# CONSERVATION BIOLOGY (CONS)

Please note: CONS courses are available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation, Front Royal, VA.

## CONS 320 - Conservation in Practice (3 Credits)

Prerequisite: BIOL 210 with a C- or better and acceptance to the UMW-SMSC program. Course focuses on personal and professional development in field of conservation. Experiences include working closely with a conservation professional. Work in course will build your resume and professional network. Course available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation, Front Royal, VA.

## CONS 400 - Conservation Seminar (2 Credits)

Prerequisite: BIOL 210, with a C- or better, upper level biology course, and acceptance into the UMW-SMSC program. Seminar style course. Students discuss current conservation literature and develop professional skills and conservation career-focused skills such as networking, fundraising, grant writing, written communication, and data management. Course available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation, Front Royal, VA.

# CONS 401 - Conservation Theory (3 Credits)

Prerequisite: BIOL 210 with a C- or better and acceptance into the UMW-SMSC program. This course introduces the field of conservation biology and science-based management of threatened species and habitats in human-dominated landscapes. Students evaluate biodiversity conservation and sustainability in a changing world. Course available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation, Front Royal, VA.

#### CONS 402 - Applied Conservation (4 Credits)

Prerequisite: BIOL 210 with a C- or better and acceptance into the UMW-SMSC program. Students participate in field exercises, including data collection for watershed monitoring and ecology. Course includes lab work, particularly in reproductive biology for conservation. Students apply knowledge to conservation management. Course available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation, Front Royal, VA.

#### CONS 404 - Biodiversity Monitoring (4 Credits)

Prerequisite: BIOL 210 with a C- or better and acceptance into the UMW-SMSC program. Students practice field techniques for surveying flora and fauna. Assessments of biodiversity and habitat quality used to develop a monitoring plan for species or habitats of conservation concern. Course available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation, Front Royal, VA.

**CONS 405** - Landscape and Macrosystems Ecology (4 Credits) Prerequisite: BIOL 210 with a C- or better, one upper level biology, and acceptance into the UMW-SMSC program. Students characterize ecosystem patterns and processes across spatial and temporal scales using GIS technologies. They analyze patterns of global environmental change and propose landscape-level solutions for threatened systems. Course available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation in Front Royal, VA.

#### **CONS 406** - Small Population Management (4 Credits)

Prerequisite: BIOL 210 with a C- or better, upper level biology course, and acceptance into the UMW-SMSC program. Students assess vulnerability of wild and captive endangered species using genetic and demographic data. Students use techniques to improve captive breeding of animals and learn best husbandry practices. Course available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation, Front Royal, VA.

**CONS 410** - Human Dimensions of Conservation (3 Credits) Prerequisite: BIOL 210 with a C- or better and acceptance into the UMW-SMSC program. Course investigates local and global perspectives on conservation issues. Students develop skills in decision-making processes, conflict resolution, environmental economics, sustainability, public policy, environmental values, and conservation ethics. Course available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation, Front Royal, VA.

# **CONS 490** - Integrated Conservation Strategies (3 Credits) Prerequisite: BIOL 210 with a C- or better and acceptance into the UMW-SMSC program. Course integrates ideas from the semester through study of current conservation issues. Students strategize solutions for case study of chosen conservation issue. Conservation solutions are presented before a panel. Course available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation, Front Royal, VA.

**CONS 491** - Conservation Management Planning (4 Credits) Prerequisite: BIOL 210 with a C- or better, upper level biology course, and acceptance into the UMW-SMSC program. Students integrate theory, applications, and socio-politics to create management plan for an endangered species. Students use concepts of adaptive management, literature searches and expert interviews, to develop plan report. Course available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation, Front Royal, VA.

#### CONS 496 - Research in Conservation (6 Credits)

Prerequisite: BIOL 210 with a C- or better, upper level biology course, and acceptance into the UMW-SMSC program. Students pursue an independent research project under the guidance of a conservation mentor and produce a scholarly work to share with the professional conservation community. Course available only to UMW students enrolled in the UMW-SMSC cooperative program at the Smithsonian-Mason School of Conservation, Front Royal, VA.

See Conservation Biology (https://catalog.umw.edu/undergraduate/ majors/conservation-biology/) for more information about the Conservation Biology major.