

UMBC UGC Change in Existing Course: BIOL 481 – Advanced Topics in Evolutionary Biology

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Proposed Effective Date: Spring 2016

	Name	Email	Phone	Dept
Dept Chair or UPD	Philip Farabaugh	farabaug@umbc.edu	410-455-3018	Biology
Other Contact	David Eisenmann	eisenman@umbc.edu	410-455-2256	Biology

COURSE INFORMATION: (please provide all information in the “current” column, and only the information changing in the “proposed” column)

change		current	proposed
<input type="checkbox"/>	Course Number(s)	BIOL 481	
<input type="checkbox"/>	Formal Title	Advanced Topics in Evolutionary Biology	
<input type="checkbox"/>	Transcript Title (≤30c)	Adv. Topics in Evolutionary Biol.	
<input checked="" type="checkbox"/>	Recommended Course Preparation	You must have completed BIOL 142 and BIOL 302	
<input checked="" type="checkbox"/>	Prerequisite NOTE: Unless otherwise indicated, a prerequisite is assumed to be passed with a “D” or better.		You must have completed BIOL 142, BIOL 302 and BIOL 303 with a grade of “C” or better.
<input type="checkbox"/>	Credits	4.00	
<input checked="" type="checkbox"/>	Repeatable?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/>	Max. Total Credits	4.00	8.00 Max. Total Credits: This should be equal to the number of credits for courses that cannot be repeated for credit. For courses that may be repeated for credit, enter the maximum total number of credits a student can receive from this course. E.g., enter 6 credits for a 3 credit course that may be taken a second time for credit, but not for a third time. Please note that this does NOT refer to how many times a class may be retaken for a higher grade.
<input type="checkbox"/>	Grading Method(s)	<input checked="" type="checkbox"/> Reg (A-F) <input type="checkbox"/> Audit <input type="checkbox"/> Pass-Fail	<input type="checkbox"/> Reg (A-F) <input type="checkbox"/> Audit <input type="checkbox"/> Pass-Fail

CURRENT CATALOG DESCRIPTION:

This advanced course analyzes principles of and current topics in evolutionary biology. The study of evolution informs every facet of biological inquiry and every level of biological organization, from molecules to ecosystems. Topics will vary across semesters according to current research and the interests of faculty. Representative topics may include the origin of species, natural and sexual selection, neutral theory, comparative methods, and evolutionary ecology. The course is a mix of lectures, problem-based learning, and student-led presentations of primary research literature. This course is repeatable for credit.

PROPOSED CATALOG DESCRIPTION (no longer than 75 words): leave blank if no changes are being proposed to the catalog description. NOTE: information about prerequisites should NOT appear in the catalog description.)

This advanced course analyzes principles of and current topics in evolutionary biology. The study of evolution informs every facet of biological inquiry and every level of biological organization, from molecules to ecosystems. Topics will vary across semesters according to current research and the interests of faculty. Representative topics may include the origin of species, natural and sexual selection, neutral theory, comparative methods, and evolutionary ecology. The course is a mix of lectures, problem-based learning, and student-led presentations of primary research literature. This course is repeatable for credit. The course may be taken twice (for a maximum of 8 credits) if different topics are covered.

RATIONALE FOR CHANGE:

"The BIOL core courses are in a sequence BIOL 141-> BIOL 142 -> BIOL 302 -> BIOL 303, with BIOL 303 serving as a capstone course for the Biology core. The curriculum was designed such that only after completing this course and showing mastery of the core course content, would students move on in the major and take 400 level courses. However, we have a number of 400 level courses offered that do not explicitly require the content of BIOL 303 for student success in the course and therefore do not currently have it listed as an academic prerequisite. Some students have been taking these courses before completing BIOL 303 and the core, and some of these students have gone on to fail BIOL 303 two times, showing that they do not have mastery of the material and perhaps should be in another major. We would like to make BIOL 303 a prerequisite for all of our 400 level courses, regardless of content, to make this maneuver impossible. We prefer students to show they should be in the major before taking these upper level courses."