This course will explore important evolutionary concepts in reference to ecological processes and biological concepts.

**PBC 430-0 Conservation Genetics (1 Unit)**
In this course we will learn how basic evolutionary and genetic principles inform the conservation and management of wildlife, game, and plant populations. We will read and discuss current research in the primary literature, examine case studies of current practices, and engage in group problem-solving and computer simulation exercises. Taught with BIOL_SCI 332-0.

**PBC 435-0 Biostatistics (1 Unit)**
This is an applied statistics class geared toward students interested in biology, ecology, and environmental science, and others are welcome. The course goal is for students to be able to use the skills, experience, information, and software learned in class after class. During the course, students will learn many approaches and techniques for solving diverse statistical problems. Student will use the software R for all quantitative methods practiced in class. R is a very flexible and powerful program that scientists and statisticians can use for any statistical problem they encounter.

**PBC 450-0 Field and Laboratory Methods in Plant Biology and Conservation (2 Units)**
This course is aimed to provide students with the knowledge, critical thinking, and practical skills to design, execute, and analyze plant biology and conservation research in order to help find solutions to real conservation problems. As this often requires the mastery of many skill sets across disciplines, the course is team taught and includes hands on training in topics such as experimental design, sampling methods, managing data, soil analyses, pollinator and breeding studies, DNA extraction, PCR, and DNA fingerprinting.

**PBC 451-0 Critical Topics in Ecology and Conservation (1 Unit)**
This course provides students with the conceptual and theoretical framework within the field of plant biology (especially ecology) and conservation. This is a seminar style class based on reading and discussion of works ranging from historical literature to recent studies including topics such as conservation policy, economics of conservation, climate change, invasive species, habitat fragmentation, and applied conservation case studies. Taught with BIOL_SCI 339-0.

**PBC 470-0 Special Topics in Plant Biology and Conservation (1 Unit)**
This seminar-style course will focus on a wide range of rotating current topics in the field of conservation science and practice. Taught with ENVR_SCI 390-0.

**PBC 499-0 Independent Study (1-3 Units)**
This is a required course for the master’s degree in plant biology and conservation in which students will work with an instructor of their choice conducting independent literature, lab, or field research. Prerequisites: Permission of instructor.

**PBC 590-0 Research (1-4 Units)**
This course will allow students in our new PhD program to sign up for research credit once they have completed a set of core basic courses. Students will be working on their independent research projects while taking this course.