------|---|--------|-----------------|----------------|
| ENVS 5110       | Data Wizardry for Environmental Science | 3      | Summer          |                |
| FIRE 4407       | GIS Applications in Fire Ecology & Mgmt | 3      | Spring          |                |
| FIRE 5410*      | Air Quality, Pollution, & Smoke         | 3      | Summer          |                |
| GEOG 5250       | Graduate GIS Fundamentals               | 3      | Fall / Summer   |                |
| GEOG 5830       | Remote Sensing/GIS Image Analysis       | 3      | Spring          |                |
| GEOG 5930       | Geovisualization                        | 3      | Fall / Summer   |                |
| NRS 5800        | Restoration Ecology Practicum           | 2      | Summer          |                |
| NRS 5920        | Emerging Media Outreach in NR           | 3      | Summer          |                |
| REM 5070*       | Landscape & Habitat Dynamics            | 3      | Fall, odd years |                |
| REM 5200        | Adv Vegetation Monitoring & Measurement | 3      | Fall            |                |
| SOIL/ENVS 4500* | Environmental Hydrology                 | 3      | Spring          |                |
| WLF 5550        | Statistical Ecology                     | 3      | Spring          |                |

# Master of Natural Resources: Fire Ecology & Management

## Ecology & Management+

3 CREDITS

| COURSE          |  | CREDIT | OFFERED         | SEMESTER TAKEN |
|-----------------|--|--------|-----------------|----------------|
| FIRE 4100       | Fire Effects & Management                | 3      | Fall            |                |
| FISH 5260       | Climate Effects & Conservation Mgmt      | 2      | Fall, odd years |                |
| FISH 5400       | Wetland Restoration                      | 3      | Summer          |                |
| FOR 5010        | Seminar: Current Issues                  | 1      | Fall / Spring   |                |
| FOR 5130        | Mountain Ecology                         | 3      | Fall / Summer   |                |
| FOR 5160        | Hydrologic Effects of Forest Management  | 1      | Spring          |                |
| GEOG 5170       | Tree Rings & Environmental Change        | 3      | Fall            |                |
| REM 4290        | Landscape Ecology                        | 3      | Spring          |                |
| REM 4400        | Restoration Ecology                      | 3      | Spring          |                |
| REM 4590        | Rangeland Ecology                        | 3      | Fall            |                |
| REM 5070*       | Landscape & Habitat Dynamics             | 3      | Fall, odd years |                |
| SOIL/ENVS 4500* | Environmental Hydrology                  | 3      | Spring          |                |
| WLF 4400        | Conservation Biology                     | 3      | Fall / Summer   |                |
| WLF 5060        | Fish & Wildlife External Speaker Seminar | 1      | Spring / Summer |                |
| WLF 5110        | Wildland Habitat Ecology & Assessment    | 2      | Fall            |                |

## Policy, Planning, & Society+

6 CREDITS

| COURSE     |                                       | CREDIT | OFFERED       | SEMESTER TAKEN |
|------------|---------------------------------------|--------|---------------|----------------|
| ENVS 5230  | Planning Sustainable Places           | 3      | Fall          |                |
| ENVS 5480  | Drinking Water & Human Health         | 3      | Spring        |                |
| ENVS 5770  | Law, Ethics, & the Environment        | 3      | Spring        |                |
| FIRE 5410* | Air Quality, Pollution, & Smoke       | 3      | Summer        |                |
| FOR 5300   | Natural Resource Policy Development   | 3      | Fall          |                |
| FS 5360    | Principles of Sustainability          | 3      | Fall / Spring |                |
| GEOG 5130  | Global Climate Change                 | 3      | Fall          |                |
| GEOG 5350  | Climate Change Mitigation             | 3      | Fall          |                |
| NRS 5010   | Seminar                               | 1      | Fall / Spring |                |
| NRS 5070   | Moral Reasoning in Natural Resources  | 3      | Summer        |                |
| NRS 5550   | Human Dimensions of Natural Resources | 3      | Spring        |                |
| NRS 5740   | Environmental Politics & Policy       | 3      | Fall / Summer |                |
| NRS 5760   | Env Project Mgmt & Decision Making    | 2      | Spring        |                |
| NRS 5880   | NEPA in Policy & Practice             | 3      | Summer        |                |

## Additional Requirements+

4 CREDITS

| COURSE   |  | CREDIT | OFFERED | SEMESTER TAKEN |
|--|--|--------|---------|----------------|
| Electives or additional courses to add up to 28 plus   |  | 2      | Various |                |
| NR 5990 Non-Thesis Master's Research - Final Portfolio |  | 2      | All     |                |

- \*Courses listed in multiple bins only count toward one bin requirement.
- +See course catalog and department website for complete degree requirements and additional information.
- This academic plan is intended as a guideline only and does not replace academic advising.

- 30 credits minimum are required for a Master of Natural Resources.
- Minimum of 18 credits numbered 5000 or above are required to graduate.
- Up to 12 semester credits of graduate level work can be transferred into the program from other institutions.

