NATURAL RESOURCES MANAGEMENT

School of Natural Resources and Extension
907-474-7083
www.uaf.edu/snre/

BS Degree

Minimum Requirements for Degree: 120 credits

The complexity and interrelatedness of society and the environment require an interdisciplinary approach to making and implementing sustainable natural resource decisions. The natural resources management degree integrates knowledge in natural science, policy, economics and human values to advance the sustainable management of natural resources and agricultural systems. Students learn through a variety of approaches, including classroom instruction, hands-on laboratory experiences, and opportunities for internships and independent research under the guidance of a faculty mentor. Successful graduates will be qualified for employment in a broad range of private enterprise, government agencies and nonprofit organizations in the various natural resources fields, and will be well-equipped for graduate studies.

Major — BS Degree

1. Complete the general university requirements. (See page 129. As part of the core curriculum requirements, complete BIOL F115X, BIOL F116X, NRM F303X, and a MATH—Calculus course.)

2. Complete the BS degree requirements. (See page 134. As part of the BS degree requirements, complete CHEM F105X and STAT F200X*.)

3. Complete the following (major) requirements:*  
   - NRM F101—Natural Resources Conservation and Policy.............3
   - NRM F111—Introduction to Sustainability..............................3
   - NRM F240—Natural Resource Measurements..........................3
   - NRM F210—Introduction to Sustainable Agriculture..................3
   - ECON F235—Introduction to Natural Resource Economics..........3
   - NRM F277—Conservation Biology........................................3
   - NRM F290—Resource Management Issues at High Latitudes.......2
   - NRM F366—Survey Research in Natural Resources Management...3
   - NRM F370—Introduction to Watershed Management................3
   - NRM F375—Natural Resource Ecology..................................3
   - NRM F380W—Soils and the Environment...............................3
   - NRM F369—GIS and Remote Sensing for Natural Resources.......3
   - NRM F403W/O—Environmental Decision Making.....................3
   - NRM F430—Resource Management Planning............................3
   - NRM/GEOG F483W—Research Design, Writing, and Presentation Methods ....................................................3

   a. Complete one of the following GIS courses:  
      - NRM F338—Introduction to Geographic Information Systems.....3
      - NRM F369—GIS and Remote Sensing for Natural Resources.....3
      - NRM F435—GIS Analysis .....................................................4

   b. Complete one of the following policy/law courses:  
      - NRM F204—Public Lands Law and Policy ............................3
      - NRM F407—Environmental Law ...........................................3

   c. Complete a minor, pre-vet, or 15 credits in a support field which is a group of courses selected for its clear pertinence to a cohesive program. Support fields may include but are not limited to natural resources management, chemistry, communications, education, art, fisheries and wildlife management. Courses must be approved by the student’s academic advisor and department head prior to attaining senior standing. Note: students must take a total of 39 upper division credits.

4. Minimum credits required ..................................................120
   * Students must earn a C- grade or better in each course.

Minor

1. Complete the following:
   - NRM F101—Natural Resources Conservation and Policy.............3
   - NRM electives* ....................................................................15

2. Minimum credits required ..................................................18
   * At least 6 credits must be upper-division. The minor program must be approved by an NRM advisor.
Baccalaureate Core Requirements

Communication ................................................. 9 Credits

- ENGL F111X—Introduction to Academic Writing (3)
- ENGL F190H may be substituted.

Complete one of the following:
- ENGL F211X—Academic Writing about Literature (3)
- ENGL F213X—Academic Writing about the Social and Natural Sciences (3)

Complete one of the following:
- COMM F131X—Fundamentals of Oral Communication: Group Context (3)
- COMM F141X—Fundamentals of Oral Communication: Public Context (3)

Perspectives on the Human Condition ............ 18 Credits

Complete all of the following four courses:
- ANTH F100X/SOC F100X—Individual, Society and Culture (3)
- ECON F100X or PS F100X—Political Economy (3)
- HIST F100X—Modern World History (3)
- ENGL/FL F200X—World Literature (3)

Complete one of the following three courses:
- ART/MUS/THR F200X—Aesthetic Appreciation: Interelementalship of Art, Drama and Music (3)
- HUM F201X—Unity in the Arts (3)
- ANS F202X—Aesthetic Appreciation of Alaska Native Performance (3)

Complete one of the following six courses:
- BA F323X—Business Ethics (3)
- COMM F300X—Communicating Ethics (3)
- JUST F300X—Ethics and Justice (3)
- NRM F303X—Environmental Ethics and Actions (3)
- PS F300X—Ethics and Society (3)
- PHIL F322X—Ethics (3)

Or complete 12 credits from the above courses plus one of the following:
- Two semester-length courses in a single Alaska Native language or other non-English language.
- Three semester-length courses (9 credits) in American Sign Language taken at the university level.

Mathematics .................................................. 3 Credits

Complete one of the following:
- MATH F103X—Concepts and Contemporary Applications of Mathematics (3)
- MATH F107X—Functions for Calculus* (4)
- MATH F161X—Algebra for Business and Economics** (4)
- STAT F200X—Elementary Probability and Statistics (3)

* No credit may be earned for more than one of MATH F107X or F161X.

Or complete one of the following:
- MATH F200X—Calculus I** (4)
- MATH F201X—Calculus II (4)
- MATH F202X—Calculus III (4)
- MATH F262X—Calculus for Business and Economics (4)
- MATH F272X—Calculus for Life Sciences (4)

* Or any math course having one of these as a prerequisite
** No credit may be earned for more than one of Math F200X, F262X or F272.

Natural Sciences ............................................ 8 Credits

Complete any two (4-credit) courses.
- ATM F101X—Weather and Climate of Alaska (4)
- BIOL F100X—Human Biology (4)
- BIOL F101X—Biological Sex (4)
- BIOL F103X—Biological Society (4)
- BIOL F104X—Natural History (4)
- BIOL F115X—Fundamentals of Biology I (4)
- BIOL F116X—Fundamentals of Biology II (4)
- BIOL F210X—Introduction to Human Nutrition (4)
- BIOL F211X—Human Anatomy and Physiology I (4)
- BIOL F214X—Human Anatomy and Physiology II (4)
- CHEM F100X—Chemistry in Complex Systems (4)
- CHEM F103X—Basic General Chemistry (4)
- CHEM F104X—Beginnings in Biochemistry (4)
- CHEM F105X—General Chemistry (4)
- CHEM F106X—General Chemistry (4)
- ECOG F111X—Earth and Environment: Elements of Physical Geography (4)
- GEOG F100X—Introduction to Earth Science (4)
- GEOS F101X—The Dynamic Earth (4)
- GEOS F106X—Life and the Age of Dinosaurs (4)
- GEOS F112X—History of Earth and Life (4)
- GEOS F120X—Glaciers, Earthquakes and Volcanoes (4)
- GEOS F125X—Humans, Earth and Environment (4)
- MSL F111X—The Oceans (4)
- PHYS F102X—Energy and Society (4)
- PHYS F103X—College Physics (4)
- PHYS F104X—College Physics (4)
- PHYS F115X—Physical Science I (4)
- PHYS F175X—Astronomy (4)
- PHYS F211X—General Physics (4)
- PHYS F212X—General Physics (4)
- PHYS F213X—Elementary Modern Physics (4)

Library and Information Research .............. 0–1 Credit

- Successful completion of library skills competency test or LS F100X or LS F101X prior to junior standing

Upper-Division Writing and Oral Communication

Complete the following at the upper-division level:
- Two writing intensive courses designated (W) and one oral communication intensive course designated (O), or two oral communication intensive courses designated (O/2) (see degree and/or major requirements)

Total credits required 38–39

All degrees (e.g. B.A., B.S., etc.) require additional courses.
Refer to specific degree and program requirements.
Students must earn a C- grade or better in each course used toward the baccalaureate core.