

1. General Information

1a. Submitted by the College of: ARTS & SCIENCES

Date Submitted: 2/4/2013

1b. Department/Division: Biology

1c. Contact Person

Name: Ruth E. Beattie

Email: rebeat1@uky.edu

Phone: 859-257-7647

Responsible Faculty ID (if different from Contact)

Name:

Email:

Phone:

1d. Requested Effective Date: Semester following approval

1e. Should this course be a UK Core Course? No

2. Designation and Description of Proposed Course

2a. Will this course also be offered through Distance Learning?: No

2b. Prefix and Number: BIO 380

2c. Full Title: Special Topics in Biology (Intermediate Level): Subtitle required

2d. Transcript Title:

2e. Cross-listing:

2f. Meeting Patterns

LECTURE: 0-4

LABORATORY: 0-4

RECITATION: 0-4

SEMINAR: 0-4

2g. Grading System: Letter (A, B, C, etc.)

2h. Number of credit hours: 1-4

2i. Is this course repeatable for additional credit? Yes

If Yes: Maximum number of credit hours: 12 cr hr under different subtitle

If Yes: Will this course allow multiple registrations during the same semester? Yes

- 2j. Course Description for Bulletin: Interdisciplinary, topical or experimental course in intermediate (300-level) biology. Subtitle required. Prerequisites: Determined by Instructor May be repeated for a maximum of 12 credit hours under different subtitles. Variable credit 1 - 4 cr hr Course format: variable - Lecture and/or laboratory and/or recitation and/or seminar
- 2k. Prerequisites, if any: Determined by Instructor
- 2l. Supplementary Teaching Component:
3. Will this course taught off campus? No
If YES, enter the off campus address:
4. Frequency of Course Offering: Winter,
Will the course be offered every year?: No
If No, explain: Depends on number of pilot courses being offered each year
5. Are facilities and personnel necessary for the proposed new course available?: Yes
If No, explain:
6. What enrollment (per section per semester) may reasonably be expected?: variable; 30-100
7. Anticipated Student Demand
Will this course serve students primarily within the degree program?: Yes
Will it be of interest to a significant number of students outside the degree pgm?: Yes
If Yes, explain: [var7InterestExplain]
8. Check the category most applicable to this course: Traditional – Offered in Corresponding Departments at Universities Elsewhere,
If No, explain:
9. Course Relationship to Program(s).
a. Is this course part of a proposed new program?: No
If YES, name the proposed new program:
b. Will this course be a new requirement for ANY program?: No
If YES, list affected programs:
10. Information to be Placed on Syllabus.
a. Is the course 400G or 500?: No
b. The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from 10.a above) are attached: Yes

Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1.How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2.How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3.How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4.Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5.How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6.How do course requirements ensure that students make appropriate use of learning resources?

7.Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8.How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?

9.Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10.Does the syllabus contain all the required components? NO

11.I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

SIGNATURE|VCASS2|Vincent Cassone|Dept approval for ZCOURSE_NEW BIO 380|20121126

SIGNATURE|RHANSON|Roxanna D Hanson|College approval for ZCOURSE_NEW BIO 380|20121126

SIGNATURE|JMETT2|Joanie Ett-Mims|Undergrad Council approval for ZCOURSE_NEW BIO 380|20121211

BIO 380: Special Topics in Biology (Intermediate Level): Subtitle required

Interdisciplinary, topical or experimental course in intermediate (300-level) biology.
Subtitle required.

Prerequisites: Determined by Instructor

May be repeated for a maximum of 12 credit hours under different subtitles.

Variable credit 1 - 4 cr hr

This course will be used to pilot new intermediate (300-level) biology courses. A course can only be offered under the same subtitle twice. After that time, the course must be submitted as a new course with its own course number.

Course offering/ subtitle must be approved by the Faculty of the Department of Biology each time the course is offered.

Variable format: lecture, laboratory, recitation and/or seminar.

The syllabus for a previously offered pilot course (BIO 380) is attached.

BIO 380/ Fall 2010

Introduction to Evolution

4 cr hr

Instructor: Jim Krupa

TAs: Sarah Stewart

Dan Wetzel

Office: Room 108 of MDR 3

Office: 106 of MDR 3

117 of MDR 3

Phone: 257-8417

Phone: 323-9499

323-9499

Email: bio149@uky.edu

Email: sarah.martin@uky.edu

dan.wetzel@uky.edu

Office hours: by appointment

Lecture: Room 116, Morgan Building (aka biology building)

Recitations: Room 109, Morgan Building; BIO 380-002, W, noon to 1:50pm; AS 300-003, W, 2pm to 3:50pm
BIO 380-004, F, noon to 1:50pm; AS 300-005, F, 3pm to 4:50pm

Book: Evolutionary Analysis by Freeman and Herron, 4th edition

This class will examine a range of topics that are covered by the study of evolution. The class will begin with a review of all the Darwinian theories of evolution including descent with modification, natural selection, and sexual selection. The class will then survey topics such as patterns of evolution, the genetic source of variation, measuring evolution, adaptation, speciation, human evolution, “evo-devo”, and evolutionary medicine.

Sources of grades:

Lecture:

Exams	400 points
Reading Quizzes	70 points

Recitation:

Participation during reading discussions	10 points
Attendance	20 points
Reading questions	20 points
Sexual selection write-up	20 points
Snail activity write-up	20 points
Phylogeny write- up	20 points
Film summaries	20 points

Total points: 600 points

Grading:

- A = 100% to 90%
- B = 89.9% to 80%
- C = 79.9% to 70%
- D = 69.9% to 60%
- E = 59.9% to 0%

Attendance: Even though attendance is not kept, you must attend in order to get a good grade. In the past, most of the students that got low grades are the ones that do not attend. Getting class notes from other students is not a successful substitute. Often I will give hints about upcoming exams and sometimes give actual exam questions. If you miss lectures, you will miss this information. I do not give out my lecture notes. Also, reading newspapers during lectures, reading books, talking to others, and sleeping will not be tolerated. Those doing so will be asked to leave the lecture.

Cheating: Cheating as defined in the student handbook section 6.3.2, is defined as follows: “cheating is defined by its general usage. It includes, but is not limited to the wrongfully giving, taking, or presenting any information or material by a student with the intent of aiding himself/herself or another on any academic work which is considered in any way in the determination of the final grade. Any question of definition shall be referred to the University Appeals Board. I have a *zero-tolerance* policy in this class.

Missing exams or recitations **Make-up exams and assignments will only be given for excused absences as defined by University Senate Rules . Make-up exams and assignments will be scheduled at a time convenient for Instructor and student.** A missed exam or assignment will result in a score of zero for that exam or assignment, unless an acceptable written excuse is presented **within one week of the absence. See Senate Rule 5.2.4.2**

Absences due to observance of Religious Holidays are excused absences as defined by University Senate Rules. See Senate Rule 5.2.4.2. Make-up exams and assignments will be scheduled at a time convenient for Instructor and student. A missed exam or assignment will result in a score of zero for that exam or assignment, unless a written excuse is presented **within one week of the absence** This should be in the form of an e-mail to the Instructor stating you missed the exam /assignment due to observation of a Religious Holiday.

Reading quizzes: Each quiz will be given at the *very beginning* of class on most Thursdays. The format will be mostly multiple-choice/true-false questions. Questions will be drawn only from the material assigned since the preceding quiz. There will be approximately 8 quizzes. I will drop the lowest score. If you miss class the day of a quiz, the resulting 0% will be the one dropped.

Grade protests: If you think I have mis-graded any piece of your work, I ask that you follow 4 simple steps:

- (1) Write a brief explanation of the problem on a sheet of paper;
- (2) attach the quiz/exam/assignment in question to it;
- (3) leave both with me; and
- (4) go away while I read and think about it. I'll return it with my decision later.

Deadline for any re-grade request is one week (7 days) after the initial grading was *returned to the class*.

Responsibilities: A Texas legislator once said, “I can *explain* it to you, but I can’t *understand* it for you!” -- a pearl of wisdom that might as well have been coined by a teacher. The process of learning by formal instruction is a two-way street with burdens on both sides. I take my part seriously and expect you to do the same. Thus,

My job is:

1. To organize an informative, challenging, and hopefully stimulating course of study on the topic;
2. To *explain* things as clearly as I possibly can and to be prepared with other ways of getting the message across if the first way doesn’t work (see point 4 on your list below);
3. To show up on time and prepared for each class;
4. To be fair & objective; and
5. To provide accurate feedback (grades) promptly, so you know how you're doing at all times.

Your job is:

1. To show up **on time** and prepared for every class period;
2. To **do** all the assigned reading (allow ca 3-4 hr per class period) at least once;
3. To *think* about the material, both as you read and as you participate in class;
4. To let me know when material is not clear to you (see #2 of my list above), especially by raising questions in class and/or in office hours; and
5. To be honest during tests.

Learning outcomes

By the end of the course you should be able to:

1. Demonstrate a thorough understanding of all Darwinian and non-Darwinian theories of evolution
2. Describe the evidence all disciplines of biology provide for evolution
3. Discuss why evolution is considered a cornerstone of science and foundation of biology
4. Describe how physics, chemistry, geology, and mathematics provide support for evolution
5. Discuss how evolutionary theory is applied to medicine, agriculture, and conservation
6. Describe the mechanisms that shape microevolution and macroevolution

Disabilities: If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.

*****A Note Concerning Academic Offenses (READ THIS INFORMATION CAREFULLY)**

PLAGIARISM and CHEATING are serious academic offenses.

The following is an excerpt taken from the “***Students Rights and Responsibilities Handbook, University of Kentucky***” regarding cheating.

“Cheating is defined by its general usage. It includes, but is not limited to, the wrongful giving, taking, or presenting any information or material by a student with the intent of aiding himself/herself or another on any academic work which is considered in any way in the determination of the final grade.”

The following is an excerpt taken from the “***Students Rights and Responsibilities Handbook, University of Kentucky***” regarding plagiarism.

“All academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression.”

*When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else’s work..... If the words of someone else are used, the student **MUST** put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic.”*

Charges of an academic offense will be made against any student that cheats or commits plagiarism. Penalties for such an offense will be assessed according to University Regulations regarding Academic Offenses. The most severe penalties include suspension or dismissal from the University. **I have a zero-tolerance policy regarding academic offenses.**

NOTE* In addition to the circumstances listed above, the following activities are considered evidence of cheating:

1. **Any talking** to another student during an examination.
2. **Looking** at another students work during an examination, or **allowing** another student to look at your work.
3. **Use of a cell phone or any electronic device during an examination** (this includes receiving calls). All cell phones and electronic devices **MUST** be turned off and put away during an examination period. They must not be turned back on again until after exiting the examination room.
4. **Collaborating with another student on a homework assignment and/or submitting an assignment that is similar in wording or sentence construction to the work of another student**, even if you acknowledge the participation of the other student. **ALL SUBMITTED WORK MUST BE DONE BY YOU ALONE.**

Course Policy on Classroom civility and decorum:

The university, college and department has a commitment to respect the dignity of all and to value differences among members of our academic community. There exists the role of discussion and debate in academic discovery and the right of all to respectfully disagree from time-to-time. Students clearly have the right to take reasoned exception and to voice opinions contrary to those offered by the instructor and/or other students (S.R. 6.1.2). Equally, a faculty member has the right -- and the responsibility -- to ensure that all academic discourse occurs in a context characterized by respect and civility. Obviously, the accepted level of civility would not include attacks of a personal nature or statements denigrating another on the basis of race, sex, religion, sexual orientation, age, national/regional origin or other such irrelevant factors.

Introduction to Evolution

Week	Lecture Topics	Readings
1	Evolution and HIV	Chapter 1
2	Patterns of evolution	Chapter 2
3	Evolutionary theories	Chapter 3
4	Sources of evolution	Chapter 5
5	Exam 1 (Tuesday, 21 September)	
	Population genetics	Chapter 6
6	Population genetics	Chapter 7
7	Adaptation	Chapter 10
7	Sexual selection	Chapter 11
8	Exam 2 (Tuesday, 12 October)	
	Speciation	Chapter 16
	<u>Midterm Grades Posted (based on criteria in syllabus)</u>	
9	Sexual Selection	Chapter 11
10		Behavior
		Chapter 12
11	Cambrian explosion	Chapter 18
12	Exam 3 (Tuesday, 9 November)	
	Human evolution	Chapter 20
13	Human evolution, continued	
14	No class (Thanksgiving break)	
15	Developmental biology and evolution, continued	Chapter 19
16	Evolutionary medicine	Chapter 14
Finals week	Exam 4 (1pm to 3pm; Tuesday, 14 December)	

Introduction to Evolution
Recitation Schedule

Week	Topics
1	No recitation
2	DVD – What Darwin Never Knew.
3	Discussion of assigned reading: Evolution of human sex
4	<i>Exam preparation and review</i>
5	Measuring variation in a population of grove snails
6	DVD – Evolution of the eye; evolution of sex
7	<i>Exam preparation and review</i>
8	Constructing phylogenetic trees: human skulls and conch shells
9	Computer simulation: sexual selection
10	DVD – How the earth was formed
11	<i>Exam preparation and review</i>
12	DVD – The Human Spark
13	Discussion of assigned readings: Evolution of human skin color
14	No recitation (Thanksgiving break)
15	Discussion and readings: Evolution, intelligent design, and creationism
16	DVD – Creation: film based on Randall Keynes's book on Charles Darwin titled "Annie's box"