

NATURAL SCIENCE (NS)

Courses

NS-100 INTRODUCTION TO ENVIRONMENTAL SCIENCE 4 Credits

An introductory course for non-science majors. This course will cover the vast interdisciplinary subject of environmental science, which uses ecological principles to address a broad range of topics from conservation of single species to global issues such as global warming and climate change. These issues involve a complex array of information and applications from Ecology, environmental policy, politics, Geology, and Geography. Three hours of lecture and one 3-hour laboratory period per week. Pre-requisite: MATH-015 or satisfactory math placement.

NS-140 INTEGRATED SCIENCE I 4 Credits

This team-taught, place-based, course is designed to provide an introduction to multiple scientific disciplines, including biology, chemistry, computer science, earth science, mathematics, and physics around the theme of the greater Lewiston-Clarkston valley watershed. Course content is integrated in order to allow the students the opportunity to use multiple scientific disciplines to understand the world in which they live. Weekly laboratories will be used to provide students with hands-on learning experiences that directly related to the topics covered in lecture and may include field experiences. The course will include emphases on college reading, college writing, collaboration, and using math to solve real-world problems. This is a 4-credit class with 3 hours of lecture a week and approximately 3 hours of laboratory each week. Pre-requisite: Placement into MATH-143P or equivalent or permission of the instructor. Must be concurrently enrolled into MATH-143 or permission of instructor.

NS-150 INTRODUCTION TO NATURAL SCIENCES 3 Credits

An introduction to science as a way of knowing. Examples are chosen from astronomy, genetics, genetic engineering, evolution and other timely topics. Pre-requisite: ENGL-101.

NS-171 INTEGRATED SCIENCE I 3 Credits

First of a two-semester sequence designed for the LCSC pre-service teachers to teach science in the elementary grades. NS-171 provides a college-level understanding of the scientific knowledge base for the physical sciences taught in grades K-8 in most states. Pre-requisite: A grade of 'C' or better in MATH-137 or satisfactory math placement.

NS-172 INTEGRATED SCIENCE II 3 Credits

Second of a two-semester sequence. NS-172 provides a college-level understanding of the scientific knowledge base for the life and earth sciences taught in grades K-8 in most states. Pre-requisite: A grade of 'C' or better in NS-171.

NS-173 INTEGRATED SCIENCE I RECITATION 1 Credit

Students will have the opportunity to practice solving problems relating to fundamental physical scientific concepts in order to prepare themselves to teach science in the elementary grades with competence. The opportunity to become more familiar with scientific terminology will also be given.

NS-174 NATURAL SCIENCE FOR ELEMENTARY EDUCATOR 4 Credits

This course is an introduction to biology and earth science for future elementary educators. To this end, we will cover the natural science topics specified by the Idaho State Standards for grade K through 8. These include cells, genetics, human biology, planets, weather, and basic geology, as well as science methodology. Throughout the semester, we will also explore ways of learning that foster deep learning, conceptual understanding, curiosity, and confidence.

NS-190 DIRECTED STUDY IN NATURAL SCIENCE 1-12 Credits

NS-192 SPECIAL TOPICS IN NATURAL SCIENCE 1-12 Credits

NS-265 SCIENCE SUCCESS SEMINAR 1 Credit

In this course, students will explore their motivation and meaning, learn strategies to study effectively in science, and develop a network to support their success. Students at all levels are welcome.

NS-270 SCIENCE OUTREACH 1 Credit

A course where students will learn about and participate in science outreach, involving visits to local elementary and secondary schools as well as those conducted on the LCSC campus. Students will assist others (both faculty and students in NS 470) in the presentation of outreach programs and will gain valuable skills in both outreach preparation and interpersonal communication.

NS-275 FIELD EXPERIENCES IN SCIENCE 2 Credits

A field-based experience integrating a variety of disciplines including, but not limited to, field biology, earth science, environmental chemistry, astronomy, and cultural history. No pre-requisites required.

NS-290 DIRECTED STUDY IN NATURAL SCIENCE 1-12 Credits

NS-291 WORKSHOP IN NATURAL SCIENCE 1-12 Credits

NS-292 SPECIAL TOPICS IN NATURAL SCIENCE 1-12 Credits

NS-295 PRACTICUM IN NATURAL SCIENCE 1-12 Credits

NS-299 RESEARCH ASSISTANTSHIP 1-12 Credits

NS-380 SENIOR SEMINAR 1 Credit

Reading and research involving primary literature in the student's field of study. Topic-driven research will result in written and oral presentations.

NS-390 DIRECTED STUDY IN NATURAL SCIENCE 1-12 Credits

NS-395 PRACTICUM IN NATURAL SCIENCE 1-12 Credits

NS-398 SENIOR PROJECT PROPOSAL 2 Credits

Preparation of the proposal for Senior Research projects to be completed in NS 499. Students will become familiar with the procedure by which proposals are prepared and submitted to funding agencies like the National Science Foundation (NSF). The format of the proposal is based on NSF proposal requests. The course will ensure that the research projects are well conceived, carefully planned, and have a reasonable chance of succeeding. All senior-research proposals are reviewed by a board of Natural Science faculty members. Proposals may be accepted, accepted with revisions, or returned for major revisions with a request for resubmission during the next semester's review. Pre-requisite: Junior standing.

NS-399 RESEARCH ASSISTANTSHIP 1-3 Credits

NS-465 TUTORING IN NATURAL SCIENCE 3 Credits

In this course, students will learn various tutoring skills accepted by the National Tutoring Association (NTA) as they work toward earning Basic Level Tutor Certification through the NTA. Students will learn to tutor and improve their tutoring through practice and working directly with tutees. Students will develop essential job skills, such as communication, teamwork, critical thinking, problem-solving, creativity, organization, and accountability.

NS-470 SCIENCE OUTREACH 1 Credit

A course where students will learn about and participate in science outreach, involving visits to local elementary and secondary schools as well as those conducted on the LCSC campus. Students will also be responsible for designing and implementing the program in the classroom setting, and will participate in peer assessment of other students' presentations, gaining valuable skills in outreach preparation and both interpersonal and large group communication. Pre-requisites: A grade of 'C' or higher in BIOL-181 or CHEM-112 & NS-270.

NS-475 FIELD EXPERIENCE 2 Credits

A field-based experience integrating a variety of disciplines including, but not limited to, field biology, earth science, environmental chemistry, astronomy, and cultural history. Requires written and/or oral presentations as a part of the field experience. No pre-requisites required.

NS-490 DIRECTED STUDY IN NATURAL SCIENCE 1-12 Credits

NS-491 WORKSHOP IN NATURAL SCIENCE 1-12 Credits

NS-492 SPECIAL TOPICS IN NATURAL SCIENCE 1-12 Credits

NS-494 INTERNSHIP IN NATURAL SCIENCE 1-12 Credits

NS-495 PRACTICUM IN NATURAL SCIENCE 1-12 Credits

NS-499 RESEARCH PROJECT AND SEMINAR IN NATURAL SCIENCE 1-3 Credits

Students will conduct and communicate the results of a research project in the Natural Sciences Division. Topics may include the historical, philosophical, cultural and environmental aspects, and the processes of natural science. Requirements of students include satisfactory oral presentation and defense of their research and submission of a written report approved by their advisor to the Natural Sciences Division. Pre-requisite: NS-398.