

**2022-23 Natural Resources Management Course Plan**

**College of Forest Resources & Environmental Science-Michigan Tech**

| Semester  | Course 1   | Course 2  | Course 3  | Course 4   | Course 5   | Course 6                                | Course 7  | Total Credits<br>(128 + 3 co-curriculars) |
|---|--|---|---|--|--|---|---|---|
| <b>First Year Fall</b>                                | FW2010 Vegetation of North America (4)                           | FW2051 Field Techniques (2)   | BL1400 Principles of Biology (3)  | BL1410 Principles of Biology Lab (1) Co-req: BL1400                          | MA1032 Precalculus (4) or MA1135 Calculus for Life Sciences(4) | UN1015 Composition (3)                  |   | 17  |
| <b>First Year Spring</b>                              | EC2001 Principles of Economics (3)                               | CH1150 University Chemistry Lecture (3) Coreq: MA1031 or MA1032 or MA1135 | CH1151 University Chemistry Lab (1) Coreq: CH1150                       | FW1050 Natural Resources Professional (2)                                    | HASS Gen Ed Requirement (3) See list                           | UN1025 Global Issues (3)                |   | 15  |
| <b>Second Year Fall</b>                               | FW2030 Natural Resource Conservation (2)                         | FW3020 Forest Ecology (3) Coreq: FW2010 and FW2051                        | FW3330 Soil Science (4) Prereq: CH1150 & CH1151                         | MA2720 Statistical Methods (4) Prereq: MA1030 or MA1032                      | Critical and Creative Thinking Gen Ed (3) Requirement See list | Co-curricular (1) See list              |   | 17  |
| <b>Second Year Spring</b>                             | FW3110 Natural Resource Policy (3)                               | FW3200 Biometrics and Data Analysis (4) Prereq: FW2051 and MA2720         | FW3540 Introduction to Geographic Information Systems (4) Coreq: MA2720 | Social Responsibility and Ethical Reasoning Gen Ed Requirement (3) See list  | HASS Gen Ed Requirement (3) See list                           |   |   | 17  |
| <b>Third Year Fall (Courses are taken as a block)</b> | FW3012 Survey of Silviculture (2) Prereq: FW2010 and FW2051      | FW3800 Insect Ecology (2)   | FW3170 Land Measurements/GPS (1) Co-req: FW3190 Prereq: FW3540          | FW3190 Multi-Resource Assessment (3) Prereq: FW2051, FW3020, FW3200 & MA2720 | FW3600 Wildlife Habitat (3)                                    | FW3840 Forest Health (3)                | FW3180 Geomorphology, Landscapes & Ecosystems (2) | 16  |
| <b>Third Year Spring</b>                              | FW3510 Outdoor Recreation and Tourism (3)                        | FW4710 Environmental Biogeochemistry (3)                                  | FW4380 Landscape Ecology and Planning (3)                               | Business Directed Elective (3) See list                                      | HASS Gen Ed Requirement (3) See list                           | Co-curricular (1) See list              |   | 16  |
| <b>Fourth Year Fall</b>                               | FW4800 Communication for Natural Resources (2) Prereq: FW3190    | FW4811 Integrated Resources Data Collection (2) Prereq: FW3190            | FW4180 Ethics of Conservation and Sustainability (2)                    | FW4150 Forest Resource Management (3) Prereq: FW3010 or FW3012               | Natural Resource Directed Elective (3) See list                | Business Directed Elective (3) See list | Free elective (3)                                 | 18  |
| <b>Fourth Year Spring</b>                             | FW4830 Integrated Natural Resource Assessment (2) Prereq: FW4811 | Social Dimensions Directed Elective (3) See list                          | Natural Resource Directed Elective (3) See list                         | Natural Resource Directed Elective (3) See list                              | HASS Gen Ed Requirement (3) See list                           | Co-curricular (1) See list              |   | 15  |

This is only a sample schedule and not an official degree audit. To run your official degree audit go to BanWeb -> Student Records -> Degree Audit -> Run Audit -> Latest -> Run Audit

**Natural Resource Electives (Choose 9 credits)**

| Course # | Course Name                       | Credits | Semester Offered | Prerequisite       |
|----------|-----------------------------------|---------|------------------|--------------------|
| BL2160   | Botany                            | 4 cr    | Spring           |                    |
| BL2170   | Zoology                           | 4 cr    | Fall             |                    |
| BL4447   | Stream Ecology and Fish Biology   | 4 cr    | Summer-odd yrs   | BL1400 & BL1410    |
| FW1035   | Wood Anatomy and Properties       | 3 cr    | Spring           |                    |
| FW3320   | Forest Genetics and Genomics      | 3 cr    | Spring           |                    |
| FW3410   | Conservation Science              | 3 cr    | Spring           |                    |
| FW3610   | Ornithology                       | 4 cr    | Spring           | BL1400 & BL1410    |
| FW4120   | Tree Physiology                   | 3 cr    | Spring           |                    |
| FW4140   | Stand & Forest Modeling           | 2 cr    | Spring           | (FW3010 OR FW3012) |
| FW4220   | Wetlands                          | 4 cr    | Fall             |                    |
| FW4240   | Mammalogy                         | 4 cr    | Fall             | BL1400 & BL1410    |
| FW4300   | Intro to Wildland Fire            | 3 cr    | Spring           |                    |
| FW4370   | Forest and Landscape Hydrology    | 3 cr    | Spring           |                    |
| FW4540   | Remote Sensing of the Environment | 3 cr    | Fall             |                    |
| FW4545   | Map Design with GIS               | 2 cr    | Spring-even yrs  | FW3540 or FW5550   |
| FW4610   | Wildlife Ecology                  | 3 cr    | Fall             | BL3400 or FW3020   |
| FW4620   | Herpetology                       | 3 cr    | Spring-odd yrs   | BL1400 & BL1410    |
| FW5115   | Restoration Ecology               | 3 cr    | Spring-even yrs  |                    |
| GE2100   | Environmental Geology             | 3 cr    | Spring           |                    |
| GE4150   | Natural Hazards                   | 3 cr    | Fall             | GE2000 or GE2100   |

**Social Dimensions Electives (Choose 3-4 credits)**

| Course #  | Course Name                                 | Credits | Semester Offered | Prerequisite                                |
|-----------|---|---------|------------------|---|
| SS3313    | Sustainability Science, Policy & Assessment | 3 cr    | Spring-odd yrs   | UN1015 & UN1025                             |
| SS3315    | Population and Environment                  | 3 cr    | Spring-odd yrs   | (MA1031 OR MA1032)<br>AND (UN1015 & UN1025) |
| SS3520    | U.S. Environmental History                  | 3 cr    | Fall             | UN1015 & UN1025                             |
| SS3630    | Environmental Policy and Politics           | 3 cr    | Fall-odd yrs     | UN1015 & UN1025                             |
| SS/FW3760 | Human Dimensions of Natural Resources       | 3 cr    | Fall             | UN1015 & UN1025                             |
| SS3800    | Energy Technology and Policy                | 3 cr    | Spring           | UN1015 & UN1025                             |
| SS4010    | Statistics for the Social Sciences          | 3 cr    | Fall-odd yrs     | MA2720                                      |
| SS4200    | Environmental Anthropology                  | 3 cr    | Fall             | SS2100, UN1015 & UN1025                     |

**Business Electives (Choose 6 credits)**

| Course # | Course Name                  | Credits | Semester Offered     | Prerequisite            |
|----------|------------------------------|---------|----------------------|-------------------------|
| ACC2000  | Accounting Principles 1      | 3 cr    | Fall, Spring, Summer |                         |
| BUS2300  | Quantitative Problem Solving | 3 cr    | Fall, Spring, Summer | MA2720                  |
| EC3400   | Economic Decision Analysis   | 3 cr    | Fall, Spring, Summer | UN1015 & UN1025         |
| EC4500   | Public Sector Economics      | 3 cr    | Fall                 | EC2001, UN1015 & UN1025 |
| EC4640   | Natural Resource Economics   | 3 cr    | Fall                 | EC2001, UN1015 & UN1025 |
| EC4650   | Environmental Economics      | 3 cr    | Spring               | EC2001, UN1015 & UN1025 |
| MGT3000  | Organizational Behavior      | 3 cr    | Fall, Spring, Summer |                         |
| MKT3000  | Principles of Marketing      | 3 cr    | Fall, Spring, Summer |                         |