Natural and Applied Sciences



NATURAL AND APPLIED SCIENCES

Program Objectives

The Natural and Applied Sciences program provides students with a liberal arts education emphasizing basic sciences. Students may develop a concentration focusing on the biology of human health and illness or one focusing on environmental issues.

The concentration in the biology of human health and illness is designed to provide students with a sufficient understanding of human biology to enable them to pursue careers in health education, to teach life sciences, to make wise health care decisions, to better communicate with health care providers, and/or to continue their education in health- and science-related fields.

The environmental issues concentration provides students with a sufficient understanding of environmental issues to enable them to pursue careers in fields focused on the environment, ecology, conservation, and natural resource management, to communicate with regional planners, to teach life sciences, and/or to continue their education in related environmental fields. A critical component of this degree program is the internship, selected with the assistance of the director of field experiences. Students identify an organization that will enable them to evaluate potential career opportunities and develop workplace skills.

Degrees & Concentrations Offered

Graduation Planner: usm.maine.edu/advising/degreeplanning

Degree Offered: Bachelor of Arts

Major Offered: Natural and Applied Sciences

Concentrations Offered: Elementary Ed Natural and Applied Sciences,

Secondary Ed Natural and Applied Sciences

Natural and Applied Sciences

Lewiston-Auburn College (207) 753-6500

Web Address: usm.maine.edu/nas

Facebook: Natural & Applied Sciences University of Southern Maine

SOUTHERN MAINE

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Career Possibilities*

Coordinator, College Science Lab
Director, Hospital Laboratory Services
Environmentalist Technician
High School Science Teacher
Lab Instructor
Laboratory Technician
Medical Technician
Medical Technologist
Middle School Science Teacher
Nurse

Nurse Anesthetist
Nurse/Midwife
Physician's Assistant
Research Technician
School Nurse
Science Lab Technician
Science Tutor
Service Learning Coordinator
Soil Conservationist
Water Quality Testing Lab Associate

* Additional education, training or experience may be required.

Acquired Transferable Skills

Deductive Reasoning Inductive Reasoning Information Ordering Near Vision Oral Comprehension Oral Expression Problem Sensitivity Speech Clarity Speech Recognition Written Expression

For more information on transferable skills go to: usm.maine.edu/community-engagement-career-development/career-tools

What can I do with this major?*

| AREA | EMPLOYERS | INFORMATION/STRATEGIES |
|---|--|--|
| Healthcare Dentistry Medicine Optometry Podiatry Pharmacy | Group or private practice Hospitals Health networks Rehabilitation centers | Plan to attend medical school or other related graduate program. Maintain a high grade point average, particularly in the sciences, to improve chances of admission to graduate or professional school. Join related student organizations and demonstrate leadership abilities. Seek experience in healthcare settings through volunteer, shadowing, part-time jobs, or internships. |
| Education | Public and private schools, K-12 Two-year community colleges/ technical institutes Four-year institutions Professional schools | Complete a teacher preparation program for K-12 positions. Master's degrees may be sufficient for teaching at community or two-year institutions. Seek Ph.D. for teaching opportunities at colleges and universities. |
| Air/Water Quality Management | Environmental Protection Agency Geological Survey Natural Resource Conservation Service Fish and Wildlife Service | Develop strong research skills through coursework with laboratory components, by assisting faculty with research projects or through related internships and jobs. Seek experience in student and community organizations related to the environment. |
| Ecological Biology Ecology Conservation Biology | Colleges and Universities State and Federal Government Independent Laboratories | Pursue extensive laboratory and research experience by working with faculty, through independent research classes, as a student employee, or through other departmental programs. Obtain a Ph.D. for teaching and advanced research and management positions. |

^{*}To learn about these areas and much more visit: whatcanidowiththismajor.com/major • © 2011 What Can I Do With This Major

Enrichment Opportunities

| <u>Internships</u> | For more information contact Department of Natural and Applied Sciences. For more information Contact Department. usm.maine.edu/community-engage- ment-career-development/internships | |
|-----------------------|---|--|
| Study Abroad | For more information contact the USM Office of International Programs. usm.maine.edu/international/study-abroad | |
| Clubs & Organizations | Environmental Health and Toxicology, Environmental Science Student Group For a complete list of student organizations: webapp.usm.maine.edu/pathways/list | |

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Helpful Career Links

USMCareerConnections:

USM's career network for job and internship searches. usm.maine.edu/community-engagement-career-development/usmcareerconnections

O*NET OnLine:

Learn more about a career opportunity by researching it with O*NET. onetonline.org

Occupational Outlook Handbook:

Learn more about a career opportunity by researching it with OOH. <u>bls.gov/ooh</u>

PROFESSIONAL ASSOCIATIONS To name a few...

American Institute of Biological Sciences: Careers
Biotechnology Institute

National Association of Environmental Professionals

Ecological Society of America

National Council for Science and the Environment

Biology Industry Organization