

ENVIRONMENTAL SCIENCES (ENSC)

ENSC 105N - Environmental Science. 3 Credits.

Offered autumn. Provides students with opportunities to use class knowledge to make a difference; helps students build all of the following: scientific literacy; skills in critical thinking, research and self-instruction; an understanding of the scientific basis of environmental issues, policies and laws; habits of sustainable living, scientifically-informed, active participation in social decisions, and service to their community and to the earth.

Gen Ed Attributes: Natural Science Course (N)

ENSC 291 - Special Topics/Experimental Courses. 1-6 Credits.

(R-6) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics.

ENSC 360 - Applied Ecology. 3.000 Credits.

Offered autumn. Prereq or coreq ENST 201. To succeed in this course, students also need college level courses in general biology, chemistry & statistics. Principles and concepts of ecology and how they can be applied to inform real life decisions about human interactions with the environment. Emphasizes the science of sustainability and the conservation of watersheds and biodiversity.

ENSC 391 - Special Topics/Experimental Courses. 1-9 Credits.

(R 12) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. Experimental offerings of visiting professors, new courses, or one time offerings of current topics.

ENSC 398 - Cooperative Education/Intern. 1-6 Credits.

Offered autumn and spring. Requires consent of instructor. Practical application of classroom learning through internship with governments, organizations or industry. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

ENSC 470 - Agroecology. 3 Credits.

Offered Intermittently. Offering crucial tools for sustainability and resilience, agroecology is the study of ecological processes applied to food and agricultural systems. Students learn key concepts, scientific findings from the field, and how to apply agroecological principles.

ENSC 491 - Special Topics/Experimental Courses. 1-9 Credits.

(R-9) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. Experimental offerings of visiting professors, new courses, or one time offerings of current topics.

ENSC 492 - Independent Study. 1-6 Credits.

(R-6) Offered autumn and spring. Requires consent of instructor. Course material appropriate to the needs and objectives of the individual student.

ENSC 494 - Seminar/Workshop. 1-3 Credits.

(R-6) Offered intermittently. May be restricted to EVST majors. May require consent of instructor. A seminar on a current environmental topic.

ENSC 495 - Field Study. 1-10 Credits.

Offered autumn. Prereq or coreq ENSC 360. Designing, executing, interpreting and documenting field studies. Project oriented.

ENSC 501 - Scientific Approaches to Environmental Problems. 3 Credits.

Offered autumn. Prereq., graduate standing in EVST or consent of instructor. The strength and limitations of the scientific approach to investigating and solving selected environmental problems with an emphasis on the natural sciences. Level: Graduate

ENSC 540 - Watershed Conservation. 3 Credits.

Offered autumn. Prereq., graduate standing or consent of instructor. Course assumes students have level of knowledge presented in a college level ecology course. Integrates watershed science, policy, planning, action and organizing. The science component explores watershed connections, evaluating change and assessing watershed condition. The policy component explains the scientific basis of national, state and local laws, programs and agencies that affect watersheds. The planning and action component discusses developing watershed conservation plans and selecting actions likely to address problems without creating other problems. The organizing component covers how to help watershed communities make choices, resolve conflicts, build commitment and find funding. Students work individually or in teams to assist Montana groups in developing watershed CPR plans, initiating monitoring projects, and/or conducting education projects. Level: Graduate

ENSC 550 - Pollution Ecology. 3 Credits.

Offered spring even-numbered years. Prereq., graduate standing or consent of instructor. Course assumes students have level of knowledge presented in a college level ecology course. Examines sources, fate, and effects of pollutants on organisms and ecosystems; methods of measuring and predicting pollutant fate and effects, assessing and reducing risks, estimating ecosystem assimilation capacity; setting standards and restoring ecosystems damaged by pollution. Briefly examines some relevant laws and policies at the federal, state and local level. Level: Graduate

ENSC 551 - Environmental Field Study. 1-3 Credits.

(R-3) Offered intermittently. Prereq. or coreq., ENSC 540 or 550 or ENST 560 or consent of instructor. Same as BIOB 551. Designing, executing and interpreting environmental field studies. Oriented to studies of aquatic systems and watersheds. Students will assist with a class project and may also pursue their own projects. Projects focus on the Clark Fork, Bitterroot and Blackfoot River basins. Level: Graduate

ENSC 593 - Professional Paper. 1-6 Credits.

(R-6) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate

ENSC 594 - Graduate Seminar. 1-15 Credits.

(R-15) Offered autumn and spring. Prereq., graduate standing. May be restricted to EVST majors. May require consent of instructor. In depth analysis of a current environmental topic. Different topics offered each semester. Level: Graduate

ENSC 595 - Special Topics. 1-9 Credits.

(R-9) Offered autumn and spring. Prereq., graduate standing. May be restricted to EVST majors. May require consent of instructor. Experimental offerings of visiting professors, of new courses, or one-time offerings of current topics. Level: Graduate

ENSC 596 - Independent Study. 1-12 Credits.

(R-12) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Work on selected problems by individual students under direct faculty supervision. Level: Graduate

ENSC 597 - Research. 1-12 Credits.

(R-12) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Directed individual graduate research and study appropriate to background and objectives of the student. Level: Graduate

ENSC 598 - Internship. 1-8 Credits.

(R-8) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Practical application of classroom learning during placements off campus. Level: Graduate

ENSC 599 - Thesis. 1-6 Credits.

(R-6) Offered autumn and spring. Prereq., graduate standing in EVST and consent of instructor. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate