

Fall 2025

Course Preview Week: August 26 - September 01, 2025 Semester Dates: September 02 - December 12, 2025

BCM 700 Conservation Ecology (MS, BCS, F)

Credits

Principles of ecology and biodiversity through the lens of conservation planning and policy. Drawing from concepts across multiple disciplines at various spatial and temporal scales in the physical and biological sciences, exploring topics and applications such as watershed management, agricultural practices, wetland delineation, population viability analysis, and ecosystem assessment. BCM 700 course syllabus

BCM 705 Conservation Research and Monitoring (MS, DMA, F)

Overview of current tools and best practices for designing research projects and **Credits** acquiring, managing, and presenting conservation data. Topics include quality control, the importance of metadata, effective research design, statistical power, and other strategies for generating valid answers to important conservation questions.

BCM 705 course syllabus

BCM 710 Conservation Design and Management (MS, LPM, F)

Credits

Focuses on all aspects of conservation project management, including understanding context and culture, writing grants, building partnerships, developing and managing a budget, assessing outcomes and deliverables, and communicating project results with diverse audiences. Students will explore principles of adaptive management related to conservation projects. BCM 710 course syllabus

BCM 740 Conservation Leadership and Community Engagement 3 (MS, LPM) **Credits**

Focuses on strategies and tools for leading and implementing collaborative conservation projects. Topics include engaging conservation partners and community volunteers, strategic planning and assessment, and communicating project progress and results to diverse audiences using mixed media. Exercises will enhance leadership and team-building skills relevant to conservation objectives.

BCM 740 course syllabus

BCM 745 Emerging Conservation Concepts and Technologies (MS, BCS) **Credits**

A survey of current and developing approaches to conservation and land stewardship. Explore principles and emerging methods relevant to invasive species management, prescribed fire, disturbance regimes, and core conservation challenges. Innovative tools and monitoring technologies are investigated, including literature review and application to individual projects. BCM 745 course syllabus



BCM 750 Spatial Analysis and Mapping (MS, DMA)

3 Credits

Foundational concepts in mapping and geospatial analysis as they apply to conservation. Process and utilize remotely sensed imagery and other geographic data. Hands-on experience using software for storing, managing, and displaying spatial information such as topography, vegetation, soil, and watershed data. BCM 750 course syllabus

BCM 790 Capstone Prep (MS)

1 Credits

Prepares students for an applied self-directed capstone experience. Address problem identification, research, and project formulation. Culminates in an oral and written proposal with project schedule.

Prerequisites: Completion of at least 15 credits, including at least one course in each of the three certificates: Biodiversity and Conservation Science, Conservation Data Management and Analysis, Conservation Leadership, Policy, and Management.

BCM 795 Capstone (MS)

3

Credits

The capstone course is an opportunity for students to apply what they have learned in the program by completing the proposed capstone project in a professional, laboratory, or field setting. The outcomes of the capstone project will be presented in a summary report.

Prerequisite: Successful completion of BCM 790.