

1. General Information

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

Date Submitted: 10/14/2013

1b. Department/Division: Arts and Sciences

1c. Contact Person

Name: A Bosch

Email: bosch@uky.edu

Phone: 7-1584

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: A&S 322

2c. Full Title: Special Course in Natural, Physical, or Mathematical Sciences: (SR)

2d. Transcript Title: Spec Crs Nat Sci; subtitle

2e. Cross-listing:

2f. Meeting Patterns

OTHER: 1-6

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

2h. Number of credit hours: 1-6

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

If Yes: Maximum number of credit hours: 12

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

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SENATE COUNCIL

2j. Course Description for Bulletin: An interdisciplinary, topical, or experimental course which may be used toward partial fulfillment of the Natural, Physical, or Mathematical Sciences requirement in the College of Arts and Sciences. Each pilot or experimental course must be approved by the department chair and by the Dean of the College of Arts and Sciences; a particular title may be offered no more than three times under this course number. Open to all university students, subject to controlled enrollment or prerequisites as set by the instructor. May be repeated under different subtitles up to 12 SCH.

2k. Prerequisites, if any: none

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?: Yes

If No, explain:

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?: 15-150

7. Anticipated Student Demand

Will this course serve students primarily within the degree program?: No

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|RHANSON|Roxanna D Hanson|A&S 322 NEW College Review|20131021

SIGNATURE|JMETT2|Joanie Ett-Mims|A&S 322 NEW Undergrad Council Review|20140307

Courses Request Tracking

New Course Form

<https://myuk.uky.edu/sap/bc/soap/fc?services=>

Open in full window to print or save

Generate R

Attachments:

Browse...

Upload File

| | ID | Attachment |
|--------|------|------------------------------------|
| Delete | 1974 | Letter of support - AS 100 300.pdf |
| Delete | 1975 | Memo re A&S 100 etc.docx |
| Delete | 2882 | A&S NAT 320-329.docx |

First 1 Last

Select saved project to retrieve...

Get New

(*denotes required fields)

1. General Information

- a. * Submitted by the College of: ARTS & SCIENCES Submission Date: 10/14/2013
- b. * Department/Division: Arts and Sciences
- c.
 - * Contact Person Name: A Bosch Email: bosch@uky.edu Phone: 7-1584
 - * Responsible Faculty ID (if different from Contact) Email: Phone:
- d. * Requested Effective Date: Semester following approval OR Specific Term/Year¹
- e.
 - Should this course be a UK Core Course? Yes No
 - If YES, check the areas that apply:
 - Inquiry - Arts & Creativity Composition & Communications - II
 - Inquiry - Humanities Quantitative Foundations
 - Inquiry - Nat/Math/Phys Sci Statistical Inferential Reasoning
 - Inquiry - Social Sciences U.S. Citizenship, Community, Diversity
 - Composition & Communications - I Global Dynamics

2. Designation and Description of Proposed Course.

- a. * Will this course also be offered through Distance Learning? Yes¹ No
- b. * Prefix and Number: A&S 322
- c. * Full Title: Special Course in Natural, Physical, or Mathematical Sciences: (SR)
- d. Transcript Title (if full title is more than 40 characters): Spec Crs Nat Sci: subtitle
- e. To be Cross-Listed² with (Prefix and Number):
- f. * Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours³ for each meeting pattern type.

| | | | |
|---------------------------------------|--|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> Lecture | <input type="checkbox"/> Laboratory ¹ | <input type="checkbox"/> Recitation | <input type="checkbox"/> Discussion |
| <input type="checkbox"/> Indep. Study | <input type="checkbox"/> Clinical | <input type="checkbox"/> Colloquium | <input type="checkbox"/> Practicum |
| <input type="checkbox"/> Research | <input type="checkbox"/> Residency | <input type="checkbox"/> Seminar | <input type="checkbox"/> Studio |
| <input type="checkbox"/> 1-6 Other | If Other, Please explain: | | depending on topic |
- g. * Identify a grading system: Letter (A, B, C, etc.) Pass/Fail Graduate School Grade Scale
- h. * Number of credits: 1-6
- i. * Is this course repeatable for additional credit? Yes No
 - If YES: Maximum number of credit hours: 12
 - If YES: Will this course allow multiple registrations during the same semester? Yes No

j. * Course Description for Bulletin:

An interdisciplinary, topical, or experimental course which may be used toward partial fulfillment of the Natural, Physical, or Mathematical Sciences requirement in the College of Arts and Sciences. Each pilot or experimental course must be approved by the department chair and by the Dean of the College of Arts and Sciences; a particular title may be offered no more than three times under this course number. Open to all university students, subject to controlled enrollment or prerequisites as set by the instructor. May be repeated under different subtitles up to 12 SCH.

k. Prerequisites, if any:

none

l. Supplementary teaching component, if any: Community-Based Experience Service Learning Both3. * Will this course be taught off campus? Yes No

If YES, enter the off campus address:

4. Frequency of Course Offering.

a. * Course will be offered (check all that apply): Fall Spring Summer Winter

b. * Will the course be offered every year? Yes No

If No, explain:

5. * Are facilities and personnel necessary for the proposed new course available? Yes No

If No, explain:

6. * What enrollment (per section per semester) may reasonably be expected? 15-150

7. Anticipated Student Demand.

a. * Will this course serve students primarily within the degree program? Yes No

b. * Will it be of interest to a significant number of students outside the degree pgm? Yes No

If YES, explain:

will serve students across campus depending on topic

8. * Check the category most applicable to this course:

Traditional – Offered in Corresponding Departments at Universities Elsewhere

Relatively New – Now Being Widely Established

Not Yet Found in Many (or Any) Other Universities

9. Course Relationship to Program(s).

a. * Is this course part of a proposed new program? Yes No

If YES, name the proposed new program:

b. * Will this course be a new requirement ⁵ for ANY program? Yes No

If YES ⁵, list affected programs:

10. Information to be Placed on Syllabus.

a. * Is the course 400G or 500? Yes No

If YES, the *differentiation for undergraduate and graduate students must be included* in the information required in 10.b. You must include: (i) identify additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See SR

b. * The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable 10.a above) are attached.

- Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.
- The chair of the cross-listing department must sign off on the Signature Routing Log
- In general, undergraduate courses are developed on the principle that one semester hour of credit represents one hour of classroom meeting per week for a semester, exclusive of any laboratory meeting. Laboratory meeting, generally, is two hours per week for a semester for one credit hour. (from SR 5.2.1)
- You must also submit the Distance Learning Form in order for the proposed course to be considered for DL delivery.
- In order to change a program, a program change form must also be submitted.

Rev 8/09

Submit as New Proposal Save Current Changes



Office of Undergraduate
Admission & University Registrar
Funkhouser Building
Lexington, KY 40506-0054

30 May 2013

Whom It May Concern,

Please accept this letter as an endorsement of the College of Arts & Sciences' proposal to realign and increase the number of A&S 100/300-level course offerings into disciplinary areas (Humanities; Natural, Physical or Mathematical Sciences; Social Sciences). Offering experimental courses under the proposed number scheme has several benefits. First, the new number scheme correlates to the number scheme adopted for UK Core experimental courses (UKC 11X – Humanities; UKC 12X – Natural, Physical or Mathematical Sciences; UKC 13X – Social Sciences). Second, the current course number offerings of A&S 100 and A&S 300 are prohibitive with regard to application in the degree audit system (APEX). The degree audit does not have the programming possibility to identify courses at the section level, leaving Registrar's Office staff attempting to identify A&S 100/300 courses by use of title checks which can be problematic if the same course is offered in two different terms under A&S 100/300 and the title has been altered in the slightest fashion. The proposed number scheme for A&S experimental courses would alleviate this issue by allowing degree audit programming to identify the A&S 100- and 300-level courses by course number and appropriately applying the course to specified degree requirement(s). It is for these reasons we support this proposal.

Please do not hesitate to contact us if you have any further questions.

A handwritten signature in black ink, appearing to read 'Sean Cooper'.

Sean Cooper
Associate Registrar for Student Records

A handwritten signature in black ink, appearing to read 'Mike Shanks'.

Mike Shanks
Associate Registrar for Transfer Equivalency &
Degree Planner/APEX

Memo re: A&S 100/300 course proposals

To: Members of the A&S Educational Policy Committee, Undergraduate Council, Senate Council
From: Anna Bosch, Associate Dean for Undergraduate Programs
Re: Experimental course numbers A&S 100 and A&S 300: Adding course numbers to permit a range of courses in three subject areas of inquiry (Hum, SocSci, NatSci), cf. UKC course numbers

Currently the College of Arts and Sciences has three variable-credit course numbers available to enable A&S departments to offer a new course as a pilot or experiment: A&S 100, 300, and 500. In many cases an A&S-number is used while a course is piloted, or during the inevitable delay while the paperwork for permanent course approval wends its way through the University approval process. According to College policy, A&S-prefixed experimental courses may be offered up to 3 times under a single title; after the third semester the course must be discontinued or the paperwork must be submitted for the course to have its own permanent name and number.

These course numbers are used quite frequently: in the past 4 semesters, we have offered as many as 25 separate sections of A&S 100 in a given semester; each separate course is distinguished by its own section number. However, the use of a single course number (A&S 100) creates practical problems for advising and for APEX/degree auditing processes. Further, section numbers are not included on student transcripts.

For example, during the transition to the UK Core curriculum, when quite a few new UK Core courses were piloted as A&S 100, it was not uncommon for entering freshmen to have two or three different courses all labeled "A&S 100" on their transcripts for a single semester. In addition, it is impossible for the Registrar's office to accommodate separate prerequisites for separate section numbers; thus, separate and distinct sections of A&S 300 could not require distinct prereqs. In addition, each semester the dean must contact Team APEX to identify which A&S 100/300 courses count towards the college disciplinary requirements (Humanities; Social Science; or Natural, Physical, and Mathematical Sciences); and students do not have access to this information when planning their schedules.

Proposal: We propose to create a range of A&S 100 and 300 courses, which will provide up to ten separate course numbers in each of the three subject areas of Humanities; Social Sciences; and Natural, Physical, and Mathematical Sciences, at both the 100 and at the 300 level. We propose to number our new A&S-prefix courses with the same numerical series as the UKC experimental course numbers, for overall consistency. Two sample syllabi are provided for each of the three disciplinary areas; one at the 100-level and one at the 300-level. Variable-credit courses will conform to senate regulations for contact hours.

Thus:

Humanities = A&S 110 through 119, and A&S 310 through 319

Natural, Physical, or Mathematical Sciences = A&S 120 through 129, and A&S 320 through 329

Social Sciences = A&S 130 through 139, and A&S 330 through 339

The College regulations for scheduling these courses will be as follows: An experimental course will require approval of the department chair and the Dean of the College; and may not be offered more than 3 times under a pilot number. These new A&S course numbers will be coded in APEX to count automatically towards the relevant 'distribution requirements' (humanities, social sciences, natural sciences...) for A&S majors.

We plan to retain the current A&S 100 and A&S 300 numbers to use when needed for experimental distance learning courses; these course numbers are already approved for distance learning delivery.

HUM: A&S 110 through 119: Special Introductory Course in Humanities: (SR) (1-6 credit hours)
An introductory course of an interdisciplinary, topical, or experimental nature which may be used toward partial fulfillment of the Humanities requirement in the College of Arts and Sciences. Each pilot or experimental course must be approved by the department chair and by the Dean of the College of Arts and Sciences; a particular title may be offered no more than three times under this course number. Open to all university students, subject to controlled enrollment or prerequisites as set by the instructor. May be repeated under different subtitles up to 12 SCH.

HUM: A&S 310 through 319: Special Course in Humanities: (SR) (1-6 credit hours)
An interdisciplinary, topical, or experimental course which may be used toward partial fulfillment of the Humanities requirement in the College of Arts and Sciences. Each pilot or experimental course must be approved by the department chair and by the Dean of the College of Arts and Sciences; a particular title may be offered no more than three times under this course number. Open to all university students, subject to controlled enrollment or prerequisites as set by the instructor. May be repeated under different subtitles up to 12 SCH.

NAT/PHYS/MA: A&S 120 through 129: Special Introductory Course in the Natural, Physical, or Mathematical Sciences: (SR) (1-6 credit hours)
An introductory course of an interdisciplinary, topical, or experimental nature which may be used toward partial fulfillment of the Natural, Physical, or Mathematical Sciences requirement in the College of Arts and Sciences. Each pilot or experimental course must be approved by the department chair and by the Dean of the College of Arts and Sciences; a particular title may be offered no more than three times under this course number. Open to all university students, subject to controlled enrollment or prerequisites as set by the instructor. May be repeated under different subtitles up to 12 SCH.

NAT/PHYS/MA: A&S 320 through 329: Special Course in Natural, Physical, or Mathematical Sciences: (SR) (1-6 credit hours)
An interdisciplinary, topical, or experimental course which may be used toward partial fulfillment of the Natural, Physical, or Mathematical Sciences requirement in the College of Arts and Sciences. Each pilot or experimental course must be approved by the department chair and by the Dean of the College of Arts and Sciences; a particular title may be offered no more than three times under this course number. Open to all university students, subject to controlled enrollment or prerequisites as set by the instructor. May be repeated under different subtitles up to 12 SCH.

SOC: A&S 130 through 139: Special Introductory Course in Social Sciences: (SR) (1-6 credit hours)
An introductory course of an interdisciplinary, topical, or experimental nature which may be used toward partial fulfillment of the Social Sciences requirement in the College of Arts and Sciences. Each pilot or experimental course must be approved by the department chair and by the Dean of the College of Arts and Sciences; a particular title may be offered no more than three times under this course number. Open to all university students, subject to controlled enrollment or prerequisites as set by the instructor. May be repeated under different subtitles up to 12 SCH.

SOC: A&S 330 through 339: Special Course in Social Sciences: (SR) (1-6 credit hours)

An interdisciplinary, topical, or experimental course which may be used toward partial fulfillment of the Social Sciences requirement in the College of Arts and Sciences. Each pilot or experimental course must be approved by the department chair and by the Dean of the College of Arts and Sciences; a particular title may be offered no more than three times under this course number. Open to all university students, subject to controlled enrollment or prerequisites as set by the instructor. May be repeated under different subtitles up to 12 SCH.

Sample Course Syllabi attached with proposal:

(these courses have been piloted under the A&S 100 or 300 number between Fall 2011 and Spring 2013)

A&S 110 (Humanities): War and Peace in Russia's Realms (2SCH), Dr. Karen Petrone, History

A&S 310 (Humanities): Jewish Rhetorics, Dr. Jan Fernheimer, English and WRD

A&S 120 (Natural, Physical, and Mathematics Sciences): Measuring Science (2SCH), Dr. Michael Cavagnero, Physics and Astronomy

A&S 320 (Natural, Physical, and Mathematics Sciences): Science on TV, Dr. Mark Lovell, Chemistry

A&S 130 (Social Science): Violence and Peace (2SCH), Dr. Cristina Alcalde, Gender and Women's Studies

A&S 330 (Social Science): An International Perspective on Refugees and Humanitarianism, Dr. Sasikumar Balasundaram, Postdoctoral Scholar in the UK Appalachian Center

Cc: Dr. Carl Lee, Chair of A&S Educational Policy Committee
Dr. Mark Kornbluh, Dean, College of Arts and Sciences
Dr. Karen Badger, Chair of Undergraduate Council
Dr. Ben Withers, Interim Associate Provost for Undergraduate Education
Dr. Lee Blonder, Chair of UK Senate

A&S 320 - 001 /fall
Special Course in Natural, Physical or Mathematical Sciences: (subt req)
Introduction to Evolution

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; AS 320-002, W, noon to 1:50pm; AS 300-003, W, 2pm to 3:50pm

AS 320-004, F, noon to 1:50pm; AS 300-005, F, 3pm to 4:50pm

Bulletin Description

An interdisciplinary, topical, or experimental course which may be used toward partial fulfillment of the Natural, Physical, or Mathematical Sciences requirement in the College of Arts and Sciences. Each pilot or experimental course must be approved by the department chair and by the Dean of the College of Arts and Sciences; a particular title may be offered no more than three times under this course number. Open to all university students, subject to controlled enrollment or prerequisites as set by the instructor. May be repeated under different subtitles up to 12 SCH.

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.

Student 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**

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 lecture 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. **Midterm grades** will be posted no later than XXXX date

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*.

Mid-term grades will be posted in myUK by the deadline established in the Academic Calendar (<http://www.uky.edu/Registrar/AcademicCalendar.htm>)

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.

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: humid 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" |

A&S 320 - 001 /fall
Special Course in Natural, Physical or Mathematical Sciences: (subt req)
Introduction to Evolution

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; AS 320-002, W, noon to 1:50pm; AS 300-003, W, 2pm to 3:50pm

AS 320-004, F, noon to 1:50pm; AS 300-005, F, 3pm to 4:50pm

Bulletin Description

An interdisciplinary, topical, or experimental course which may be used toward partial fulfillment of the Natural, Physical, or Mathematical Sciences requirement in the College of Arts and Sciences. Each pilot or experimental course must be approved by the department chair and by the Dean of the College of Arts and Sciences; a particular title may be offered no more than three times under this course number. Open to all university students, subject to controlled enrollment or prerequisites as set by the instructor. May be repeated under different subtitles up to 12 SCH.

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.

Student 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**

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 lecture 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. **Midterm grades** will be posted no later than XXXX date

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*.

Mid-term grades will be posted in myUK by the deadline established in the Academic Calendar (<http://www.uky.edu/Registrar/AcademicCalendar.htm>)

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.

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 |
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