BIOL 1309: Life on Earth  
Synonym: 10754, Section: 008  
Lecture: MTuWTh 2:00 to 3:50 pm  
RRHEC AVRY 258  
Summer 2010

Instructor: Bernice Speer

Office: RRHEC, AVRY 456

Office Hours: MTuWTh 11:20-11:50 am  
Monday 4:00-5:30 pm  
Wednesday 4:00-4:30 pm  
Thursday 4:00-6:00 pm  
Other hours by appointment

Phone Numbers:  
Home: 255-6827 (leave messages on answering machine)  
RRHEC 716-4642 (only during office hours)  
RVS office 223-6297 (voice mail only; not at RVS this semester)  
Fax: 255-1849 (home fax); please e-mail me when you fax

e-mail: bspeer@austincc.edu

Web page: http://www.austincc.edu/bspeer

Course Description:
A survey of the living organisms on our planet for the non-science major. Emphasis on evolutionary and natural history, structural and behavioral adaptations, biological diversity and co-evolution.

Prerequisites:
This course requires college level reading and writing skills. You must have: (1) at least a 5 or above on both the ACC reading and writing assessment tests, or (2) passed both the reading and writing portions of the TASP, or (3) are exempt from the TASP. If you do not meet these requirements, you may be withdrawn from the course

Course Rationale:
This course was designed for students who are primarily non-science majors. Through the use of lectures, good science videos and web-based homework assignments, students are introduced to the organisms that inhabit this planet, their characteristics, their evolutionary relationships and their adaptation to life on earth.

Specific skills and competencies expected of students who complete this course include:
- ability to explain evolutionary relationships among different organisms
- ability to discuss adaptations, using several different examples
- ability to observe phenomena and to record information
- ability to apply biological concepts to new examples
- ability to demonstrate higher level thinking skills
Common Course Objectives:  All faculty teaching a biology course at ACC have agreed upon common course objectives. They outline the minimal course content that all instructors must teach. To view the common course objectives for BIOL 1309, go to http://www2.austincc.edu/biology/ccobjectives and click on the BIOL 1309 link.

Instructional Methodology:
This course is taught in the classroom as a lecture course.

ACCeID
You will need an ACCeID to use the Blackboard site and ACC Online.

If you don't already have an ACCeID, go to the ACCeID Manager Login at: https://acceid.austincc.edu/idm/user/login.jsp

Click on "First-Time Login" and follow the instructions. You must be able to access Blackboard.

Blackboard Site:
A Blackboard site has been set up for this class. I will use Blackboard to post announcements, class materials and your grades. I will also use Blackboard to send e-mails to the class.

For this reason, you must use your ACC e-mail address. That is the only e-mail address that Blackboard will use and the only e-mail address that will be used to send out official notices and feedback.

Information about the ACC e-mail can be found at: http://www.austincc.edu/google/

You can have your ACC e-mail forwarded to another e-mail address if you prefer. See more information at: http://mail.google.com/support/bin/answer.py?hl=en&answer=10957

To get started on Blackboard, go to the login site at: http://acconline.austincc.edu/ and click on the "Student Guide – Getting Started with Blackboard" link. This will help you set up your Blackboard account and get you to the course site. If you need help, call the ACC Help Desk at 223-HELP.

Please put my e-mail address into your address book or your Spam Blocker may block my e-mails.

You are expected to check Blackboard on a regular basis. I will post required class materials on Blackboard, including material for you to read or web sites to explore. If I post online lecture notes on Blackboard, I will not cover the same material in class unless you have questions.

You can also use Blackboard to keep in touch with other students who are enrolled in this course to form real or virtual study groups. You can post questions and comments to everyone through the Blackboard class discussion groups or you can use the real time Chat Room from this site.
**Required Course Materials:**
(1) Textbook: there is no formal textbook for the course. On the Blackboard site for this class, I have posted textbook readings that are specific for this section.

(2) A set of colored pencils with at least 20 different colors. You will need these for homework.

**Grading Criteria:**
Your final grade depends on the total number of points you accumulate from these sources:

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<tbody>
<tr>
<td><strong>Lecture Exams</strong></td>
<td>500 points</td>
</tr>
<tr>
<td><strong>Homework Assignments</strong></td>
<td>225 points</td>
</tr>
<tr>
<td><strong>Total for Course</strong></td>
<td>725 points</td>
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</table>

**Grading Scale:**
90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; < 60% = F

Since I do provide extra credit activities throughout the semester, I do not round grades or curve scores. Your grade is based on the points that you accumulate during the semester.

**Lecture Exams**
There will be five lecture exams, each worth 100 points. The exam dates are listed in the schedule. The exam format will be a combination of objective questions (such as multiple-choice, true-false, and matching questions) and written questions (such as short answer, essay, flow-charting and drawing). The exams will be based on the information covered during the unit, whether presented in lecture, through videos, in readings or articles, in homework assignments or in the study objectives for the unit. You will be expected to spell all terms correctly in order to receive full credit.

**Optional Final:**
An optional comprehensive final will be given at the end of the semester for any student who wants to try to improve an exam grade. The grade from the final exam will substitute for one of the regular exam grades if the final exam grade is higher. This policy does **not** apply to an exam that the student has missed and did not make up (i.e., an exam with a grade of 0). If you have an exam with a grade of 0, the final grade will be substituted for the next lowest non-zero exam grade, if the final grade is higher.

**Homework Assignments:**
You will regularly be given homework assignments in class that pertains to the material we are covering. Most of these assignments will require Internet access; some may require a high speed connection in order to work.

The homework assignments are developed with certain goals in mind: (1) to help you prepare for lecture and keep you on task in your studying, (2) to introduce higher-level thinking activities, (3) to bring in additional or updated materials that relate to course objectives, and (4) to help you relate the material in class to the real world. The homework assignments also serve as a good study guide for the optional final.
The homework assignments will take time to finish, so don’t wait until the last minute to work on them! As a general rule, homework assignments will be due at the beginning of the next class period. The homework assignments are due at the beginning of class. I accept only one assignment late for credit; other late assignments will not be accepted for credit. A late assignment will not be accepted after we have discussed it in class or the key is posted in Blackboard. It is your responsibility to keep track of the deadlines. If you know that you are going to miss class, you can turn your homework in at the mailroom on the 4th floor (make sure it is date stamped), fax it to me, or scan it and send via e-mail. If you fax or scan, please bring the originals to the next class. Please note: I will accept no more than 25% of your homework assignments turned in outside of class.

A significant part of your grade is based upon homework. Many of the homework assignments use web pages. If you have trouble accessing a web page, you may need to use another computer or check to make sure that your computer has not blocked pop-ups on these sites.

Extra Credit:
If you chose, you can go on a self-guided field trip for up to 20 points of extra credit. Additional information will be posted on Blackboard about field trip activities after completion of our third unit exam. The amount of extra credit that you earn depends on participation in the scheduled activities and completion of the written assignment. I also usually ask a few extra credit questions on the exams. No other extra credit is available.

Makeup Exams:
You can miss one lecture exam and make it up. Use this wisely because you will not be able to make up two exams, regardless of your reasons. Makeup exams will be given in the RRHEC Testing Center. You must schedule and take the makeup exam within one week of the original test deadline. Makeup exams will be primarily written in nature (fill-in-the-blanks, short answer and essay questions).

Timely Return of Papers:
Graded exams and assignments will be returned within one week, if not sooner. I will post your grades on Blackboard as soon as I have finished grading an assignment or an exam.

Attendance Policy:
Everyone is expected to attend and participate in lecture activities. If you do not do so, you should not expect to succeed in the course. You are responsible for all materials, activities, assignments, or announcements covered in class, regardless of your reason for being absent or late. If you do miss a class, be sure and ask another student for lecture notes and get any handouts from me.

Class Participation and Expectation:
As part of my personal philosophy in teaching non-science major classes, I feel that a typical class should involve a mixture of different components. While part of a typical class period may involve “traditional” lecture, I will also use media, classroom assessment activities and small group activities on a regular basis. It is important for each student to participate actively in class activities to gain the most benefit from them. So jump in and get your hands on the stuff, engage your mind, talk and discuss. We tend to put things into long-term memory that we find
interesting or experienced through hands-on and visual experiences. In short: Passive behavior ≠ learning! You are expected to work cooperatively with other students in the class. By helping your fellow students, you will learn the material better.

To pass the course (with a grade of 70% C), you should expect to spend at least 2-3 hours outside of class for every hour spent in class. For this class, that means a minimum of 6-9 hours of quality, undisturbed study time outside of class per week to complete homework assignments, read the required materials, study and prepare for exams.

Withdrawal Policy:
You are responsible for monitoring your progress in the course and determining if you need to withdraw. You are responsible for the paperwork. You can do this at any ACC admissions and records office. My signature is not required. If you stop attending class and do not withdraw yourself from the course, you will end up with a grade of F for the semester.

I do NOT withdraw students from the course unless:

(1) I do not receive signed student information sheet by the end of the first week (Thursday),
(2) Safety policies are not followed in the classroom, or
(3) A student is disruptive in class, creating an environment that is not conducive for learning.

The instructor reserves the right to withdraw students who miss exams and do not take scheduled make-up exams.

If you are dropped for such reasons, you will not be reinstated into the course.

Retroactive withdrawals will not be given in this class. The last day to withdraw for the semester is June 30, 2010. If you do drop the class, please keep your paperwork until you have received your grade report at the end of the semester.

Reinstatement Policy:
If I drop you for any reason, I will not reinstate you. If you are dropped for non-payment, you will not be reinstated into the course.

Note from the Catalog:
Per state law, students enrolling for the first time in fall 2007 or later at any Texas college or university may not withdraw (receive a W) from more than six courses during their undergraduate college career. Some exceptions for good cause could allow a student to withdraw from a course without having it count toward this limit. Students are encouraged to carefully select courses; contact an advisor or counselor for assistance.

Third Course Attempt and Tuition
Per state law, effective spring 2006 any student taking a class for the third time or more may be charged an additional $60 per credit hour unless exempted. This is the Rule of Three or Third Course Attempt. There is more information at http://www.austincc.edu/support/admissions/thirdattempt/index.php
Incomplete Grade Policy:
Incomplete grades are rarely given in this class, will be given solely at my discretion, and only if a major emergency comes up towards the end of the semester after the withdrawal deadline.

An incomplete (I) will be assigned only if:
1) You have a valid reason and I agree to give an incomplete grade,
2) You request an incomplete, with written documentation,
3) You have completed more than 60% of the course work,
4) You have at least a C (70%) average on completed work, and
5) The reason for your request occurred after the official drop deadline for the semester,
6) You provide all documentation and sign the required form prior to the last day of class.

Be aware that incompletes that are not finished convert automatically to F grades, regardless of your class average when you request the incomplete. Once you receive an incomplete grade, it will not be converted into a withdrawal for any reason.

Scholastic Dishonesty:
Acts prohibited by the college for which discipline may be administered include scholastic dishonesty, including but not limited to, cheating on an exam or quiz, plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their thought, research or self-expression. Academic work is defined as, but not limited to, tests, quizzes, whether taken electronically or on paper; projects, either individual or group; classroom presentations; and homework.

I treat acts of scholastic dishonesty following the policies outlined in the ACC Student Handbook. For information on those policies, see http://www.austincc.edu/handbook/

Academic Freedom
Institutions of higher education are conducted for the common good. The common good depends upon a search for truth and upon free expression. In this course the professor and students shall strive to protect free inquiry and the open exchange of facts, ideas, and opinions. Students are free to take exception to views offered in this course and to reserve judgement about debatable issues. Grades will not be affected by personal views. With this freedom comes the responsibility of civility and a respect for diversity of ideas and opinions. This means that students must take turns speaking, listen to other speak without interruption, and refrain from name-calling or other personal attacks.

Students with Disabilities
Each ACC campus offers support services for students with documented physical or psychological disabilities. Students with disabilities must request reasonable accommodations through the Office of Students with Disabilities on the campus where they expect to take the majority of their classes. Students are encouraged to do this three weeks before the start of the semester.

Students who are requesting accommodation must provide the instructor with a letter of accommodation from the Office of Students with Disabilities (OSD) at the beginning of the semester. I cannot provide you with accommodations for your disability until I receive the letter of accommodation. Please see the staff in the OSD for more information.
Safety
Health and safety are paramount values in ACC classrooms, libraries, testing centers and other areas. Students are expected to learn, understand and comply with environmental, health and safety (EHS) procedures and protocols, and must agree to abide by the ACC safety policies. Students are expected to conduct themselves with appropriate professional behavior and with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be immediately asked to leave a room or campus, may be withdrawn from the class, and/or barred from attending all activities. ACC’s emergency instructions can be found at: http://www.austincc.edu/handbook/emergency.php

Student Services at ACC:
To find out more about services for students at ACC, you can visit the Student Services web site at:

http://www.austincc.edu/resources_students/services.php

Instructional Services:
Other on-line sources you may find useful include:

(1) Services for Students at: http://www.austincc.edu/cataloghtml/services.php

(2) The ACC student handbook can be found at: http://www.austincc.edu/handbook/

(3) Campus-based Student Support Services Overview:
http://www.austincc.edu/faculty/newsemester/pdfs/ssover.pdf

Testing Center Policy:
You will only use the Testing Center for makeup exams and only at this campus. You can find more information about the testing centers at

http://www2.austincc.edu/testctr/

The complete student guide for use of the ACC testing centers is located on pages 19-20 of this syllabus. It can also be found at this web page:
http://www.austincc.edu/testctr/documents/STUDENTGUIDEFOREUSEOFACCTESTINGCENTERMemporarybaa_001.pdf

ACC Policy Concerning Copyrighted Materials:
ACC policy concerning copyrighted materials: All class materials provided on ACC web pages, electronic reserves, on diskette, and in printed form are copyrighted and may not be reproduced without the written consent of the copyright holder. Reproduction means photocopying, scanning, copying downloaded files, or posted any of these on a server (web site). Each student currently enrolled in this section of BIOL 1309 is hereby given permission to download and print one copy of the materials from the Blackboard site for his/her own use.
BLOOM’S TAXONOMY

1.00 KNOWLEDGE (remembering previously learned material)
   1.10 Knowledge of specifics
      1.11 Knowledge of terms
      1.12 Knowledge of specific facts
   1.20 Knowledge of ways and means of dealing with specifics
      1.21 Knowledge of conventions
      1.22 Knowledge of trends and sequences
      1.23 Knowledge of classifications and categories
      1.24 Knowledge of criteria
      1.25 Knowledge of methodology
   1.30 Knowledge of the universals and abstractions in a field of study
      1.31 Knowledge of principles and generalizations
      1.32 Knowledge of theories and structures

2.00 COMPREHENSION (grasping the meaning of material)
   2.10 Translation (converting from one form to another)
      2.11 Interpretation (explaining or summarizing material)
      2.12 Extrapolation (extending the meaning beyond the data)

3.00 APPLICATION (using information in concrete situations)

4.00 ANALYSIS (breaking down material into its parts)
   4.10 Analysis of elements (identifying the parts)
   4.20 Analysis of relationships (identifying the relationships)
   4.30 Analysis of organizational principles (identifying the way the parts are organized)

5.00 SYNTHESIS (putting parts together into a whole)
   5.10 Production of a unique communication
   5.20 Production of a plan or proposed set of operations
   5.30 Derivation of a set of abstract relationships

6.00 EVALUATION (judging the value of a thing for a given purpose using definite criteria)
   6.10 Judgments in terms of internal evidence
   6.20 Judgments in terms of external criteria

What is Bloom’s Taxonomy? This is a standard model that attempts to place cognitive skills (mental thinking skills) into categories. Bloom’s Taxonomy has six levels of thinking, going from the simplest level of thinking (knowledge) to the most complex level (evaluation). Each level requires more of our thinking skills and incorporates the previous levels as well. When people use the terms “problem-solving” or “critical thinking”, they are usually referring to these higher-level thinking skills.

There are several other models for cognitive skills but Bloom’s Taxonomy is widely used. In college, students are expected to work beyond the knowledge level (lowest category) and use higher-level thinking skills. See Blackboard for specific examples of how questions over the same material can be written at different levels.
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<thead>
<tr>
<th>Date</th>
<th>Lecture Topic</th>
<th>Homework</th>
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<tbody>
<tr>
<td>June 1</td>
<td>Introduction, Syllabus, What is Science? Evolution</td>
<td>HW 1</td>
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<tr>
<td>June 2</td>
<td>Natural Selection Species &amp; Speciation</td>
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<td>June 3</td>
<td>Evolutionary History Taxonomy</td>
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<td>June 7</td>
<td>Review Homework #3</td>
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<tr>
<td></td>
<td><strong>Exam 1</strong></td>
<td>(turn in HW 3)</td>
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<tr>
<td>June 8</td>
<td>Systematics and Phylogenetic Trees Species Interactions</td>
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<td>June 9</td>
<td>Prokaryotes Protists (the first Eukaryotes)</td>
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<td>June 10</td>
<td>Fungi</td>
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<td>June 14</td>
<td>Review Homework #6</td>
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<tr>
<td></td>
<td><strong>Exam 2</strong></td>
<td>(turn in HW 6)</td>
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<tr>
<td>June 15</td>
<td>Evolution of Plants; Mosses, ferns and horsetails</td>
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<td>June 16</td>
<td>Gymnosperms Angiosperms 1</td>
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<td>June 17</td>
<td>Angiosperms 2</td>
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<tr>
<td>June 21</td>
<td>Review Homework #9</td>
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<tr>
<td></td>
<td><strong>Exam 3</strong></td>
<td>(turn in HW 9)</td>
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<tr>
<td>June 22</td>
<td>Introduction to Animals</td>
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<td>June 23</td>
<td>Invertebrates 1</td>
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<td>June 24</td>
<td>Invertebrates 2</td>
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<tr>
<td>June 28</td>
<td>Review Homework #12</td>
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<tr>
<td></td>
<td><strong>Exam 4</strong></td>
<td>(turn in HW 12)</td>
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<tr>
<td>June 29</td>
<td>Echinoderms and Chordates Vertebrates 1: Fishes</td>
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<tr>
<td>June 30</td>
<td>Vertebrates 2: Amphibians, Reptiles and Birds</td>
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<tr>
<td>July 1</td>
<td>Vertebrates 3: Mammals</td>
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<tr>
<td>July 5</td>
<td>Review Homework #15</td>
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<tr>
<td></td>
<td><strong>Exam 5</strong></td>
<td>(turn in HW 15)</td>
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<tr>
<td>July 6</td>
<td>Review Exam 5; Optional field trip reports due</td>
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<tr>
<td>July 7</td>
<td><strong>Optional final</strong></td>
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This schedule may change. If changes are made, you will be notified in class or through Blackboard.

All ACC campuses will be closed on Sunday, July 4.

Please note that late homework will not be accepted for credit once we have gone over the correct answers during class or if an answer key is posted on Blackboard.