**APPENDIX D—BIOLOGY SYLLABI**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 198V</td>
<td>Research Experience (RPMS)</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>BIOL 1063</td>
<td>Intro to Biology</td>
<td>Summer 2015</td>
</tr>
<tr>
<td>BIOL 1071</td>
<td>Intro to Biology Lab</td>
<td>Summer 2015</td>
</tr>
<tr>
<td>BIOL 1102</td>
<td>Medical Terminology</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>BIOL 2041</td>
<td>Principles of Biology I Lab</td>
<td>Fall 2014</td>
</tr>
<tr>
<td>BIOL 2053</td>
<td>Principles of Biology I</td>
<td>Fall 2014</td>
</tr>
<tr>
<td>BIOL 2083</td>
<td>Principles of Biology II</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>BIOL 2091</td>
<td>Principles of Biology II Lab</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>BIOL 2143</td>
<td>Botany</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>BIOL 2153</td>
<td>Zoology</td>
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<tr>
<td>BIOL 2161</td>
<td>Zoology Lab</td>
<td>Summer 2015</td>
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<tr>
<td>BIOL 2171</td>
<td>Botany Lab</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>BIOL 2233</td>
<td>A&amp;P I</td>
<td>Summer 2015</td>
</tr>
<tr>
<td>BIOL 2243</td>
<td>A&amp;P II</td>
<td>Summer 2015</td>
</tr>
<tr>
<td>BIOL 2291</td>
<td>A&amp;P I Lab</td>
<td>Summer 2015</td>
</tr>
<tr>
<td>BIOL 2414</td>
<td>A&amp;P II Lab</td>
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<td>BIOL 3331</td>
<td>Molecular Biology Lab</td>
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<td>BIOL 3333</td>
<td>Molecular Biology</td>
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<tr>
<td>BIOL 3324</td>
<td>Ornithology/Mammalogy</td>
<td>Spring 2002</td>
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<td>BIOL 3354</td>
<td>Genetics</td>
<td>Fall 2014</td>
</tr>
<tr>
<td>BIOL 3363</td>
<td>Cell Biology</td>
<td>Spring 2015</td>
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<tr>
<td>BIOL 3384</td>
<td>Herpetology</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>BIOL 3394</td>
<td>Ichthyology</td>
<td>Fall 2014</td>
</tr>
<tr>
<td>BIOL 3414</td>
<td>Mammalogy</td>
<td>Fall 2013</td>
</tr>
<tr>
<td>BIOL 3423</td>
<td>Plant Morphology</td>
<td>Spring 1993 (Syllabus not available)</td>
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<tr>
<td>BIOL 3434</td>
<td>Regional Flora</td>
<td>Spring 2015</td>
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<tr>
<td>BIOL 3451</td>
<td>Mammalogy Lab</td>
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<td>BIOL 3484</td>
<td>Ecology</td>
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<td>BIOL 3493</td>
<td>Environmental Science</td>
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<td>BIOL 3503</td>
<td>Marine Biology</td>
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<tr>
<td>BIOL 3511</td>
<td>Marine Biology Lab</td>
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</tr>
<tr>
<td>BIOL 3524</td>
<td>Ornithology</td>
<td>Spring 2014</td>
</tr>
<tr>
<td>BIOL 3553</td>
<td>Microbiology</td>
<td>Spring 2015</td>
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<td>BIOL 3561</td>
<td>Microbiology Lab</td>
<td>Spring 2015</td>
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<tr>
<td>BIOL 3574</td>
<td>Comparative Anatomy</td>
<td>Fall 2014</td>
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<tr>
<td>BIOL 358V</td>
<td>Natural History</td>
<td>Spring 2015</td>
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<tr>
<td>BIOL 3594</td>
<td>Invertebrate Zoology</td>
<td>Spring 2013</td>
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55
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Term</th>
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</thead>
<tbody>
<tr>
<td>BIOL 3763</td>
<td>Evolution</td>
<td>Spring 2015</td>
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<tr>
<td>BIOL 3801</td>
<td>Mammalian Anatomy Lab</td>
<td>Fall 2004</td>
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<td>BIOL 4594</td>
<td>Waterfowl Ecology</td>
<td>Spring 2015</td>
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<td>BIOL 4624</td>
<td>Vertebrate Embryology</td>
<td>Spring 2002 (Syllabus not available)</td>
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<td>BIOL 4634</td>
<td>Vertebrate Physiology</td>
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<td>BIOL 4664</td>
<td>Mammalian Histology</td>
<td>Fall 2006</td>
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<td>BIOL 4673</td>
<td>Pharmacology</td>
<td>Spring 2015</td>
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<tr>
<td>BIOL 469V</td>
<td>Senior Research</td>
<td>Summer 2015</td>
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<td>BIOL 4724</td>
<td>Aquatic Biology</td>
<td>Spring 2012</td>
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<td>BIOL 4734</td>
<td>Animal Behavior</td>
<td>Spring 2005</td>
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<td>BIOL 4741</td>
<td>Biology Seminar</td>
<td>Spring 2015</td>
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<tr>
<td>BIOL 4753</td>
<td>Selected Topics in Biology</td>
<td>Fall 2006 (Syllabus not available)</td>
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<td>BIOL 479V</td>
<td>Independent Study</td>
<td>Spring 2002 (Syllabus not available)</td>
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<td>BIOL 5014</td>
<td>Waterfowl Ecology (Grad)</td>
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<tr>
<td>BIOL 5024</td>
<td>Herpetology (Grad)</td>
<td>New course</td>
</tr>
<tr>
<td>BIOL 5144</td>
<td>Mammalogy (Grad)</td>
<td>Fall 2009</td>
</tr>
<tr>
<td>BIOL 5344</td>
<td>Ornithology (Grad)</td>
<td>Spring 2014</td>
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</table>
Instructor Name: Marvin Fawley, Ph.D
Instructor Location of Office: Museum of Natural History, Room 101
Instructor Phone: 870-460-1165
Instructor E-mail Address: fawleym@uamont.edu
Instructor Website: http://www.uamont.edu/facultyweb/fawley
Office hours: Tuesday 9:00-11:00 or by arrangement.

Course Title and Credit Hours: Research Experience for RPMS Students – Biol 198v, 1 credit
Course Description: An introduction to scientific research. Students will participate in laboratory work on a DNA sequencing project and present their results in a regional research meeting.
Prerequisites: none
Required Textbook: none
Student Learning Outcomes: Ability to generate scientific hypotheses, perform technical activities associated with a DNA sequencing project, analyze data and present results.

Statement of Special Policies:

Class Attendance: Attendance is required and graded. If you are ill or have a legitimate reason for missing the scheduled class time you will be able to make up the class at a different time. You must contact the instructor no later than the day of the class to reschedule. Chronic tardiness may result in points off your grade. You will be notified if points may be lost due to absences or chronic tardiness.

Classroom Policies: Use of tobacco products is not permitted on UAM grounds. Cell phones and all electronic communication devices should be turned off and put away during class.

Cheating/Plagiarism: Cheating will not be tolerated. Falsification or fabrication of data is considered academic dishonesty in this class. The Academic Dishonesty policy found on page 3 of this syllabus will be applied to all activities.

Tentative schedule of topics

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 12</td>
<td>Introduction to science and research</td>
</tr>
<tr>
<td>Jan. 19</td>
<td>Introduction to the research topic</td>
</tr>
<tr>
<td>Jan. 26</td>
<td>DNA isolation</td>
</tr>
<tr>
<td>Feb. 2</td>
<td>Polymerase Chain Reaction</td>
</tr>
</tbody>
</table>
Feb. 9     Set up DNA sequencing  
Feb. 16    Additional PCR and sequencing  
Feb. 23    Data analysis  
Mar. 2     Hypothesis evaluation  
Mar. 9     Additional data collection, if necessary  
Mar. 16    Literature search/discussion  
Mar. 23    Spring Break!  
Mar. 30    Poster preparation  
Apr. 6     Presentation at Arkansas Academy of Sciences meeting  
Apr. 13    Break  
Apr. 20    Recap and future work  

Special assignments (trips): Arkansas Academy of Science Meeting, April 10-11, Henderson State University, Arkadelphia.

Grading Policy:

No exams will be given in this course. Evaluation is explained below.

Grading scale (%)  
90-100   A  
80-90    B  
70-80    C  
60-70    D  
Below 60  F

Attendance is required and each week is worth 10 points. The final poster and presentation at the AAS meeting will also be evaluated and is worth 100 pts. The final grade will be based on the average of the attendance, participation, and poster/presentation.

Special dates of concern:

Wednesday, January 7    First day of classes.  
Monday, January 19      Martin Luther King, Jr. Day  
Tuesday, January 9      Last day to register of add classes.  
Friday, February 27     Deadline to file for Aug and Dec 2015 graduation  
M-F (March 23-27)        Spring Break!  
Wednesday, March 18     Last day to drop W.  
Monday, April 6          Preregistration for Fall and Summer 2013 begins  
Friday, April 17         Preregistration for Fall and Summer 2013 ends.
Tuesday, April 28  Last day of classes.
W-T, Apr 29-May 5  Final exam period.
Friday, May 8  Commencement

Students with disabilities:

It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University's commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.

For assistance on a College of Technology campus contact:
McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105.
Crossett: Office of Special Student Services representative on campus; phone 870 364-6414; fax 870 364-5707.

Student conduct statement:

Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

Academic dishonesty:

1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student's paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.

2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will a potential grade reduction to F (zero points) on the specific assignment or exam.
E-mail: huntj@uamont.edu. Web page: http://uam-web2.uamont.edu/facultyweb/huntj.
Office Hours: Monday-Thursday 2:00-3:00, or by appointment.

Corequisite: ENGL1013.


Course Objectives: To acquaint the student with the basic concepts of biology, with emphasis on the chemistry of life, introductory cell and molecular biology, photosynthesis, respiration, genetics, taxonomy, evolution, and ecology. This course will strive to convey knowledge of basic biological concepts and to stimulate an interest and understanding of the natural environment.

Tests and grading: Grades will be computed as a percentage of 400 points. Of these, 300 points will come from 3 hourly exams, and 100 will come from the final exam. Grading will be on the standard 10-point scale (90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F). There is no curving of the grade or “extra” credit. Points will be earned from scheduled examinations. Slight changes in the grading scheme may be made at the discretion of the instructor.

Exams will consist of multiple choice questions—bring a scantron on exam days. Exam dates are July 9, July 16, July 23, and July 30. These dates will not change! (In the event of emergency cancellation of class on an exam day, the exam will occur on the next class day.) Each test will cover material beginning with the previous exam, and continuing through the last class day before the exam. The final exam, which will not be comprehensive, will be on Wednesday, July 30. Please note that we will have lecture after exams are completed!

Attendance: Attendance at all lectures and exams is mandatory. Attendance will be recorded regularly. Most exam material will come from lectures, so that your success, or lack thereof, in this class is directly related to attendance. Because each subject we will cover builds on those previous to it, missing even one lecture can make it difficult to catch up. This is especially true during a short summer session! Please plan on coming to class every day.

Missed exams may be made up only by students with an approved university excuse, by arrangement with the instructor. Approved university excuses do not include “hung over,” “overslept,” or
“my car is busted.” Please be aware that any made-up exam may NOT be the same exam given during the normal class period; make-up exams may be essay-style. Students are responsible for all material presented in class, even with an approved university excuse for missing a class. It is the responsibility of the student to obtain missed material from classmates.

**Class web page.** The class web page may be found at: [http://uam-web2.uamont.edu/facultyweb/huntj/Biology1063.htm](http://uam-web2.uamont.edu/facultyweb/huntj/Biology1063.htm). On this page there are lists of terms to know and lecture outlines for each of the chapters of the text that we will cover. These outlines are general in nature, and are not meant to replace detailed notes which you should take in class. A list of definitions for each chapter is also included. Test scores will be posted on the class web page shortly after each exam. Your score will be listed by an anonymous code word selected by you.

**Class policies.** The points in this class are not concentrated near the end—you need to do well early in the semester. The instructor is here to help you. Please feel free to ask questions at any time. You are encouraged to seek help outside of regular class hours if you are so inclined, either during office hours or by appointment. Tutor service is available at Harris Hall—call 870-460-1054 for details.

Please do not hold conversations with classmates during lecture. You may tape lectures if you so desire, but this should not substitute for the taking of detailed class notes. **DO NOT BRING CELL PHONES TO CLASS!** If your cell phone rings during my lecture, I will respond in the only manner available to me—by adjusting your grade. You may not text-message or keep your cell phone on your desk during class. **If I see you text-messaging during class, you will be asked to leave.** If this occurs twice, you will be assigned a grade of F for the course. No electronic devices other than tape recorders are allowed in class—this includes laptops and i-pods. You may not read outside material, study other classes, or work crossword puzzles during class. Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on pages 39-45 of the 2013-2015 UAM Catalog.

The last date to drop this course with a W (and for most other courses at UAM) is July 27.

**Academic dishonesty:** Cheating will not be tolerated. The Academic Code of the University of Arkansas-Monticello may be found on page 40 of the 2013-2015 UAM Catalog. Please note the following definitions of academic dishonesty:

Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, or other class work. This includes but is not limited to the following classes of dishonesty: a) Copying from another student’s paper; b) Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor; c) Collaboration with another student during the examination; d) Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material; e) Substituting for another person during an examination or allowing such substitutions for oneself.
Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

Please note that the instructor has wide latitude in taking corrective action in response to cheating; expect the harshest possible response in this class. In other words, if I catch you cheating even once, I will assign a grade of F for the course. You will not be allowed to have a cell phone of any sort on your desk during exams (or any other time during class).

Students with disabilities: It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the commitment of the University to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall, Room 120, phone 870-460-1026, TDD 870-460-1626, fax 870-460-1926.

Topics to be covered: Lectures will begin at Chapter 1 in the text and proceed in the order of the text chapters. This will include definitions of science, the scientific method, and biology; basic chemistry and biochemistry; cell theory and structure; metabolism; cellular respiration and photosynthesis; cell division; genetics; evolution and natural selection; biodiversity; ecology; and conservation. We will move as fast as we can and still cover the topics in the required depth, so that a detailed schedule of lectures is impossible; this is another reason you should come to class every day.
Corequisites: Biol 1063 (A.C.T. Equivalent # BIOL1004)

Required Texts:
1. Laboratory Exercises for Biological Sciences (revised July 2006)
2. Campbell Essentials Biology, 4th Edition (Assigned readings from textbook used in Biol 1063)

Instructor=s Name and Office Number:
Name: Ms Jessie Chappell
Office Number: Science Center B-26
Office Telephone: 870-460-1566
E-mail: chappelj@uamont.edu
Office Hours: M-H 9:30-10:30

Class attendance:
You are expected to attend classes regularly and punctually. After 2 absences your ability to succeed in Intro Bio Science lab will be greatly diminished. 2 points are given for attending and completing each lab. You will sign an attendance sheet for each lab and exam. Failure to sign the attendance sheet will result in a 2 point deduction. An excused absence does not excuse you from scheduled homework, quizzes or exams. You are expected to inquire about assignments and be prepared when you return to class. An excused absence includes medical excuses and UAM authorized student activities accompanied by proper documentation.

Cheating:
Cheating will not be tolerated. The policy found on page 59 of the catalog, under Academic Code violations will be followed. Cheating and plagiarism are considered violations of the Academic Code. Violators will receive no credit for the quiz or exam (a no credit quiz or exam cannot be dropped as a lowest grade). Students with cell phones on the desk during quizzes or exams will receive a zero. Quizzes earning a zero for cell phone usage or cheating will not be dropped.

Classroom policies:
Cell phones and pagers will be turned off during class and should not be on your desk during class. Use of a cell phone will result in the loss of your performance points for the day. Students should not write on the desks. Scores on exams will be posted by a code number assigned on the first exam unless a student requests not to have his/her scores posted.

Important Dates:
July 1 First day of classes
### Course objectives:

Biology 1071 is a course designed to introduce students to basic studies of plants and animals, cells, biochemistry, metabolism and inheritance. It is designed to illustrate and complement concepts discussed in Biol 1063, Introduction to Biological science.

### Course outline

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab topic</th>
<th>Quizzes</th>
<th>Reading from</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Campbell =s</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Essential Biology, 4th edition</td>
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<tr>
<td>July 1</td>
<td>Exercise 1</td>
<td></td>
<td>pp. 56-59</td>
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<tr>
<td>July 2</td>
<td>Exercise 2</td>
<td>Quiz #1</td>
<td>pp.60; 83-86</td>
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<tr>
<td>July 6</td>
<td>Exercise 3</td>
<td></td>
<td>pp. 32-50</td>
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<tr>
<td>July 7</td>
<td>Exercise 4</td>
<td></td>
<td>pp. 32-50; 80-82</td>
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<td><strong>July 8</strong></td>
<td>LABORATORY EXAMINATION I*(EXERCISES 1-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*A jump drive for Mitosis and Embryology slide photos is recommended.</td>
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<tr>
<td>July 9</td>
<td>Exercise 6</td>
<td>Quiz #2</td>
<td>pp. 91-103</td>
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<td>July 13</td>
<td>Exercise 5</td>
<td></td>
<td>pp. 107-116</td>
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<td>July 14</td>
<td>Exercise 7, Exercise 8</td>
<td></td>
<td>pp. 122-128</td>
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<td></td>
<td></td>
<td></td>
<td>pp. 122-128 &amp; 251</td>
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<tr>
<td><strong>July 15</strong></td>
<td>LABORATORY EXAMINATION II (EXERCISES 5-8)</td>
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<tr>
<td>July 16</td>
<td>Exercise 9</td>
<td></td>
<td>pp. 145-167</td>
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<tr>
<td>July 20</td>
<td>Exercise 11</td>
<td></td>
<td>pp. 318-327</td>
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<tr>
<td>July 21</td>
<td>Exercise 12</td>
<td></td>
<td>pp. 318-327</td>
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<td>July 22</td>
<td>Handout 404-420</td>
<td>Ecology</td>
<td>Quiz #3</td>
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<tr>
<td></td>
<td></td>
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<td>pp. 374-379 &amp;</td>
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**Grading policy:**

<table>
<thead>
<tr>
<th>Basis of final grade</th>
<th>Points Possible</th>
<th>Grading Scale</th>
<th>Points needed</th>
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<tbody>
<tr>
<td>Exam I</td>
<td>100</td>
<td>89.5 - 100</td>
<td>A 299.8/335</td>
</tr>
<tr>
<td>Exam II</td>
<td>100</td>
<td>79.5 - 89.4</td>
<td>B 266.3/335</td>
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<tr>
<td>Exam III</td>
<td>100</td>
<td>69.5 - 79.4</td>
<td>C 232.8/335</td>
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<tr>
<td>Quizzes</td>
<td>10</td>
<td>59.5 - 69.4</td>
<td>D 199.3/335</td>
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<tr>
<td>Lab performance</td>
<td>25</td>
<td>00 - 59.4</td>
<td>F Below 199.3</td>
</tr>
<tr>
<td><strong>Total points possible</strong></td>
<td><strong>335</strong></td>
<td></td>
<td></td>
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</tbody>
</table>

**Makeup exams:**

All makeup exams will be essay type and will be given at the end of the semester. Exceptions will be made for medical excuses and UAM authorized student activities accompanied by proper documentation. Only one makeup will be allowed. It is to your advantage to take exams as scheduled. **Quizzes cannot be made up. The lowest quiz grade (3 quizzes) will be dropped and a missed quiz will be your drop.**

Exam grades are never dropped.

It is the policy of the University of AR at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.

Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others.

Incomplete:

To qualify for a grade of A for an incomplete a student must have a C or better average and have completed 67% of the course work.
Course Prerequisites: Grade of “C” or above in English 133, an English ACT of 19 or comparable test score or instructors permission.

Required Text:
Fremgen & Fruct: Medical Terminology, A Living Language, 5th Edition

Instructor’s Name and Office Number:
Name: Ms Jessie Chappell
Office Number: Science Center B-26
Office Telephone: 870-460-1566
E-mail: chappellj@uamont.edu
Office Hours: M 9-11, W 10-11, H 9-11, F 10-12

Class Attendance:
You are expected to attend classes regularly and punctually. After 3 absences your ability to succeed in Medical Terminology will be greatly diminished. You will sign an attendance sheet for each class. Failure to sign the attendance sheet will result in a recorded absence. An excused absence does not excuse you from scheduled homework, quizzes or exams. You are expected to inquire (from classmates or syllabus) about assignments and be prepared when you return to class.

Cheating:
Cheating will not be tolerated. The policy found on page 59 of the catalog, under Academic Code violations will be followed. Cheating and plagiarism are considered violations of the Academic Code. Violators will receive no credit for the quiz or exam (a no-credit quiz or exam cannot be dropped as a lowest grade). Use of a cell phone or having a cell phone on your desktop during quizzes or exams will result in a grade of ZERO on the quiz or exam.

Makeup Exams:
All makeup exams will be essay type and will be given at the end of the semester on a date and time I designate. Exceptions will be made for medical excuses and UAM authorized student activities accompanied by documentation. You have 24 hours to inform me when you miss an exam. It is to your advantage to take exams as scheduled. Makeup exams must be scheduled by your instructor. Failure to appear for a scheduled makeup will result in a grade of ZERO. Students arriving after the first student has handed in an exam will not be allowed to take the exam. Quizzes cannot be made up and any missed quiz will be counted as one of your 2 dropped lowest score quizzes.

Classroom Policies:
Students should not write on the desks. Scores on exams will be posted by a code number assigned on the first exam unless a student requests not to have his/her scores posted. Use of a cell phone or having a cell phone on your desktop during quizzes or exams will result in a grade of ZERO on the quiz or exam.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>07 Jan</td>
<td>First day of classes</td>
</tr>
<tr>
<td>19 Jan</td>
<td>MLK holiday. All classes and offices closed</td>
</tr>
<tr>
<td>09 Jan</td>
<td>Last day to register or add spring classes</td>
</tr>
<tr>
<td>23-27 Mar</td>
<td>Spring break</td>
</tr>
<tr>
<td>18 March</td>
<td>Last day to drop with W</td>
</tr>
<tr>
<td>06 Apr</td>
<td>Preregistration for summer and fall begins</td>
</tr>
<tr>
<td>17 Apr</td>
<td>Preregistration for summer and fall ends</td>
</tr>
<tr>
<td>28 Apr</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>29 Apr-May 5</td>
<td>Final exams begin (29 April)</td>
</tr>
</tbody>
</table>

Course Objectives:
Biology 1102 is designed to help students understand medical terminology within the context of human body systems. It introduces the student to the basic rules of using word parts to form medical terms. The use of phonetic pronunciations, real-life photographs, accurate illustrations, many practice applications on each topic. A wealth of multimedia applications including quizzes, games, videos, and audio pronunciations will be utilized.

Course outline:(Quizzes will be given over every chapter or topic)
Dates
**Jan. 8** Introduction to class and assignments

**Jan 13-15** Chapter 1 Introduction to Medical Terminology Pages 1-20

**Jan 20-22** Chapter 2 Body Organization Pages 21-48

**Jan 27-29** Chapter 3 Integumentary System Pages 49-82

--Feb 3 EXAM 1 Chapters 1-3

**Feb 5-10** Chapter 4 Musculoskeletal System Pages 83-136
Section 1 - Skeletal System
Section 2 - Muscular System

*Feb 12 EXAM 2* Chapter 4

---

*Feb 17-19*  
Chapter 5  
Cardiovascular System  
Pages 137-176

*Feb 24-26*  
Chapter 6  
Blood and the Lymphatic and Immune Systems  
Section 1 – Blood  
Section 2 - Lymphatic & Immune

---

*Mar 3* EXAM 3 Chapters 5-6

---

*Mar 5-10*  
Chapter 7  
Respiratory Systems  
Pages 217-254

*Mar 12-17*  
Chapter 8  
Digestive System  
Pages 255-294

SPRING BREAK MARCH 23-27 NO CLASSES

*Mar 17-19*  
Chapter 9  
Urinary System  
Pages 295-328

---

*Apr 1 EXAM 4* Chapters 7-9

---

*Apr 4-9*  
Chapter 10*  
Reproductive System*  
Section 1 - Female  
Section 2 - Male  
Pages 330-376

*Apr 11-16*  
Chapter 11*  
Endocrine System  
Pages 377-408

*Apr 18-30*  
Chapter 12*  
Nervous System*  
Pages 409-444

*Apr 18-30*  
Chapter 13*  
Special Senses*  
Section 1 - The Eye  
Section 2 - The Ear  
Pages 445-488

*Apr 18-30*  
Chapter 14*  
Special Topics*  
Section 1 - Pharmacology*  
Section 2 - Mental Health*  
Section 3 - Diagnostic Imaging*  
Section 4 - Rehabilitation Services*  
Section 5 - Surgery*  
Section 6 - Oncology*  
Pages 489-533

*(Selected topics to be announced in class will be covered in these chapters)*

EXAM 5/FINAL EXAM Chapters 10-14 and Comprehensive Questions from all chapters

Wednesday, April 29, 2015 @ 1:30-3:30 p.m.

**GRADING POLICY**

<table>
<thead>
<tr>
<th>Basis of Final Grade:</th>
<th>Grading Scale</th>
<th>Points needed for Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams 1-4 100 points each = 400 points</td>
<td>89.5-100 A</td>
<td>537</td>
</tr>
<tr>
<td>Exam 5 150 points</td>
<td>79.5-89 B</td>
<td>477</td>
</tr>
<tr>
<td>Quizzes 50 points**</td>
<td>69.5-79 C</td>
<td>417</td>
</tr>
<tr>
<td></td>
<td>59.5-69 D</td>
<td>357</td>
</tr>
</tbody>
</table>

69
**The 2 lowest quiz scores will be dropped. 10 point quizzes will be given over each complete chapter.**

Partial chapters will not have quizzes.

**It is the policy of the University of AR at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.**

The following action is prohibited under the Student Conduct Code:

**Disorderly Conduct:** Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others

**Incomplete:**

A grade of “I” for an incomplete will be allowed only when a student has a “C” or better average and has completed 75% of the course work.
Instructor Name: Karen Fawley, Ph.D
Instructor Location of Office: Museum of Natural History, Room 101
Instructor Phone: 870-460-1165
Instructor E-mail Address: fawley@uamont.edu
Instructor Website: http://www.uamont.edu/facultyweb/fawley

Office hours: MW 9-10am; T 9:40-11am; Th 2-3:30pm or by appointment.

Course Title and Credit Hours: Biology 2041, Principles of Biology I Lab, 1 credit hour

Course Description: Laboratory exercises and demonstrations on statistics, the chemical basis of life, cell structure and function, metabolism, photosynthesis, and animal form and function. Designed for biology and other life science majors.

Prerequisites: ACT composite of 22 or BIOL 1063 (A.C.T. equivalent BIOL 1034) (Introduction to Biological Science) with a C or above. **You may be dropped from this class if you do not have the prerequisites.**

Student Learning Outcomes: **This course is designed for biology and other life science majors or minors.** Upon completion of this course, students should have a general understanding of the scientific method and experimental design with laboratory exercises on statistics, the chemical basis of life, cell structure and function, metabolism, photosynthesis, and animal form and function.

Statement of Special Policies:

**Class Attendance:** Attendance will be taken during every lecture. In general, students who attend class regularly make better grades. As a courtesy to the students in the class and the instructor, please be on time.

**Classroom Policies:** Use of tobacco products is not permitted on UAM grounds.

Cell phones and all electronics should be turned off and put away during class. Any cell phone that is found on a
student’s desk during an exam or a quiz will result in an automatic zero. The use of cell phones as calculators during an exam or a quiz is prohibited.

**Cheating/Plagiarism:** Cheating will not be tolerated. The Academic Dishonesty policy found on page 4 of this syllabus will be applied to all assignments, quizzes and exams. Cheating includes plagiarism; plagiarism can result in a grade of “F” (zero points) for an assignment.

**Course Content Outline/Calendar:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>W Aug 27</td>
<td>Lab 1. Statistics/Hypothesis Testing Part 1</td>
</tr>
<tr>
<td>W Sept 3</td>
<td>Lab 2. Statistics/Hypothesis Testing Part 2</td>
</tr>
<tr>
<td>W Sept 10</td>
<td>Lab 3. Biomolecules</td>
</tr>
<tr>
<td>W Sept 17</td>
<td>Lab 4. DNA</td>
</tr>
<tr>
<td>W Sept 24</td>
<td>LAB EXAM I (Labs 1-4)</td>
</tr>
<tr>
<td>W Oct 1</td>
<td>Lab 5. Microscopy</td>
</tr>
<tr>
<td>W Oct 8</td>
<td>Lab 6. Diffusion and Osmosis</td>
</tr>
<tr>
<td>W Oct 15</td>
<td>Lab 7. Photosynthesis</td>
</tr>
<tr>
<td>W Oct 22</td>
<td>Quiz-Photosynthesis; Review</td>
</tr>
<tr>
<td>W Oct 29</td>
<td>LAB EXAM II (Labs 5-7)</td>
</tr>
<tr>
<td>W Nov 5</td>
<td>Lab 8. Plant Form and Function</td>
</tr>
<tr>
<td>W Nov 19</td>
<td>Lab 10. Animal Structure and Function: Muscle/Nerve Tissue</td>
</tr>
<tr>
<td>W Nov 26</td>
<td>NO CLASS--THANKSGIVING HOLIDAY</td>
</tr>
<tr>
<td>W Dec 3</td>
<td>FINAL EXAM (LAB EXAM III) (Labs 8-10)</td>
</tr>
</tbody>
</table>

**Writing Assignment/Quiz /Exam Schedule:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab Topic</th>
<th>Total pts</th>
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<tbody>
<tr>
<td>W Sept 3</td>
<td>Lab Quiz- Lab 1. Statistics/Hypothesis Testing</td>
<td>20</td>
</tr>
<tr>
<td>W Sept 10</td>
<td>Writing Assignment Questions and Abstract</td>
<td>40</td>
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<tr>
<td></td>
<td>for Lab 1&amp;2-Statistics/Hypothesis Testing due</td>
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<tr>
<td>W Sept 17</td>
<td>Lab Quiz-Lab 3. Biomolecules</td>
<td>20</td>
</tr>
<tr>
<td>W Sept 24</td>
<td>LAB EXAM I (Labs 1-4)</td>
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</tr>
<tr>
<td>W Oct 8</td>
<td>Lab Quiz-Lab 5. Microscopy</td>
<td>20</td>
</tr>
</tbody>
</table>
W Oct 15 Lab Quiz-Lab 6.-Diffusion/Osmosis 20
W Oct 22 Lab Quiz-Lab 7. Photosynthesis 20
W Oct 29 LAB EXAM II (Labs 5-7) 100
W Nov 12 Lab Quiz-Lab 8. Plant Form and Function 20
W Nov 26 THANKSGIVING HOLIDAY
W Dec 3 FINAL EXAM (LAB EXAM III) (Labs 8-10) 100

Provisions for tests and evaluations:

Scores on exams will be posted on the instructor's web site, http://www.uamont.edu/facultyweb/fawley, by a code number unless a student requests not to have his/her scores posted.

Make-up Labs/Quizzes: Due to time constraints, there will be no make-up labs or make-up quizzes. However, students can drop one 20 point quiz during the semester.

Make-up Exams: No make-up exams will be given, but the student can replace one missed exam with the final exam grade. Students can make-up one exam only, if they have a valid medical or personal excuse. The student must get in contact with the professor before or the day of the scheduled exam. Any additional missed exams will be counted as a zero.

Rescheduling Exams: If you are unable to take an exam at the scheduled time, please notify the instructor well before the day of the exam to reschedule at an earlier time.

Grading Policy:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes/Assignments</td>
<td>160 pts</td>
</tr>
<tr>
<td>Exams</td>
<td>300 pts</td>
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<tr>
<td></td>
<td>460 pts</td>
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</table>

Grading scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100</td>
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<tr>
<td>B</td>
<td>80-89</td>
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<tr>
<td>C</td>
<td>70-79</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>Below 60</td>
</tr>
</tbody>
</table>

Special dates of concern:

Wednesday, August 20 First day of classes.
Friday, August 22  
Last day to register or add classes.

Monday, September 1  
Labor Day Holiday

Friday, October 3  
Deadline to file for May graduation

Wednesday, October 29  
Last day to drop with a grade W.

Monday, November 3  
Preregistration for Spring 2015 begins

Friday, November 14  
Preregistration for Spring 2015 ends.

Wednesday, November 26  
No class; University offices open.

Thursday-Friday, November 27-28  
Thanksgiving Holiday

Friday, December 5  
Last day of classes.

M-F, December 8-12  
Final exam period.

Wednesday, December 17  
Fall conferral of degrees and awards.

Students with disabilities:

It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.

For assistance on a College of Technology campus contact:
McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105.
Crossett: Office of Special Student Services representative on campus; phone 870 364-6414; fax 870 364-5707.

Student conduct statement:

Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

Academic dishonesty:

5. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
c. Substituting for another person during an examination or allowing such substitutions for oneself.

6. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

7. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

8. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will a potential grade reduction to F (zero points) on the specific assignment or exams.
Instructor Name: Karen Fawley, Ph.D
Instructor Location of Office: Museum of Natural History, Room 101
Instructor Phone: 870-460-1165
Instructor E-mail Address: fawley@uamont.edu
Instructor Website: http://www.uamont.edu/facultyweb/fawley
Office hours: MW 9-10am; T 9:40-11am; Th 2-3:30pm or by appointment.

Course Title and Credit Hours: Biology 2053, Principles of Biology I, 3 credit hours

Course Description: The chemical basis of life, cell structure and function, metabolism, and genetics. Designed for biology and other life science majors or minors.

Prerequisites: ACT composite of 22 or BIOL 1063 (Introduction to Biological Science) (A.C.T. equivalent BIOL 1004) with a C or above. You may be dropped from this class if you do not have the prerequisites.


Student Learning Outcomes: This course is designed for biology and other life science majors or minors. Upon completion of this course, students should have a general understanding of the scientific method, cellular structure and function, cellular respiration, photosynthesis, and plant and animal form and function.

Statement of Special Policies:

Class Attendance: Attendance will be taken during every lecture. In general, students who attend class regularly make better grades. As a courtesy to the students in the class and the instructor, please be on time.
Classroom Policies: Use of tobacco products is not permitted on UAM grounds.

Cell phones and all electronics should be turned off and put away during class. Any cell phone that is found on a student’s desk during an exam or a quiz will result in an automatic zero. The use of cell phones as calculators during an exam or a quiz is prohibited.

Cheating/Plagiarism: Cheating will not be tolerated. The Academic Dishonesty policy found on page 4 of this syllabus will be applied to students guilty of cheating on exams.

Course Content Outline/Calendar:

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topic</th>
<th>Reading from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 20</td>
<td>Introduction: Themes in the Study of Life</td>
<td><em>Campbell Biology</em> Ch 1</td>
</tr>
<tr>
<td>Aug 22</td>
<td>The Chemical Context of Life</td>
<td>Ch 2</td>
</tr>
<tr>
<td>Aug 25</td>
<td>The Chemistry Context of Life</td>
<td>Ch 2</td>
</tr>
<tr>
<td>Aug 27</td>
<td>Water and Life</td>
<td>Ch 3</td>
</tr>
<tr>
<td>Aug 29</td>
<td>Class cancelled by instructor</td>
<td></td>
</tr>
<tr>
<td>Sept 1</td>
<td>LABOR DAY HOLIDAY-No class</td>
<td></td>
</tr>
<tr>
<td>Sept 3</td>
<td>Carbon and Molecular Diversity of Life</td>
<td>Ch 4</td>
</tr>
<tr>
<td>Sept 5</td>
<td>The Molecules of Life-Large Biological Molecules</td>
<td>Ch 5</td>
</tr>
<tr>
<td>Sept 8</td>
<td>The Molecules of Life-Large Biological Molecules</td>
<td>Ch 5</td>
</tr>
<tr>
<td>Sept 10</td>
<td>EXAM I</td>
<td>Ch 1-5</td>
</tr>
<tr>
<td>Sept 12</td>
<td>A Tour of the Cell</td>
<td>Ch 6</td>
</tr>
<tr>
<td>Sept 15</td>
<td>A Tour of the Cell</td>
<td>Ch 6</td>
</tr>
<tr>
<td>Sept 17</td>
<td>Membrane Structure and Function</td>
<td>Ch 7</td>
</tr>
<tr>
<td>Sept 19</td>
<td>An Introduction to Metabolism</td>
<td>Ch 8</td>
</tr>
<tr>
<td>Sept 22</td>
<td>An Introduction to Metabolism</td>
<td>Ch 8</td>
</tr>
<tr>
<td>Sept 24</td>
<td>Cellular Respiration and Fermentation</td>
<td>Ch 9</td>
</tr>
<tr>
<td>Sept 26</td>
<td>Cellular Respiration and Fermentation</td>
<td>Ch 9</td>
</tr>
<tr>
<td>Sept 29</td>
<td>Cellular Respiration and Fermentation</td>
<td>Ch 9</td>
</tr>
<tr>
<td>Oct 1</td>
<td>EXAM II</td>
<td>Ch 6-9</td>
</tr>
<tr>
<td>Oct 3</td>
<td>Photosynthesis</td>
<td>Ch 10</td>
</tr>
<tr>
<td>Oct 6</td>
<td>Photosynthesis</td>
<td>Ch 10</td>
</tr>
<tr>
<td>Oct 8</td>
<td>Plant Structure, Growth and Development</td>
<td>Ch 35</td>
</tr>
<tr>
<td>Day</td>
<td>Date</td>
<td>Course Title</td>
</tr>
<tr>
<td>-----</td>
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</tr>
<tr>
<td>F</td>
<td>Oct 10</td>
<td>Extra credit assignment- Plants and Biotechnology</td>
</tr>
<tr>
<td>M</td>
<td>Oct 13</td>
<td>Plant Structure, Growth and Development</td>
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<tr>
<td>W</td>
<td>Oct 15</td>
<td>Angiosperm Reproduction and Biotechnology</td>
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<tr>
<td>F</td>
<td>Oct 17</td>
<td>Resource Acquisition and Transport in Vascular Plants</td>
</tr>
<tr>
<td>M</td>
<td>Oct 20</td>
<td>Plant Responses to Internal and External Signals</td>
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<tr>
<td>W</td>
<td>Oct 22</td>
<td>EXAM III</td>
</tr>
<tr>
<td>F</td>
<td>Oct 24</td>
<td>Basic Principles of Animal Form and Function</td>
</tr>
<tr>
<td>M</td>
<td>Oct 27</td>
<td>Animal Nutrition</td>
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<tr>
<td>W</td>
<td>Oct 29</td>
<td>Animal Nutrition</td>
</tr>
<tr>
<td>F</td>
<td>Oct 31</td>
<td>Circulation and Gas Exchange</td>
</tr>
<tr>
<td>M</td>
<td>Nov  3</td>
<td>Circulation and Gas Exchange</td>
</tr>
<tr>
<td>W</td>
<td>Nov  5</td>
<td>The Immune System</td>
</tr>
<tr>
<td>F</td>
<td>Nov  7</td>
<td>Class cancelled by instructor</td>
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<tr>
<td>M</td>
<td>Nov 10</td>
<td>The Immune System</td>
</tr>
<tr>
<td>W</td>
<td>Nov 12</td>
<td>EXAM IV</td>
</tr>
<tr>
<td>F</td>
<td>Nov 14</td>
<td>Hormones and the Endocrine System</td>
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<tr>
<td>M</td>
<td>Nov 17</td>
<td>Hormones and the Endocrine System</td>
</tr>
<tr>
<td>W</td>
<td>Nov 19</td>
<td>Hormones and the Endocrine System</td>
</tr>
<tr>
<td>F</td>
<td>Nov 21</td>
<td>Animal Reproduction</td>
</tr>
<tr>
<td>M</td>
<td>Nov 24</td>
<td>Animal Reproduction</td>
</tr>
<tr>
<td>W</td>
<td>Nov 26</td>
<td>THANKSGIVING HOLIDAY</td>
</tr>
<tr>
<td>F</td>
<td>Nov 28</td>
<td>THANKSGIVING HOLIDAY</td>
</tr>
<tr>
<td>M</td>
<td>Dec  1</td>
<td>Animal Development</td>
</tr>
<tr>
<td>W</td>
<td>Dec  3</td>
<td>Neurons, Synapses and Signaling</td>
</tr>
<tr>
<td>F</td>
<td>Dec  5</td>
<td>Neurons, Synapses and Signaling</td>
</tr>
<tr>
<td>M</td>
<td>Dec  8</td>
<td>FINAL EXAM (EXAM V), 1:30-3:30pm, SCI AUD</td>
</tr>
</tbody>
</table>

**Provisions for tests and evaluations:**

Scores on exams will be posted on the instructor’s web site, [http://www.uamont.edu/facultyweb/fawley](http://www.uamont.edu/facultyweb/fawley), by a code number unless a student requests not to have his/her scores posted.

**Rescheduling Exams:** If you are unable to take an exam at the scheduled time, please notify the instructor well before the day of the exam to reschedule at an earlier time.

**Make-up Exams:** No make-up exams will be given, but the student can replace one missed exam with the final exam grade. Students can make-up one exam only, if they have a valid medical or personal
excuse. The student must get in contact with the professor before or the day of the scheduled exam. Any additional missed exams will be counted as a zero.

**Grading Policy:**

<table>
<thead>
<tr>
<th>Exam 1</th>
<th>100 pts</th>
<th>90-100</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 2</td>
<td>100 pts</td>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>Exam 3</td>
<td>100 pts</td>
<td>70-79</td>
<td>C</td>
</tr>
<tr>
<td>Exam 4</td>
<td>100 pts</td>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>Exam 5 (final exam)</td>
<td>100 pts</td>
<td>Below 59</td>
<td>F</td>
</tr>
</tbody>
</table>

| 500 pts |

**Special dates of concern:**

- **Wednesday, August 20**: First day of classes.
- **Friday, August 22**: Last day to register or add classes.
- **Monday, September 1**: Labor Day Holiday
- **Friday, October 3**: Deadline to file for May graduation
- **Wednesday, October 29**: Last day to drop with a grade W.
- **Monday, November 3**: Preregistration for Spring 2015 begins
- **Friday, November 14**: Preregistration for Spring 2015 ends.
- **Wednesday, November 26**: No class; University offices open.
- **Thursday-Friday, November 27-28**: Thanksgiving Holiday
- **Friday, December 5**: Last day of classes.
- **M-F, December 8-12**: Final exam period.
- **Wednesday, December 17**: Fall conferral of degrees and awards.

**Students with disabilities:**

It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.

For assistance on a College of Technology campus contact:
McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105.
Crossett: Office of Special Student Services representative on campus; phone 870 364-6414; fax 870 364-5707.

Student conduct statement:
Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

Academic dishonesty:
1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.
2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will a potential grade reduction to F (zero points) on the specific assignment or exam.
Biology 2083—Principles of Biology II
(ACTS BIOL 1014, when combined with BIOL 2091)
Department of Mathematical and Natural Sciences
Spring 2015, MWF, 11:10-12:00
Science Center B-18

Instructor: Dr. John L. Hunt. Office: B-11, Science Center. Phone: 870-460-1466
E-mail: huntj@uamont.edu. Web page: http://www.uamont.edu/facultyweb/Huntj.
Office Hours: 10-11 MWF; 8:30-9:30 TTh; 2-3 MTThF, or by appointment.

Prequisites: BIOL 2053 and BIOL 2041, each with a grade of C or above.


Course Objectives: To acquaint the student with the basic concepts of biology, with emphasis on evolution, diversity, and ecology of organisms. This course will strive to convey knowledge of basic biological concepts and to stimulate an interest and understanding of the natural environment.

Class web page. The class web page may be found at: www.uamont.edu/facultyweb/Huntj/Principles.htm. On this page there are lists of terms to know and lecture outlines for each of the chapters of the text we will cover. These outlines are general in nature, and are not meant to replace detailed notes which you should take in class. Test scores will be posted on the class web page shortly after each exam. Your score will be listed by an anonymous code word selected by you.

Tests and grading: Grades will be computed as a percentage of 500 points. Of these, 300 points will come from 3 hourly exams, 150 will come from the final exam, and 50 will come from unannounced quizzes. Grading will be on the standard 10-point scale (90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F). There is no curving of the grade or “extra” credit. No test scores will be dropped. Points will be earned from scheduled examinations and from unannounced quizzes.

Tests will consist of a mixture of objective and subjective questions, and will be on the dates listed below. These dates will not change. Exams may include bonus questions on material from the text that has never been discussed in class. The final exam will be Thursday, April 30, at 1:30 p.m. The final will be 33% comprehensive; other exams are not comprehensive. Bring a Scantron on exam days.
The number of quizzes is approximate. There will be an average of 1 quiz per week at the beginning of one of the lecture periods. There will be at least 10 quizzes during the semester; if there are more, students will drop the lowest scores and count only their 10 best quizzes. These quizzes will be unannounced and will consist of one to five questions from the previous day’s lecture. Quizzes are designed to encourage daily review and study, and regular attendance and promptness, and therefore, MAY NOT be made up.

Attendance: Attendance at all lectures and exams is mandatory. Attendance will be taken on a daily basis. Quizzes may not be made up. However, missed quizzes will not count against the grade of any student who presents the instructor with an approved excuse for his absence on the next class day. Approved excuses do not include “hung over,” “overslept,” “had a flat,” “worked an extra shift,” or “abducted by aliens.” Students with approved excuses may make up missed exams, by arrangement with the instructor. Please be aware that make-up exams will NOT be the same exam given during the normal class period. It is important for you to note that you are responsible for material covered in every class, even if you miss the class with an excused absence. It is your responsibility to obtain the material you have missed; the instructor will NOT provide notes for missed classes. Most exam material will come from lectures, so that your success, or lack thereof, in this class is directly related to attendance.

Class policies. The points in this class are not concentrated near the end—you need to do well early in the semester. The instructor is here to help you. Please feel free to ask questions at any time. You are encouraged to seek help outside of regular class hours if you are so inclined, either during office hours or by appointment. Tutor service is available at Harris Hall—call 870-460-1054 for details.

Please do not hold conversations with classmates during lecture. You may tape lectures if you so desire, but this should not substitute for the taking of detailed class notes. DO NOT BRING CELL PHONES TO CLASS! If your cell phone rings during my lecture, I will respond in the only manner available to me—by adjusting your grade. You may not text-message or keep your cell phone on your desk during class. If I see you text-messaging during class, you will be asked to leave. If this occurs twice, you will be assigned a grade of F for the course. No electronic devices other than tape recorders are allowed in class—this includes laptops and i-pods. You may not read outside material, study other classes, or work crossword puzzles during class. Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on pages 39-45 of the 2013-2015 UAM Catalog.

The last date to drop this course with a W (and for most other courses at UAM) is March 18. A grade of I will only be given if a student has completed 75% of the work of the course, with a mathematical possibility of obtaining a passing grade, and will be given only for University-approved excuses, with the approval of the Dean of Math and Sciences.
**Academic dishonesty:** Cheating will not be tolerated. The Academic Code of the University of Arkansas-Monticello may be found on page 40 of the 2013-2015 UAM Catalog. Please note the following definitions of academic dishonesty:

Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, or other class work. This includes but is not limited to the following classes of dishonesty: a) Copying from another student’s paper; b) Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor; c) Collaboration with another student during the examination; d) Buying, selling, stealing, soliciting, or transmitting an examination or any material purporting to be the unreleased contents of coming examinations or the use of any such material; e) Substituting for another person during an examination or allowing such substitutions for oneself.

Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

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Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

Please note that the instructor has wide latitude in taking corrective action in response to cheating; expect the harshest possible response in this class. In other words, if I catch you cheating even once, I will assign a grade of F for the course. You will not be allowed to have a cell phone of any sort on your desk during exams (or any other time during class). You will not be allowed to wear a Pebble or other phone-watch during exams. Use of such technology constitutes cheating and will result in assignment of an F for the class.

**Students with disabilities:** It is the policy of the University of Arkansas—Monticello to accommodate individuals with disabilities pursuant to federal law and the commitment of the University to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall, Room 120, phone 870-460-1026, TDD 870-460-1626, fax 870-460-1926.

**Subjects to be covered (with associated text chapters):** Subjects to be covered will be determined by our speed moving through the material—we will move as quickly as possible, but as slowly as we need. In general, we will cover muscle and skeletal systems, cell division (including mitosis and meiosis), genetics, evolution, ecology, biodiversity (including classification), and conservation biology.
Important Dates:
January 7  First Day of Class
January 19  Martin Luther King Day—No Class
February 4  Exam I
March 2  Exam II
March 18  Last Day to Drop with a W
March 23-27  Spring Break (Woo-hoo!)—No Class
April 8  Exam III
April 27  Last Day of Class
April 30  Final Exam, 1:30 p.m.  33% comprehensive.

Class Website:  www.uamont.edu/facultyweb/Huntj/Principles.htm.
Dr. Hunt’s Website:  http://www.uamont.edu/facultyweb/huntj/
Textbook Website:  www.masteringbiology.com
UAM Home Page:  http://www.uamont.edu/
UAM Bookstore:  http://www.bkstr.com/uamontstore/home
Study Tips:  http://www.uamont.edu/facultyweb/Huntj/Study%20tips.htm

Dr. Hunt’s Phone Number:  870-460-1466
Special Student Services:  870-460-1026
Biology 2091—Principles of Biology II Laboratory
(ACTS BIOL 1014, when combined with BIOL 2083)
Department of Mathematical and Natural Sciences
Spring 2015, Wednesday 1:10-3:00 p.m. (Section 01)
Wednesday 3:10-5:00 p.m. (Section 02)
Science Center B7

Instructor: Dr. John L. Hunt.  Office: B-11, Science Center.  Phone: 870-460-1466
E-mail: huntj@uamont.edu.  Web page: http://www.uamont.edu/facultyweb/Huntj.
Office Hours: 10-11 MWF; 8:30-9:30 TTh; 2-3 MTThF, or by appointment.

Prerequisites: BIOL 2053 and BIOL 2041 (each with a grade of at least C).

Corequisite: BIOL 2083; Principles of Biology II.

Required texts: none.

Course Objectives: Students will participate in exercises and demonstrations on animal and plant diversity, as well as structure, function, and behavior of these organisms. This lab is designed for biology and other life science majors and minors.

Tests and grading: Grades will be computed as a percentage of approximately 300 points. Of these, 200 points will come from exams, 50 will come from quizzes and lab performance, and 50 will come from a written assignment. Grading will be on the standard 10-point scale (90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F). There is no curving of the grade or “extra” credit. Points will be earned from scheduled examinations, assignments, and quizzes.

Attendance: Attendance at all lab sessions and exams is mandatory. You will sign an attendance sheet for each lab. Unexcused absences may result in the loss of ten points from your final average for each lab missed. It is important for you to note that you are responsible for material covered in every lab, even if you miss the lab with an excused absence. It is your responsibility to obtain the material you have missed, and to be prepared when you return to class. Students who miss an exam with an excused absence will take a make-up exam, which may be an essay type. Make-up exams will be given at a time and place determined by the instructor. Quizzes may not be made up.

Class policies. Please note that some of the labs require dissection. All students are required to participate in dissections; those students who do not participate will lose points. The points in this class are not concentrated near the end—you need to do well early in the semester. The instructor is here to help you. Please feel free to ask questions at any time. You are encouraged to seek help outside of
regular class hours if you are so inclined, either during office hours or by appointment. Tutor service is available at Harris Hall—call 870-460-1054 for details.

Please do not hold conversations with classmates during lecture. You may tape lectures if you so desire, but this should not substitute for the taking of detailed class notes. **DO NOT BRING CELL PHONES TO CLASS!** If your cell phone rings during my lecture, I will respond in the only manner available to me—by adjusting your grade. You may not text-message or keep your cell phone on your desk during class. **If I see you text-messaging during class, you will be asked to leave.** If this occurs twice, you will be assigned a grade of F for the course. No electronic devices other than tape recorders are allowed in class—this includes laptops and i-pods. You may not read outside material, study other classes, or work crossword puzzles during class. Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on pages 39-45 of the 2013-2015 UAM Catalog.

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**Tentative course outline:**

| January 7  | No lab. |
| January 14 | Introduction, mitosis. |
| January 21 | Bone and muscle tissues, bone identification. |
| January 28 | Genetics. |
| February 4 | Dissection of a vertebrate. |
| February 11 | Protists. |
| February 18 | LAB EXAM 1. |
| February 25 | Fungi. |
| March 4 | Animal behavior, technical writing. |
| March 11 | Animal diversity. |
| March 18 | Animal diversity.—**Writing Assignment Due** |
| March 25 | Spring Break (Woo-hoo!). |
| April 1 | TBD |
| April 8 | Embryology. |
| April 15 | Ecology. |
| April 22 | FINAL EXAM. |
Instructor Name:  Karen Fawley, Ph.D
Instructor Location of Office: Museum of Natural History, Room 101
Instructor Phone:  870-460-1165
Instructor E-mail Address:  fawley@uamont.edu
Instructor Website:  http://www.uamont.edu/facultyweb/fawley
Office hours:  MW, 9-11am; Th, 1:30-3pm or by appointment.
Course Title and Credit Hours: Biology 2143, (A.C.T. equivalent BIOL 1034)
General Botany, 3 credit hours

Course Description: Structure, physiology, and phylogeny of plants, fungi, and algae.

Corequisites:  English 1013 (A.C.T. equivalent ENGL 1013)

Required Textbook:  *Plant Biology*, Graham, Graham, and Wilcox, 2006,

Student Learning Outcomes: To familiarize students with plant biology through an understanding of plant structure and function, plant reproduction, genetics, and evolution, and the diversity of plants, prokaryotes, protists, and fungi.

Statement of Special Policies:

Class Attendance:  Attendance will be taken during every lecture. In general, students who attend class regularly make better grades. As a courtesy to the students in the class and the instructor, please be on time.

Classroom Policies:  Use of tobacco products is not permitted on UAM grounds.
Cell phones and all electronics should be turned off and put away during class. Any cell phone that is found on a student’s desk during an exam will result in an automatic zero.

**Cheating/Plagiarism:** Cheating will not be tolerated. The Academic Dishonesty policy found on page 4-5 of this syllabus will be applied to all exams.

**Course Content Outline/Calendar:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topic</th>
<th>Chapter Readings from <em>Plant Biology</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Th</td>
<td>Jan 8</td>
<td>Introduction to Plant Biology</td>
</tr>
<tr>
<td>T</td>
<td>Jan 13</td>
<td>Naming and Organizing Plants</td>
</tr>
<tr>
<td>Th</td>
<td>Jan 15</td>
<td>Class cancelled by instructor</td>
</tr>
<tr>
<td>T</td>
<td>Jan 20</td>
<td>Plant Cells</td>
</tr>
<tr>
<td>Th</td>
<td>Jan 22</td>
<td>Plant Cells</td>
</tr>
<tr>
<td>T</td>
<td>Jan 27</td>
<td>Plant Structure and Growth</td>
</tr>
<tr>
<td>Th</td>
<td>Jan 29</td>
<td>EXAM I</td>
</tr>
<tr>
<td>T</td>
<td>Feb 3</td>
<td>Stems and Material Transport</td>
</tr>
<tr>
<td>Th</td>
<td>Feb 5</td>
<td>Leaves</td>
</tr>
<tr>
<td>T</td>
<td>Feb 10</td>
<td>Leaves</td>
</tr>
<tr>
<td>Th</td>
<td>Feb 12</td>
<td>Roots and Plant Nutrition</td>
</tr>
<tr>
<td>T</td>
<td>Feb 17</td>
<td>Photosynthesis</td>
</tr>
<tr>
<td>Th</td>
<td>Feb 19</td>
<td>EXAM II</td>
</tr>
<tr>
<td>Date</td>
<td>Lecture Topic</td>
<td>Chapter Readings from Plant Biology</td>
</tr>
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</tr>
<tr>
<td>T Feb 24</td>
<td>Reproduction, Meiosis, and Life Cycles</td>
<td>Ch 13</td>
</tr>
<tr>
<td>Th Feb 26</td>
<td>Protists and the Origin of Eukaryotic Cells</td>
<td>Ch 19</td>
</tr>
<tr>
<td>T Mar 3</td>
<td>Protists and the Origin of Eukaryotic Cells</td>
<td>Ch 19</td>
</tr>
<tr>
<td>Th Mar 5</td>
<td>Fungi and Lichens</td>
<td>Ch 20</td>
</tr>
<tr>
<td>T Mar 10</td>
<td>Fungi and Lichens</td>
<td>Ch 20</td>
</tr>
<tr>
<td>Th Mar 12</td>
<td>EXAM III</td>
<td>Ch 13, 19-20</td>
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<tr>
<td>T Mar 17</td>
<td>Seedless Plants</td>
<td>Ch 21</td>
</tr>
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<td>Th Mar 19</td>
<td>Seedless Plants</td>
<td>Ch 21</td>
</tr>
<tr>
<td>M-F Mar 23-27</td>
<td>SPRING BREAK!</td>
<td></td>
</tr>
<tr>
<td>T Mar 31</td>
<td>Seedless Plants</td>
<td>Ch 21</td>
</tr>
<tr>
<td>Th Apr 2</td>
<td>EXAM IV</td>
<td>Ch 21</td>
</tr>
<tr>
<td>T Apr 7</td>
<td>Gymnosperms</td>
<td>Ch 22</td>
</tr>
<tr>
<td>Th Apr 9</td>
<td>Gymnosperms</td>
<td>Ch 22</td>
</tr>
<tr>
<td>T Apr 14</td>
<td>Angiosperms</td>
<td>Ch 23</td>
</tr>
<tr>
<td>Th Apr 16</td>
<td>Angiosperms</td>
<td>Ch 23</td>
</tr>
<tr>
<td>T Apr 21</td>
<td>Angiosperms</td>
<td>Ch 23</td>
</tr>
<tr>
<td>Th Apr 23</td>
<td>Flowering Plant and Animal Coevolution</td>
<td>Ch 24</td>
</tr>
<tr>
<td>T Apr 28</td>
<td>Plants and People</td>
<td>Ch 2</td>
</tr>
</tbody>
</table>
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<th>Points</th>
<th>Grading Scale</th>
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<td>90-100 A</td>
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<td>Exam 2</td>
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<td>100</td>
<td>60-69 D</td>
</tr>
<tr>
<td>Exam 5 (final exam)</td>
<td><strong>100 pts</strong></td>
<td>Below 59 F</td>
</tr>
</tbody>
</table>

**Special dates of concern:**

- **Wednesday, January 7**
  - First day of classes.
- **Monday, January 19**
  - Martin Luther King, Jr. Day
- **Tuesday, January 9**
  - Last day to register of add classes.
- **Friday, February 27**
  - Deadline to file for Aug and Dec 2015 graduation
- **M-F (March 23-27)**
  - Spring Break!
- **Wednesday, March 18**
  - Last day to drop W.
- **Monday, April 6**
  - Preregistration for Fall and Summer 2015 begins
- **Friday, April 17**
  - Preregistration for Fall and Summer 2015 ends.
- **Tuesday, April 28**
  - Last day of classes.
- **W-T, Apr 29-May 5**
  - Final exam period.
- **Friday, May 8**
  - Commencement
Students with disabilities:

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Crossett: Office of Special Student Services representative on campus; phone 870 364-6414; fax 870 364-5707.

Student conduct statement:

Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

Academic dishonesty:

1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.
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For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will a potential grade reduction to F (zero points) on the specific assignment or exam.
Instructor: Glenn Manning  
Office: B-27  
Office Phone: 460-1166  
E-mail: manning@uamont.edu  
Webpage: http://www.uamont.edu/facultyweb/Manning/  
Office Hours: Before or after class or by appointment. Changes in this schedule may occur and will be posted outside my door or announced in class.

BIOL 2153, General Zoology Lecture, 3 credit hours

Objectives: To acquaint the student with the basic concepts of zoology and to study classification, phylogenetic relationships, morphology, function, and life histories of invertebrates and vertebrates.


Student Learning Outcomes: By the conclusion of the course you should be able to have an understanding of the form function, distribution of animal life on earth.

Attendance, Testing, and Cheating: Attendance in this course is mandatory. Attendance will be recorded regularly and anyone missing the equivalent of two weeks of class will be dropped from the course unless appropriate documentation can be provided. Your success in this course is directly dependent on your attendance and participation in lectures.

Exam attendance is required and make-up exams will be given only under extreme circumstances. Make-up exams will be allowed only in cases of illness with a doctor’s excuse, excused university functions, or family emergencies with a written excuse from a family member. If you are forced to miss an exam you must notify me within 24 hours of the exam. Failure to do so will result in a zero on that exam. If you know ahead of time that you will be absent please let me know and prior arrangements for testing can be made. Cheating in any form will not be tolerated and will automatically result in failure of the course. Cellular phones are included in the cheating policy and any appearance of a cellular phone (or other communication devise) during a test will be considered an attempt to cheat by the student. Likewise electronic devices such as cellular phones etc. will not be allowed in lecture unless prior approval is given by the instructor.

*******NO EXTRA CREDIT will be given under any circumstances!!!
Course Grade:  

<table>
<thead>
<tr>
<th>GRADING SCALE</th>
<th>GRADE POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 - 100 A</td>
<td>Hour Exam I 125</td>
</tr>
<tr>
<td>80 - 89 B</td>
<td>Hour Exam II 125</td>
</tr>
<tr>
<td>70 - 79 C</td>
<td>Hour Exam III 125</td>
</tr>
<tr>
<td>60 - 69 D</td>
<td>Hour Exam IV 125</td>
</tr>
<tr>
<td>00 - 59 F</td>
<td>----</td>
</tr>
</tbody>
</table>

Total Points 500

Each student will choose a code number/code name prior to the first test and this will be used to post grades. Grades will be posted either by hard copy or on the Internet. If you do not wish to have your grade posted please let the instructor know prior to the first test. Grades will not be provided over the phone.

Lecture Schedule: CONTENT: (Subject to change); Anticipated test dates are underlined CHAPTERS LISTED FOR EXAMS MAY VARY.

<table>
<thead>
<tr>
<th>LECTURE TOPICS</th>
<th>READING ASSIGNMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Animal Architecture</td>
<td>3</td>
</tr>
<tr>
<td>Classification and Phylogeny Of Animals</td>
<td>4</td>
</tr>
<tr>
<td>Protozoan Groups</td>
<td>5</td>
</tr>
<tr>
<td>Phylum Porifera</td>
<td>6</td>
</tr>
<tr>
<td><strong>HOUR EXAMINATION I (3 Jun)</strong></td>
<td>1, 3, 4, 5 AND 6</td>
</tr>
<tr>
<td>Radiate Animals: Cnidarians and Ctenophorans</td>
<td>7</td>
</tr>
<tr>
<td>Phylum Platyhelminthes &amp; Nemertea</td>
<td>8</td>
</tr>
<tr>
<td>Gnathiferans and lesser Lophotrochozoans</td>
<td>9</td>
</tr>
<tr>
<td>Phylum Mollusca</td>
<td>10</td>
</tr>
<tr>
<td><strong>HOUR EXAMINATION II (11 Jun)</strong></td>
<td>7, 8, 9 AND 10</td>
</tr>
<tr>
<td>Segmented Worms: Annelids</td>
<td>11</td>
</tr>
<tr>
<td>Smaller Ecdysozoans</td>
<td>12</td>
</tr>
<tr>
<td>Arthropods</td>
<td>13</td>
</tr>
<tr>
<td>Phylum Chaetognatha and Echinodermata</td>
<td>14</td>
</tr>
<tr>
<td><strong>HOUR EXAMINATION III (18 Jun)</strong></td>
<td>11, 12, 13, and 14</td>
</tr>
<tr>
<td>The Chordates and Fishes</td>
<td>15 and 16</td>
</tr>
<tr>
<td>Early Tetrapods and Modern Amphibians</td>
<td>17</td>
</tr>
<tr>
<td>Amniote Origins and Reptilian Groups</td>
<td>18</td>
</tr>
<tr>
<td>Birds</td>
<td>19</td>
</tr>
<tr>
<td>Mammals</td>
<td>20</td>
</tr>
<tr>
<td><strong>HOUR EXAMINATION IV (24 June)</strong></td>
<td>15, 16, 17, 18, 19, and 20</td>
</tr>
</tbody>
</table>

Important Dates:

- 27 May - last day to register or add a class
- 19 June - last day to drop with a W
- 24 June - last day of classes
Students with disabilities: It is the policy of the University of AR at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.

Statement on disruptive behavior: The following action is prohibited under the Student Conduct Code: Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others. THIS INCLUDES THE USE OF CELL PHONES (RINGING OR TEXTING DURING CLASS)

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BIOL 2161 (ACT: BIO 1054)
General Zoology Lab
Summer 2015
Lab M-Th 10:30-1:20
Science Center B-5

Instructor: Glenn Manning
Office: B-27
Office Phone: 460-1166
E-mail: manning@uamont.edu
Webpage: http://www.uamont.edu/facultyweb/Manning/
Office Hours: Before or after class or by appointment. Changes in this schedule may occur and will be posted outside my door or announced in class.

BIOL 2161, General Zoology Lab, 1 credit hour

Objectives: To acquaint the student with the basic concepts of zoology and to study classification, phylogenetic relationships, morphology, function, and life histories of invertebrates and vertebrates through hands on experiences.


Student Learning Outcomes: By the conclusion of the course you should be able to have an understanding of the form function, distribution of animal life on earth.

Attendance, Testing, and Cheating: Attendance in this course is mandatory. Attendance will be recorded regularly and anyone missing the equivalent of two weeks of class will be dropped from the course unless appropriate documentation can be provided. Your success in this course is directly dependent on your attendance and participation in lectures.

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Likewise electronic devices such as cellular phones etc. will not be allowed in lecture unless prior approval is given by the instructor.

There will be 11 in class lab assignments worth 8 points each. You will be allowed to drop your lowest score.

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<table>
<thead>
<tr>
<th>Course Grade:</th>
<th>GRADING SCALE</th>
<th>GRADE POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>90 - 100</td>
<td>LAB EXAM I</td>
</tr>
<tr>
<td></td>
<td>80 - 89</td>
<td>LAB EXAM II</td>
</tr>
<tr>
<td></td>
<td>70 - 79</td>
<td>LAB EXAM III</td>
</tr>
</tbody>
</table>
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COURSE CONTENT (Subject to change)

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>CHAPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 May</td>
<td>Microscopy and Animal Cells &amp; Tissues</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td></td>
<td>Mitosis and Development</td>
<td></td>
</tr>
<tr>
<td>27 May</td>
<td>Unicellular Animals: Protozoans</td>
<td>6</td>
</tr>
<tr>
<td>28 May</td>
<td>Phylum Porifera</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Phylum Cnidaria</td>
<td>8</td>
</tr>
<tr>
<td>1 June</td>
<td>LABORATORY EXAMINATION I</td>
<td>1, 2, 3, 4, 6, 7 and 8</td>
</tr>
<tr>
<td>2 June</td>
<td>Lophotrochozoa Worms:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phylum Platyhelminthes &amp; Annelida</td>
<td>9&amp;12</td>
</tr>
<tr>
<td></td>
<td>Phylum Rotifera &amp; Acanthocephala</td>
<td>Pg 163 &amp; 164</td>
</tr>
<tr>
<td>3 June</td>
<td>Phylum Mollusca</td>
<td>11</td>
</tr>
<tr>
<td>4 June</td>
<td>LABORATORY EXAMINATION II</td>
<td>9, 11 and 12</td>
</tr>
<tr>
<td>8 June</td>
<td>Ecdysozoa Worms: Phylum Nematoda &amp; Nematomorpha</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Phylum Arthropoda: Chelicerate</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Phylum Arthropoda: Crustacean</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Phylum Arthropoda: Uniramia</td>
<td>15</td>
</tr>
<tr>
<td>9 June</td>
<td>Phylum Echinodermata</td>
<td>16</td>
</tr>
<tr>
<td>10 June</td>
<td>LABORATORY EXAMINATION III</td>
<td>10, 13, 14, 15, and 16</td>
</tr>
<tr>
<td>16 June</td>
<td>Phylum Chordata</td>
<td>17 – 22</td>
</tr>
<tr>
<td></td>
<td>Frog Anatomy</td>
<td>19</td>
</tr>
<tr>
<td>17 June</td>
<td>Fetal Pig Anatomy</td>
<td>22</td>
</tr>
<tr>
<td>18 June</td>
<td>Mammalian Heart, Brain, &amp; Eye</td>
<td>22</td>
</tr>
<tr>
<td>22 June</td>
<td>LABORATORY EXAMINATION IV</td>
<td>17 – 22</td>
</tr>
</tbody>
</table>

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Instructor Name: Karen Fawley, Ph.D
Instructor Location of Office: Museum of Natural History, Room 101
Instructor Phone: 870-460-1165
Instructor E-mail Address: fawley@uamont.edu
Instructor Website: http://www.uamont.edu/facultyweb/fawley
Office hours: MW, 9-11am; Th, 1:30-3pm or by appointment.
Course Title and Credit Hours: Biology 2171, General Botany Lab, 1 credit hour

Course Description: Morphological survey of plants, fungi, and algae, including the anatomy of seed plants.

Corequisite: Biology 2143 (A.C.T. equivalent BIOL 1034)


Student Learning Outcomes: To familiarize students with plant biology through an understanding of plant structure and function, plant reproduction, genetics, and evolution, and the diversity of plants, prokaryotes, protists, and fungi.

Statement of Special Policies:

Class Attendance: Attendance will be taken during every lecture. In general, students who attend class regularly make better grades. As a courtesy to the students in the class and the instructor, please be on time.

Classroom Policies: Use of tobacco products is not permitted on UAM grounds.
Cell phones and all electronics should be turned off and put away during class. Any cell phone that is found on a student’s desk during an exam or a quiz will result in an automatic zero.

**Cheating/Plagiarism:** Cheating will not be tolerated. The Academic Dishonesty policy found on page 4 of this syllabus will be applied to all assignments, quizzes and exams.

**Course Content Outline/Calendar:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Jan 12</td>
</tr>
<tr>
<td>M</td>
<td>Jan 19</td>
</tr>
<tr>
<td>M</td>
<td>Jan 26</td>
</tr>
<tr>
<td>M</td>
<td>Feb 2</td>
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<tr>
<td>M</td>
<td>Feb 9</td>
</tr>
<tr>
<td>M</td>
<td>Feb 16</td>
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<tr>
<td>M</td>
<td>Feb 23</td>
</tr>
<tr>
<td>M</td>
<td>Mar 2</td>
</tr>
<tr>
<td>M</td>
<td>Mar 9</td>
</tr>
<tr>
<td>M</td>
<td>Mar 16</td>
</tr>
<tr>
<td>M-F</td>
<td>Mar 23-27</td>
</tr>
<tr>
<td>M</td>
<td>Mar 30</td>
</tr>
<tr>
<td>M</td>
<td>April 6</td>
</tr>
</tbody>
</table>
M Apr 13  LAB EXAM IV (Labs 8-9)/ Lab 10-Gymnosperms

M Apr 20  Lab 11. Angiosperms-Flowers/ Lab 12. Angiosperms-Fruits

M Apr 27  FINAL EXAM (Exam V) (Labs 10-12)

**Lab Quiz/Exam Schedule:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Quiz/Exam Contents</th>
<th>Total points</th>
</tr>
</thead>
<tbody>
<tr>
<td>M Jan 26</td>
<td>Quiz -Lab 1. Microscopy</td>
<td>20</td>
</tr>
<tr>
<td>M Feb 2</td>
<td>Lab Exam I- Labs 1-2</td>
<td>100</td>
</tr>
<tr>
<td>M Feb 16</td>
<td>Quiz -Lab 4. Leaves</td>
<td>20</td>
</tr>
<tr>
<td>M Feb 23</td>
<td>Lab Exam 2-Labs 3-5</td>
<td>100</td>
</tr>
<tr>
<td>M Mar 9</td>
<td>Quiz -Lab 6. Protists</td>
<td>20</td>
</tr>
<tr>
<td>M Mar 16</td>
<td>Lab Exam 3-Labs 6-7</td>
<td>100</td>
</tr>
<tr>
<td>M Apr 6</td>
<td>Quiz -Lab 8. Seedless plants-Bryophytes</td>
<td>20</td>
</tr>
<tr>
<td>M Apr 13</td>
<td>Lab Exam 4-Labs 8-9</td>
<td>100</td>
</tr>
<tr>
<td>M Apr 20</td>
<td>Quiz-Lab 10. Gymnosperms</td>
<td>20</td>
</tr>
<tr>
<td>M Apr 27</td>
<td>Lab Exam 5-(Final Exam)-Labs 10-12</td>
<td>100</td>
</tr>
</tbody>
</table>

**Provisions for tests and evaluations:**

Scores on exams will be posted on the instructor’s web site,  
[http://www.uamont.edu/facultyweb/fawley](http://www.uamont.edu/facultyweb/fawley), by a code number unless a student requests not to have his/her scores posted.

**Rescheduling Exams:** If you are unable to take an exam at the scheduled time, please notify the instructor well before the day of the exam to reschedule at an earlier time.

**Make-up Exams:** No make-up exams will be given, but the student can replace one missed exam with the final exam grade. Students can make-up one exam only, if they have a valid medical or personal excuse. The student must get in contact with the professor before or the day of the scheduled exam. Any additional missed exams will be counted as a zero.

**Make-up Labs/Quizzes:** Due to time constraints, there will be no make-up labs or make-up quizzes. However, students can drop 1 lab and 1 quiz during the semester.
Grading Policy:

<table>
<thead>
<tr>
<th></th>
<th>Grading scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Quizzes</td>
<td>90-100 A</td>
</tr>
<tr>
<td>100 pts</td>
<td></td>
</tr>
<tr>
<td>In-Lab Evaluation</td>
<td>80-89 B</td>
</tr>
<tr>
<td>220 pts</td>
<td></td>
</tr>
<tr>
<td>Lab Exams</td>
<td>70-79 C</td>
</tr>
<tr>
<td>500 pts</td>
<td></td>
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<tr>
<td></td>
<td>60-69 D</td>
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<tr>
<td>820 pts</td>
<td></td>
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<tr>
<td></td>
<td>Below 60 F</td>
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</tbody>
</table>

Special dates of concern:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday, January 7</td>
<td>First day of classes.</td>
</tr>
<tr>
<td>Monday, January 19</td>
<td>Martin Luther King, Jr. Day</td>
</tr>
<tr>
<td>Tuesday, January 9</td>
<td>Last day to register of add classes.</td>
</tr>
<tr>
<td>Friday, February 27</td>
<td>Deadline to file for Aug and Dec 2013 graduation</td>
</tr>
<tr>
<td>M-F (March 23-27)</td>
<td>Spring Break!</td>
</tr>
<tr>
<td>Wednesday, March 18</td>
<td>Last day to drop W.</td>
</tr>
<tr>
<td>Monday, April 6</td>
<td>Preregistration for Fall and Summer 2015 begins</td>
</tr>
<tr>
<td>Friday, April 17</td>
<td>Preregistration for Fall and Summer 2015 ends.</td>
</tr>
<tr>
<td>Tuesday, April 28</td>
<td>Last day of classes.</td>
</tr>
<tr>
<td>W-T, Apr 29-May 5</td>
<td>Final exam period.</td>
</tr>
<tr>
<td>Friday, May 8</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

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For assistance on a College of Technology campus contact:
McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105.
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   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.

2. **Collusion:** Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

3. **Duplicity:** Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

4. **Plagiarism:** Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will a potential grade reduction to F (zero points) on the specific assignment or exam.
University of Arkansas at Monticello
School of Mathematical and Natural Science

Human Anatomy and Physiology
BIOL 2233
ACTS#: BIOL 2404
Summer 2015
Lecture MTWH 8:00-10:15
Science Center Auditorium

Instructor: Dr. Christopher G. Sims
Office: B 4
Office Phone: 460-1664
E-mail: simsc@uamont.edu
Web Site: http://www.uamont.edu/facultyweb/Sims/
Office Hours: 10:15-12:00 daily or by appointment. Changes in this schedule may occur and will be posted
outside my door or announced in class.

Course Title and Credits: Human Anatomy and Physiology II (BIOL 2243); 3 Credit Hours

Course Description: A basic course in anatomy and physiology with emphasis on structure and function of cells,
tissues, organs, and systems in the human body.

Co-requisites: ENGL 1013 Composition I (ACTS #: ENGL 1013)
BIOL 1063 Introduction to Biological Science strongly recommended (ACTS #: 1004)

New York. 14th ed.
ISBN: 978-1-118-34500-9 (hard cover)
ISBN: 978-1-118-80897-9 (e-text)
NOTE: Neither the loose leaf or e-text will be purchased back by the book store.

Attendance, Testing, and Cheating: Attendance in this course is mandatory and will be recorded regularly.
Exam attendance is required and make-up exams will be given only under extreme circumstances. Make-up
exams will be allowed only in cases of illness with a doctor’s excuse, excused university functions, or family
emergencies with a written excuse from a family member. If you are forced to miss an exam you must notify me
within 24 hours of the exam. Failure to do so will result in a zero on that exam. If you know ahead of time that
you will be absent please let me know and prior arrangements for testing can be made.
Cheating in any form will not be tolerated and will automatically result in failure of the course. Cellular
phones are included in the cheating policy and any appearance of a cellular phone (or other communication
device) during a test will be considered an attempt to cheat by the student.
Likewise electronic devices such as cellular phones etc. will not be allowed in lecture unless prior approval is given by the instructor. Failure to follow this rule will result in the student being asked to leave class.

Objectives: To convey knowledge of basic human anatomy and physiology, with special emphasis on cells, tissues, and organ systems.

Course Grade:

<table>
<thead>
<tr>
<th>Course Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1:</td>
<td>100 pts.</td>
</tr>
<tr>
<td>Exam 2:</td>
<td>100 pts.</td>
</tr>
<tr>
<td>Exam 3:</td>
<td>100 pts.</td>
</tr>
<tr>
<td>Final Exam:</td>
<td>100 pts.</td>
</tr>
<tr>
<td>Total for Course:</td>
<td>400 pts.</td>
</tr>
</tbody>
</table>

Your percentage grade will be based on the number of points you earn divided by the number of possible points in the course.

********ON THE DAY OF EACH EXAM, PLEASE BRING A SCANTRON FORM (882-E) AND A NUMBER 2 PENCIL.

********NO EXTRA CREDIT will be given under any circumstances!!!

Each student will choose a code number/code name prior to the first test and this will be used to post grades. Grades will be posted either by hard copy or on the Internet. If you do not wish to have your grade posted please let the instructor know prior to the first test. Grades will not be provided over the phone or by E-mail.

Lecture Schedule:

<table>
<thead>
<tr>
<th>Lecture Schedule</th>
<th>Chapter #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to the human body</td>
<td>1</td>
</tr>
<tr>
<td>Chemical organization</td>
<td>2</td>
</tr>
<tr>
<td>Cellular organization</td>
<td>3</td>
</tr>
<tr>
<td>EXAM 1</td>
<td>25</td>
</tr>
<tr>
<td>Cellular metabolism</td>
<td></td>
</tr>
<tr>
<td>Tissue organization</td>
<td>4</td>
</tr>
<tr>
<td>EXAM 2</td>
<td>5</td>
</tr>
<tr>
<td>Integumentary system</td>
<td></td>
</tr>
<tr>
<td>Skeletal system</td>
<td>6</td>
</tr>
<tr>
<td>• Bone</td>
<td></td>
</tr>
<tr>
<td>• Axial</td>
<td>7</td>
</tr>
<tr>
<td>• Appendicular</td>
<td>8</td>
</tr>
<tr>
<td>EXAM 3</td>
<td></td>
</tr>
<tr>
<td>Muscular tissue</td>
<td>10</td>
</tr>
<tr>
<td>Muscular system</td>
<td>11</td>
</tr>
<tr>
<td>Nervous tissue</td>
<td>12</td>
</tr>
<tr>
<td>EXAM #4 (Final)</td>
<td></td>
</tr>
</tbody>
</table>

Tests will be given every Wednesday during the first hour.
Important Dates:
May 25 (Mon) – Memorial Day Holiday. Offices and classes closed.
May 26 (Tues) – Application deadline for regular registration. Registration for undergraduate and graduate classes for sessions S1 and 1. First day of classes for sessions S1 and 1.
May 27 (Wed) – Last day to register or add classes for session S1 and 1.
June 19 (Fri) - Last day to drop session S1 classes. Grade(s) will be W.
June 24 (Wed) – Last day of session S1 classes. Final exams in those classes.

Students with disabilities: It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; email: whitingm@uamont.edu

Student conduct statement: Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

Academic dishonesty:
9. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.
10. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
11. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
12. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be given a failing grade (F) in the course.
BIOL 2243—HUMAN ANATOMY AND PHYSIOLOGY
(ACTS BIOL 2414) Summer II 2015, Science Center Auditorium
MTWTh 10:30-12:45

Instructor: John L. Hunt. E-mail: huntj@uamont.edu. Phone: 870-460-1466. Office: B11, Science Center. Office hours: Monday-Thursday, 2:00-3:00, by appointment. Website: http://uam-web2.uamont.edu/facultyweb/huntj/.


Objective: A continuation of the basic course in anatomy and physiology, with emphasis on structure and function of cells, tissues, organs, and systems in the human body.

Grading: Grades will be computed as a percentage of 400 points. Of these, 300 points will come from 3 hourly exams, and 100 will come from the final exam. Grading will be on the standard 10-point scale (90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F). There is no curving of the grade or “extra” credit. Points will be earned from scheduled examinations. Slight changes in the grading scheme may be made at the discretion of the instructor.

Exams will consist of multiple choice questions—bring a scantron on exam days. Exam dates are July 9, July 16, July 23, and July 30. These dates will not change! (In the event of emergency cancellation of class on an exam day, the exam will occur on the next class day.) Each test will cover material beginning with the previous exam, and continuing through the last class day before the exam. The final exam, which will not be comprehensive, will be on Wednesday, July 30. Please note that we will have lecture after exams are completed!

Attendance: Attendance at all lectures and exams is mandatory. Attendance will be recorded regularly. Most exam material will come from lectures, so that your success, or lack thereof, in this class is directly related to attendance. Because each subject we will cover builds on those previous to it, missing even one lecture can make it difficult to catch up. This is especially true during a short summer session! Please plan on coming to class every day.

Missed exams: Missed exams may be made up only by students with an approved university excuse, by arrangement with the instructor. Approved university excuses do not include “hung over,” “overslept,” or “my car is busted.” Please be aware that any made-up exam
may NOT be the same exam given during the normal class period; make-up exams may be essay-style. **Students are responsible for all material presented in class, even with an approved university excuse for missing a class.** *It is the responsibility of the student to obtain missed material from classmates.*

**Class policies:** Human anatomy and physiology is a demanding class, with a large number of terms and concepts to be mastered. Taking the course in a short summer term is even more difficult. Expect to spend every free minute studying. This will cut into your beer-drinking time—please accept my apologies in advance. The instructor is here to help you; please feel free to ask questions at any time. You are encouraged to seek my help outside of regular class hours if you are so inclined.

Please do not hold conversations with classmates during lecture. You may tape lectures if you so desire, but this should not substitute for the taking of detailed class notes. **DO NOT BRING CELL PHONES TO CLASS!** If your cell phone rings during my lecture, I will respond in the only manner available to me—by adjusting your grade. You may not text-message or keep your cell phone on your desk during class. **If I see you text-messaging during class, you will be asked to leave.** If this occurs twice, you will be assigned a grade of F for the course. No electronic devices other than tape recorders are allowed in class—this includes laptops and i-pods. You may not read outside material, study other classes, or work crossword puzzles during class. Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on pages 39-45 of the 2013-2015 UAM Catalog.

The last date to drop this course with a W (and for most other courses at UAM) is July 27.

**Students with disabilities:** It is the policy of the University of Arkansas-Monticello to accommodate students with disabilities in accordance with federal law. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall, Room 120, phone 870-460-1026; TDD 870-460-1626; fax 870-460-1926.

**Academic dishonesty:** Cheating will not be tolerated. The Academic Code of the University of Arkansas-Monticello may be found on page 40 of the 2013-2015 UAM Catalog. Please note the following definitions of academic dishonesty:

**Cheating:** Students shall not give, receive, offer, or solicit information on examinations, quizzes, or other class work. This includes but is not limited to the following classes of dishonesty: a) Copying from another student’s paper; b) Use during the examination of
prepared materials, notes, or texts other than those specifically permitted by the
instructor; c) Collaboration with another student during the examination; d) Buying,
selling, stealing, soliciting, or transmitting an examination or any material purported to be
the unreleased contents of coming examinations or the use of any such material; e) Substituting for another person during an examination or allowing such substitutions for
oneself.

Collusion: Collusion is defined as obtaining from another party, without specific approval in
advance by the instructor, assistance in the production of work offered for credit to the
extent that the work reflects the ideas of the party consulted rather than those of the
person whose name is on the work submitted.

Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged
work in two or more courses, without specific advanced approval of the instructors
involved.

Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to
one’s use, and to incorporate in one’s own work without acknowledgement the ideas or
passages from the writings or works of others.

Please note that the instructor has wide latitude in taking corrective action in response to
cheating; expect the harshest possible response in this class. In other words, if I catch you
cheating even once, I will assign a grade of F for the course. You will not be allowed to have a
cell phone of any sort on your desk during exams (or any other time during class).

Material covered: Lecture material will commence at Chapter 13 in the text, and will
continue forward until we run out of time. Topics to be covered include: spinal cord; brain;
endocrine system; circulatory system; lymphatic system; immune system; respiratory system;
and the urinary system. We will return to Chapter 17 (special senses) at the end of the
semester if time permits.

Class web page. The class web page may be found at: http://uam-
web2.uamont.edu/facultyweb/huntj/A&P%20page.htm. On this page there are lists of terms
to know and lecture outlines for each of the chapters of the text we will cover. These outlines
are general in nature, and are not meant to replace detailed notes which you should take in
class. Test scores will be posted on the class web page shortly after each exam, using an
anonymous code word selected by you.
School of Mathematical and Natural Sciences Syllabus
Summer 1, 2015

Course Title and Number: Anatomy and Physiology Laboratory I, Biology 2291

Instructor's Name and Office Number: Ms. Jessie Chappell
Office Number: Room B-26 in the Science Center
Office Hours: M-H 10:00-10:30
Office Tel: 460-1566 E-mail: chappellj@uamont.edu

Required texts:

Course objectives
Biology 2261 is a course designed to convey a knowledge of basic human anatomy and physiology. Through hands on experience in a laboratory setting students will learn human anatomy and physiology with a special emphasis on cells, tissues, the skeleton, muscles, and the nervous system.

<table>
<thead>
<tr>
<th>Course Content</th>
<th>Lab Assignments</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Microscope</td>
<td>Lab manual, exercise 3</td>
<td>23-28</td>
</tr>
<tr>
<td>Cell Structure and function and Mitosis</td>
<td>Lab manual, exercise 4</td>
<td>31-36</td>
</tr>
<tr>
<td>Transport across the Plasma Membrane</td>
<td>Lab manual, exercise 5</td>
<td>41-44</td>
</tr>
<tr>
<td>Survey of Tissues</td>
<td>Lab manual, exercise 6</td>
<td>51-74</td>
</tr>
<tr>
<td>Epithelial, Connective, Muscle &amp; Nervous Bone</td>
<td>Lab manual additional pages</td>
<td></td>
</tr>
<tr>
<td>Blood</td>
<td>99(fig8.3b)</td>
<td></td>
</tr>
</tbody>
</table>

Exam I on Tissues(100 points)
Skeletal System and Lab manual, exercises 8-10 99-162
Knee Lab manual, exercise 11 166-167

Exam II on Axial Skeleton(50 points)

Exam III on Appendicular Skeleton(50 points)
External &Muscular Anatomy System (Mink) Smith & Schenk, Chapters 1, 3
Study of Human Manikins Manikin Handouts
Human model and sheep brain, Smith & Schenk, Chapter 8

Exam IV on Mink Muscles, Human muscles on Manikin,
Basis of final grade | Grading Scale
--- | ---
Exam I 100 | 90 - 100 A
Exam II 50 | 80 - 89 B
Exam III 50 | 70 - 79 C
Exam IV 100 | 00 - 59 F
Quizzes and lab performance 100

An A grade will be allowed only when a student has completed 2 exams with a grade of C or better.

**Basis of final grade**: The final grade will be based on the average of the four lab examinations (300 points) and 100 points for quizzes and performance. No more than 10 quizzes will be given over the semester. The two lowest scores on quizzes will be dropped. Lab performance will account for 15 points of the 100 for quizzes and lab performance. One point is deducted for each missed lab.

**Cheating**: Cheating will not be tolerated. The policy found on page 59 of the catalog, under Academic Code Violations will be applied to students guilty of cheating on quizzes or exams. You will not receive credit for quizzes or exams when you violate academic codes. **Cell phones are not permitted on your desk or person during exams.**

**Class attendance**: You are expected to attend classes regularly and punctually. It is **your responsibility** to inform me of school related absences prior to the absence. After 2 absences your ability to succeed in Anatomy and Physiology lab will be greatly diminished. Points are given for attending and completing each lab. You will sign an attendance sheet for each class. Failure to sign the attendance sheet will result in a 1 point deduction from your overall points. **An excused absence does not result in the 1 point deduction but does not excuse you from scheduled homework, quizzes or exams. You are expected to inquire about assignments and be prepared when you return to class.** If you are forced to miss an exam you must notify me within 24 hours of the exam.

**Makeup exams**: A makeup exam is a privilege requiring a one week advance notice in writing for school related activities and an e-mail or call is required within 24 hours for medical and emergency excuses. Makeup exams must be completed within a week of returning to class. It is to your advantage to take exams as scheduled. **Only one exam makeup is allowed. Quizzes cannot be made up.**

**Classroom policies**: Use of tobacco products is not permitted on our campus. Students should not write on the desks. Scores on exams will be posted by a code number assigned on the first
exam unless a student requests not to have his/her scores posted. Students must provide their own Scantrons answer sheets for exams and will be notified when they are needed.

**Dissecting supplies:** Each student group is required to have scissors, scalpel, probe, and forceps. The bookstore stocks dissecting kits. Plastic gloves are recommended and can be purchased at Wal-Mart, drug stores, pharmacy, hair care or gardening stores.

**DATES TO REMEMBER:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 26</td>
<td>First day of class</td>
</tr>
<tr>
<td>June 27</td>
<td>Last day to register</td>
</tr>
<tr>
<td>June 19</td>
<td>Last day to drop with W</td>
</tr>
<tr>
<td>June 24</td>
<td>Last day of class and final exams. Our lab final (exam 4) will be given</td>
</tr>
<tr>
<td></td>
<td>when all lab work is completed</td>
</tr>
<tr>
<td>June 25-26</td>
<td>Registration for Summer II</td>
</tr>
</tbody>
</table>

The following action is prohibited under the Student Conduct Code:

Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others.

It is the policy of the University of Arkansas-Monticello to accommodate individuals with disabilities pursuant to federal law and the University=s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall, Room 219, phone 870-460-1154; TDD 870-460-1251; or fax 870-460-1810.

**COURSE OUTLINE:**

*From Allen & Harper Laboratory Manual for Anatomy and Physiology, 4nd Edition*

<table>
<thead>
<tr>
<th>EXERCISE</th>
<th>PAGES</th>
<th>Syllabus, announce <strong>quiz</strong>, talk about future quizzes,</th>
<th>3</th>
<th>23-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/26T</td>
<td></td>
<td>Histology, epithelial tissues</td>
<td>6</td>
<td>51-82</td>
</tr>
<tr>
<td>5/27W</td>
<td></td>
<td>Histology, connective tissues</td>
<td>6</td>
<td>51-82</td>
</tr>
<tr>
<td>5/28H</td>
<td></td>
<td>Finish tissues and Mitosis.</td>
<td>4</td>
<td>35-36</td>
</tr>
</tbody>
</table>

Assign pages 107-112 to fill in blanks to prepare for studying actual skull.

113
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/2T</td>
<td><strong>EXAM 1 (100 POINTS) ON TISSUES AND MITOSIS,</strong>&lt;br&gt;<em>Continue skull after exam</em> and assign terminology quiz 9 105-136 sternum, hyoid bone</td>
</tr>
<tr>
<td>6/3W</td>
<td>Finish skull. Introduce the remainder of axial skeleton 9 105-136</td>
</tr>
<tr>
<td>6/4H</td>
<td>Finish axial skeleton</td>
</tr>
<tr>
<td>6/8M</td>
<td><strong>EXAM 2 (50 PTS) ON AXIAL SKELETON,</strong> 10 137-158</td>
</tr>
<tr>
<td>6/9T</td>
<td>Start appendicular skeleton 10 137-158</td>
</tr>
<tr>
<td>6/10W</td>
<td>Finish appendicular skeleton, 10 137-158</td>
</tr>
<tr>
<td>6/11H</td>
<td><strong>EXAM 3 (50 PTS) ON APPENDICULAR SKELETON,</strong>&lt;br&gt;Assign minks, start muscles 20 312-314</td>
</tr>
<tr>
<td>6/15M</td>
<td>Continue mink muscles, human muscles and sheep 3 21-44 brain &amp; human brain model 8 97-102</td>
</tr>
<tr>
<td>6/16T</td>
<td>Review mink &amp; man muscles, and human and sheep brains</td>
</tr>
<tr>
<td>6/17W</td>
<td>Review day. No class</td>
</tr>
</tbody>
</table>
| 6/18H | **FINAL EXAM (100 pts.) over mink, man, and brains**

*From Smith & Schenk. *A Dissection Guide and Atlas to the Mink*
Corequisites: BIOL 2243 Anatomy and Physiology II

Required texts:

Instructor's name and office number:
Ms. Jessie Chappell
Office Number: Room B-26 in the Science Center
Office Hours: M -H 9:30-10:30
Office Tel: 460-1566
E-mail: chappellj@uamont.edu

Class attendance:
You are expected to attend classes regularly and punctually. One point is earned for attending and completing each lab. Abseceses and tardies will result in a loss of these points. You will sign an attendance sheet for each lab and exam. Failure to sign the attendance sheet will result in a 1 point deduction. An excused absence does not excuse you from scheduled homework, quizzes or exams. You are expected to inquire about assignments and be prepared when you return to class. An excused absence includes medical excuses and UAM authorized student activities accompanied by proper documentation.

Cheating:
Cheating will not be tolerated. The policy found on page 59 of the catalog, under Academic Code Violations. Violators will be dropped from the class. Use of cell phones or having a cell phone on your desk during a quiz or exam will result in a score of zero. A quiz score of zero due to cell phone usage or cheating will not be dropped.

Makeup exams:
All makeup exams will be essay type and will be given at the end of the semester. Exceptions will be made for medical excuses accompanied by documentation and UAM authorized student activities. It is to your advantage to take exams as scheduled.
Quizzes cannot be made up. The two lowest quiz scores will be dropped. A missed quiz becomes a drop. Exam scores are never dropped.

Classroom policies:
Cell phones should be silenced during class. Use of your phone to photograph specimens is at the discretion of the instructor. Students should not write on the desks. Scores on exams will be posted by a code number assigned on the first exam unless a student requests not to have his/her scores posted. Students must provide their own Scantron answer sheets for exams 1 and 2.

Dissecting supplies:
Each student group is required to have scissors, scalpel, probe, and forceps. The bookstore stocks dissecting kits. These materials will be needed for heart anatomy and mink dissection. Plastic gloves are recommended and can be purchased at Wal-Mart, drug stores, pharmacy, hair care or gardening stores.

Important Dates:
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1</td>
<td>First day of classes</td>
</tr>
<tr>
<td>July 2</td>
<td>Last day to register or add classes for all students</td>
</tr>
<tr>
<td>July 4</td>
<td>No class HOLIDAY</td>
</tr>
<tr>
<td>July 25</td>
<td>Last day to drop a class</td>
</tr>
<tr>
<td>July 30</td>
<td>Last day of classes and Final Exams</td>
</tr>
</tbody>
</table>

Course objectives
Biology 2261 is a course designed to convey a knowledge of basic human anatomy and physiology. Through hands on experience in a laboratory setting students will learn human anatomy and physiology with a special emphasis on the structure and function of internal systems including exercises which demonstrate physiological principles.
## Course outline

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab topic</th>
<th>Lab Assignments</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Week of)</td>
<td>(Week of)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07/1</td>
<td>Skeletal Muscle Function</td>
<td>Lab manual, exercise 12</td>
<td>173-184</td>
</tr>
<tr>
<td></td>
<td>Myogram</td>
<td>Handout</td>
<td></td>
</tr>
<tr>
<td>07/2</td>
<td>Somatic reflexes</td>
<td>Lab manual, exercise 19</td>
<td>287-296</td>
</tr>
<tr>
<td></td>
<td>Autonomic nervous system</td>
<td>Lab manual, exercise 24</td>
<td>331-342</td>
</tr>
<tr>
<td>07/6</td>
<td>General senses</td>
<td>Lab manual, exercise 22</td>
<td>343-356</td>
</tr>
<tr>
<td>07/7</td>
<td>Special senses</td>
<td>Lab manual, exercise 23</td>
<td>357-387</td>
</tr>
<tr>
<td><strong>07/8</strong></td>
<td><strong>EXAM 1</strong></td>
<td><strong>Exercises 12, 19, 24, 22, 23</strong></td>
<td></td>
</tr>
<tr>
<td>07/9</td>
<td>Blood Components and blood tests</td>
<td>Lab manual, exercise 26</td>
<td>409-428</td>
</tr>
<tr>
<td>07/13</td>
<td>Heart Structure and Function</td>
<td>Lab manual, exercise 27</td>
<td>429-448</td>
</tr>
<tr>
<td></td>
<td>Cardiac cycle</td>
<td>Lab manual, exercise 28</td>
<td>449-460</td>
</tr>
<tr>
<td></td>
<td>ECG</td>
<td>Handout</td>
<td></td>
</tr>
<tr>
<td>07/14</td>
<td>Blood vessel structure &amp; function</td>
<td>Lab manual, exercise 29</td>
<td>461-476</td>
</tr>
<tr>
<td>07/15</td>
<td>Respiratory system structure &amp; function</td>
<td>Lab manual, exercise 32-33</td>
<td>525-558</td>
</tr>
<tr>
<td><strong>07/16</strong></td>
<td><strong>EXAM 2</strong></td>
<td><strong>Exercises 26, 27, 28, 29, 32, 33, and ECG handout</strong></td>
<td></td>
</tr>
<tr>
<td>MINK</td>
<td>Mink manual, exercise 4</td>
<td>45-55</td>
<td></td>
</tr>
<tr>
<td>07/20</td>
<td>Digestive system</td>
<td>Mink manual, exercise 5</td>
<td>56-78</td>
</tr>
<tr>
<td>07/21</td>
<td>Circulatory system,</td>
<td>Mink manual, exercise 6</td>
<td>79-82</td>
</tr>
<tr>
<td></td>
<td>Sheep and human heart models</td>
<td>Mink manual, exercise 7</td>
<td>83-96</td>
</tr>
<tr>
<td></td>
<td>Respiratory system</td>
<td>Mink manual, exercise 8</td>
<td>102-106</td>
</tr>
<tr>
<td></td>
<td>Reproductive and excretory systems</td>
<td>Mink manual, exercise 9</td>
<td>107-112</td>
</tr>
<tr>
<td></td>
<td>Nervous system</td>
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<tr>
<td></td>
<td>endocrine system</td>
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<tr>
<td>07/23</td>
<td>Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>07/27</strong></td>
<td><strong>EXAM 3 - Practical covering Mink internal systems, sheep heart and heart models</strong></td>
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</tbody>
</table>
Basis of final grade:

The final grade will be based on the average of the three lab examinations; and the quiz and performance average. Nine 10 point quizzes are given over the semester and 15 points for performance. The 2 lowest quizzes will be dropped and the quizzes and performance points will be averaged for one fourth of your total 400 points. A quiz score of zero due to cell phone usage or cheating will not be dropped.

Makeup exams:
All makeup exams will be essay type and will be given at the end of the semester. Exceptions will be made for medical excuses accompanied by documentation and UAM authorized student activities. Only approved (by instructor) arrangements can be made to take an exam or complete a lab with another section of A&P II lab. It is to your advantage to take exams as scheduled. Quizzes cannot be made up. The two lowest quiz scores will be dropped. A missed quiz becomes a drop. Exam scores are never dropped. A quiz score of zero due to cell phone usage or cheating will not be dropped.

It is the policy of the University of AR at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.

The following action is prohibited under the Student Conduct Code:
Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others.

Incomplete:
To qualify for a grade of AI@ for an incomplete a student must have a AC@ or better average and have completed 67% of the course work.
COURSE
Molecular Biology lab (BIOL 3331), 1 credit hour
Lab meeting time: Monday 1:10 – 4:00 pm, Science Center B36/B32

PLEASE NOTE:
There will be some weeks when you will need to come into the lab outside of normally scheduled lab time.

PRE-REQUISITES
BIOL 3354 (Genetics Lecture and Lab).

CO-REQUISITE: Concurrent enrollment in Molecular Biology (BIOL 3333) is required.

REQUIRED TEXTBOOKS AND SUPPLEMENTARY MATERIALS
No lab manual is required. Lab protocols and other reading material will be supplied or students will be directed to the appropriate web sites for protocols/reading material. Some background reading will be assigned from the textbook used in the co-requisite course (Molecular Biology, BIOL 3333).

A new, lined and bound composition notebook is needed for lab.

INSTRUCTOR
Mary Stewart, Ph.D. Phone: 870-460-1767
Email Address: stewartm@uamont.edu (Please remember to put the m after stewart in my email)

OFFICE AND OFFICE HOURS
Office: Science Center, Room B12
Office Hours: Monday, 10:00 – 11:00 am
Tuesday and Thursday: 9:00 – 10:00 am and 1:00 -2:00 pm
Wednesday and Friday: 10:00 – 11:00 am and 1:00 – 2:00 pm
Also by appointment.
STATEMENT OF SPECIAL POLICIES SUCH AS ABSENTEEISM, CHEATING, PLAGIARISM, CELL PHONES, ELECTRONIC DEVICES, LAB SAFETY, ETC.

1. **Lab attendance is required.** If you have an excused reason for missing lab, contact me (in advance if possible) to discuss what you need to do to make up the lab work. **For each unexcused absence from lab,** you grade will be penalized by 20 points plus any other points that might have been available for that lab such as quizzes, worksheets, lab notebook points and lab report points.

Leaving lab early (for unexcused reasons) without satisfactorily completing the work will count as an unexcused absence from lab.

Excused and unexcused absences. **Excused absences** include, but are not limited to, participating in a UAM sponsored event, being so ill that you visit a medical facility, or a death in your immediate family. For each excused absence, it is your responsibility to contact me to discuss whether your absence is excused and to bring the appropriate written documentation. I reserve the right to contact the appropriate people to determine that your excused absence is valid. If it turns out that your “excused” absence really is not for a valid reason, you will have an unexcused absence.

The information in the paragraph below is from the UAM student handbook:

**“ABSENCES DUE TO PARTICIPATION IN UNIVERSITY-SPONSORED EVENTS”**

At times, a student may participate in a University-sponsored activity that causes him or her to miss one or more class meetings. When this occurs, the sponsor of the activity will provide the student with a memo which includes the event, dates and times of the event, and the students name to be provided to each academic instructor. The student will discuss the work and the class(es) to be missed with each academic instructor at least one week prior to the anticipated absence. The student is responsible for all materials covered and any class activities during the absence. The sponsor of the activity will also provide all academic unit heads and Academic Affairs a description of the activity, which includes the location, dates, and a list of campus participants.”

**Unexcused absences** include, but are not limited to, items such as going on vacation, having to work, sleeping late, having a paper due in another class, wanting to study for an exam in another class, not being ready for an exam, etc.

**No cell phone use in lab! Using your cell phone in lab will be considered as disruptive behavior and you will be asked to leave lab.** This will count as an unexcused absence from lab and you will be docked 20 points. In addition to the 20-point penalty, you will lose other points associated with that lab such as assignments, worksheets, lab participation points and points associated with a lab report for that lab.
**Cheating.** Academic dishonesty and cheating will not be tolerated. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:

i. Copying from another student’s paper;

ii. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;

iii. Collaboration with another student during the examination;

iv. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;

v. Substituting for another person during an examination or allowing such substitutions for oneself.

   a. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

   b. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

   c. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be zero points earned on the item involved. If the item on which student(s) cheat is a ten-point lecture quiz, that quiz will not be dropped. In other words, if you earn zero points on a ten-point quiz because you cheated, your zero on that quiz will not be dropped even if it is one of your two lowest lecture quiz scores.

2. **Punctuality.** Be on time for lab. Don’t take off early. If you miss the pre-lab lecture, you will be considered as being absent for the entire lab period, you will not be allowed to do the lab. If you miss the pre-lab lecture for an excused reason, see me as soon as possible to discuss your absence and make arrangements for making up the lab. If you miss the pre-lab lecture for an unexcused reason, grade penalties will apply.

3. **Turning in assignments late.** Late assignments will be accepted only if graded assignments have not been returned to other students, the assignment has not been discussed in class, or if a key has not been posted.

Late assignments will have a 10% penalty per weekday (Monday through Friday, excluding holidays).
4. **Lab safety policies**: Handouts for lab safety policies will be provided.

5. **Checked-out lab equipment and financial cost of replacement or repair of this equipment**: A set of lab equipment items will be checked out to you and possibly a lab partner(s) that you work with. Only you and your lab partner(s) should use these items. You and your lab partner(s) will be responsible for locking these items in your assigned lab drawer and for returning the drawer key to the instructor at the end of every lab period. At the end of the semester, if any of the items are missing or damaged (other than normal wear and tear), you and/or your lab partner(s) will be charged the cost of replacing or repairing the item(s), whichever is appropriate for the item(s).

a. **Disruptive Behavior**: Disorderly conduct is prohibited under the Student Conduct Code. Disorderly conduct is any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others. You may be asked to leave lab for the day for disorderly conduct (this will be considered as an unexcused absence and grade penalties for unexcused absences will apply. You may be dropped from the class/lab for disorderly conduct.

**SPECIAL DATES OF CONCERN TO THE COURSE**

Predicted dates for lab exams and lab reports are within the tentative schedule section of this syllabus. These dates may change for reasons such as the University closes for inclement weather.

**COURSE OBJECTIVES AND COURSE DESCRIPTION**

**Course description**: This laboratory course is designed to familiarize students with laboratory techniques applicable to modern biology and associated disciplines.

Students will learn and use methods to analyze nucleic acids and proteins. In addition to experimental methods, this course incorporates developing hypotheses, applying lab techniques to address scientific questions, critically evaluating data, and organizing data for verbal and written presentation.

**Course objectives**:

By the end of this course, students should be able to:

- Demonstrate proper techniques for working with nucleic acids and proteins.
- Describe the theoretical basis for lab methods used.
- Be able to follow written laboratory protocols.
- Trouble-shoot experiments to determine and correct the probable cause(s) of failed experiments.
- Describe the applicability of the lab methods used to the specific scientific questions addressed in this lab course.
• Demonstrate the ability to think critically about how lab methods used in this course could be applied to scientific questions not specifically addressed in this lab course.
• Critically evaluate, analyze and interpret data.
• Communicate experimental results in written and verbal formats.

COURSE OUTLINE AND SCHEDULE*. MOLECULAR BIOLOGY LAB (BIOL 3331), SPRING 2015.

* This schedule may change for reasons such as the University closes for some reason (e.g. inclement weather).

For the first nine weeks of the 2015 spring semester, we will learn and use methods used in DNA analysis to carry out a project to PCR, clone, sequence and bioinformatically analyze GADPH genes from different plant species. The remainder of the semester will be focused on methods to analyze protein expression in Drosophila melanogaster, a model organism used for studies in molecular biology, biochemistry, molecular genetics and developmental biology.

<table>
<thead>
<tr>
<th>DATE</th>
<th>LAB TOPIC / EXPERIMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 (Jan 7-9)</td>
<td>No lab this week.</td>
</tr>
</tbody>
</table>
| Week 2 (Jan 12-16) | **Lab 1:**  
  • Lab Safety, equipment check-in.  
  • Overview of lab project one (PCR clone, sequence and analyze a gene)  
  • PCR review  
  • Primer design |
| Week 3 (Jan 19-23) | Monday Jan 19: No lab today. Martin Luther King holiday. |
| Week 4 (Jan 26-30) | **Lab 2:**  
  • Isolate genomic DNA.  
  • Set up PCR reactions.  
  • Digest cloning vector.  
  • Pour agarose gels for use next week. |
| Week 5 (Feb 2-6) | **Lab 3**  
  • Gel electrophoresis: check an aliquot of the cloning vector and an aliquot of PCR reactions by gel electrophoresis.  
  • Purify PCR product. Purify cloning vector. |
| Week 6 (Feb 9-13) | **Lab 4:**  
|                  | - Quantify purified PCR product and purified cloning vector.  
|                  | - Set up ligation reactions to ligate PCR product and vector. Also set up a control ligation of vector alone.  
|                  | - Prepare and pour X-Gal/ITPG LB amp plates.  
| Week 7 (Feb 16-20) | **Lab 5:**  
|                  | - **Lab exam 1** (on methods and applications used up to this date in the course, but not including competent bacteria and transformation).  
|                  | - Prepare competent *Escherichia coli*  
|                  | - Transform *E. coli*  
|                  | **Note:** Outside of normal lab time, each student will need to come into lab two additional days this week, each time for about 15-20 minutes. See the instructor to arrange times.  

| Week 8 (Feb 23-27) | **Lab 6:**  
|                  | - Isolate plasmid DNA  
|                  | - Set up restriction digestions of plasmid DNA  
|                  | - Pour agarose gels for use next week  

| Week 9 (March 2-6) | **Lab 7:**  
|                  | - Prepare DNA samples for sequencing.  
|                  | - Discussion, demonstration and practice problems in DNA sequence analysis and genomics web tools.  
|                  | - DNA analysis practice set assignment will be handed out. For this, you will use your own computer or a UAM computer to use genomics databases and analysis tools to do a small-scale analysis of DNA sequences that the instructor will provide.  

| Week 10 March 9-13 | **Lab 8:**  
|                  | - **DNA analysis practice set assignment due.**  
|                  | - We will meet only briefly for lab on Monday this week to discuss the DNA analysis practice set problems and any issues you may have had when working with DNA and genomics analysis tools.  
|                  | - On your own time, analyze your experimentally obtained DNA sequences. This will require that you work independently on a UAM computer or your own computer to use genomics databases and analysis tools. Do not hesitate to contact me for help.  

| Week 11 (March 23-27) |  
|                      | Spring break: no lab this week  

125
### Week 12 (March 30 – April 3)

**Lab 10:**
- Wrap-up of cloning project, discussion of DNA sequence and genomics results.
- Lab reports on the cloning project are due next week.
- Discussion of protein analysis methods.

### Week 13 (April 6-10)

**Lab 11:**
- **Lab reports on the cloning project due.**
- Preparation of protein extracts from *Drosophila melanogaster*.
- Spectrophotometric or fluorometric analysis of protein concentration.
- Preparation of samples for SDS-PAGE (to be frozen until use next week).

### Week 14 (April 13-17)

**Lab 12:**
- Run SDS-PAGE gels.
- Western blot transfer
- Prepare solutions needed to finish Western blot analysis next week.

### Week 15 (April 20-24)

**Lab 13:**
- Finish Western blot analysis. **Note: Each group must arrange times for this with the instructor.** This process will require two continuous days. Approximately 2-3 hours is needed each day. Each day, there are several “hurry up and wait” steps, so you will be able to do other things during the wait times.

### Week 16 (April 27 – May 1)

**Lab 14:**
- Discussion of Western blot results.
- **Lab exam 2** (on methods used to analyze proteins)
- **Lab report on the protein expression labs is due by 5:00 pm on Friday this week.**

### Finals Week (May 4-8)

No lab this week

---

**SPECIAL PROJECTS, ASSIGNMENTS FIELD TRIPS, ETC.**

This course does not include field trips.

There will be some weeks when you will need to come into the lab, outside of lecture or lab time. Please arrange this with the instructor.
Some experiments will require that you work outside of lab to use free online computer databases and software to analyze data.

EXAMS AND OTHER EVALUATIONS
Your grade in this laboratory course will be based on two lab exams, two lab reports, a lab notebook, and various assignments, worksheets and quizzes. Most labs (but not all) will have associated worksheets/assignments/quizzes that have a total worth of 10 to 20 points.

**Lab exams** are designed primarily to assess your understanding of the methods used in lab but some portions will assess your ability to troubleshoot experiments and/or interpret results.

**Makeup lab exams, assignments, worksheets and quizzes** are possible only for excused absences.

**Makeups for lab experiments:** If you miss lab for excused reasons, contact me as soon as possible to arrange how to makeup the work. If you know in advance that you will miss a lab for an excused reason, contact me as far in advance as possible. **If you miss a lab for unexcused reasons,** you will be docked 20 points per missed lab, you will not be allowed to makeup the lab work, you will receive zero credit for any worksheet/assignments/quizzes associated with that lab, and your lab reports will have a grade reduction for the portion of the work you did not do.

GRADING POLICY
The letter grade that you earn in this course will be based on the items described below.

**Points possible**

<table>
<thead>
<tr>
<th>Item</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Two lab exams at 50 points each.</td>
<td>100</td>
</tr>
<tr>
<td>Lab report 1</td>
<td>30</td>
</tr>
<tr>
<td>Lab report 2</td>
<td>30</td>
</tr>
<tr>
<td>Lab notebook</td>
<td>60</td>
</tr>
<tr>
<td>Lab assignments/worksheets/quizzes</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total points</strong></td>
<td>420</td>
</tr>
</tbody>
</table>

No lab scores will be dropped in the calculation of your final grade. Grading scale:

- **A** (89.50 – 100%)
- **B** (79.50 – 89.49%)
- **C** (69.50 – 79.49%)
- **D** (59.50 – 69.49%)
- **F** (59.49% and below)

Note that 89.49% is a B and does not round up to 89.5%. Likewise, 79.49% is a C; 69.49% is a D and 59.49% is an F.
STUDENTS WITH DISABILITIES

It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any approved accommodations at the beginning of the course. Any student with questions regarding accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; fax 870 460-1926.

McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105.

Crossett: Office of Special Student Services representative on campus; phone 870364-6414; fax 870 364-5707.

STATEMENT ON DISRUPTIVE BEHAVIOR

The following action is prohibited under the Student Conduct Code: Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others.

BLACKBOARD

If you are officially enrolled in this class at UAM, you automatically will be enrolled in the Blackboard site for this class. To access the Blackboard site for this class, go to http://www.uamont.edu/academiccomputing/ and follow the onscreen instructions.

I will be putting your scores in this class on Blackboard. Your Blackboard account is password protected. To protect against others seeing your grades, do not share your login information and password with others. Also, after you are finished looking in your Blackboard account, be sure to logout of Blackboard and close the browser window. If you do not wish to have your scores on Blackboard, you must let me know, preferably by email.

If you need help with Blackboard, I will be happy to help you if I can. There are some Blackboard tips available at http://www.uamont.edu/academiccomputing/. For help, you also can call the UAM Office of Academic Computing at 870-460-1663. If you forget your password, you will need to contact the Office.
COURSE
Molecular Biology lecture (BIOL 3333), 3 credit hours
Lecture meeting time and place: Tuesday and Thursday 11:10 am – 12:30 pm, Science Center B19

PREREQUISITES
BIOL 3354 (Genetics Lecture and Lab).

REQUIRED TEXTBOOKS AND SUPPLEMENTARY MATERIALS

Some topics will be supplemented with required readings from other sources or from the primary scientific literature. These readings will be handed out, available online or on reserve at the UAM library.

INSTRUCTOR
Mary Stewart, Ph.D.
Phone: 870-460-1767
Email Address: stewartm@uamont.edu (Please remember to put the m after stewart in my email)

OFFICE AND OFFICE HOURS
Office: Science Center, Room B12
Office Hours: Monday, 10:00 – 11:00 am
Tuesday and Thursday: 9:00 – 10:00 am and 1:00 -2:00 pm
Wednesday and Friday: 10:00 – 11:00 am and 1:00 – 2:00 pm
Also by appointment.

STATEMENT OF SPECIAL POLICIES SUCH AS ABSENTEEISM, CHEATING, PLAGIARISM, CELL PHONES, ELECTRONIC DEVICES, ETC.

1. Attendance is required. If you miss more than six class periods for unexcused reasons, your grade will be penalized by 60 points for each class period that you miss after six (a loss of 60 points correlates to a loss of one letter grade).

   Excused and unexcused absences. Excused absences include, but are not limited to, participating in a UAM sponsored event, being so ill that you visit a medical facility, or a death in your immediate family. For each excused absence, it is your
responsibility to contact me to discuss whether your absence is excused and to bring the appropriate written documentation. I reserve the right to contact the appropriate people to determine that your excused absence is valid. If it turns out that your “excused” absence really is not for a valid reason, you will have an unexcused absence.

The information in the paragraph below is from the UAM student handbook:

**ABSENCES DUE TO PARTICIPATION IN UNIVERSITY-SPONSORED EVENTS**

At times, a student may participate in a University-sponsored activity that causes him or her to miss one or more class meetings. When this occurs, the sponsor of the activity will provide the student with a memo which includes the event, dates and times of the event, and the students name to be provided to each academic instructor. The student will discuss the work and the class(es) to be missed with each academic instructor at least one week prior to the anticipated absence. The student is responsible for all materials covered and any class activities during the absence. The sponsor of the activity will also provide all academic unit heads and Academic Affairs a description of the activity, which includes the location, dates, and a list of campus participants.”

Unexcused absences include, but are not limited to, items such as going on vacation, having to work, sleeping late, having a paper due in another class, wanting to study for an exam in another class, not being ready for an exam, etc.

1. **Cell phone use in class:** Cell phones and other electronic devices are not to be used during class. Turn your cell phones and electronic devices off and put them away during class. If you use your cell phone during class, you may be asked to leave. **If your cell phone is out during an exam or quiz, you will be considered as cheating. Turn cell phones off and put them away!**

2. **Cheating.** Academic dishonesty and cheating will not be tolerated.
   a. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
      i. Copying from another student’s paper;
      ii. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
      iii. Collaboration with another student during the examination;
      iv. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
      v. Substituting for another person during an examination or allowing such substitutions for oneself.
   b. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work.
offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

c. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

d. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be zero points earned on the item involved. If the item on which student(s) cheat is a ten-point lecture quiz, that quiz will not be dropped. In other words, if you earn zero points on a ten-point quiz because you cheated, your zero on that quiz will not be dropped even if it is one of your two lowest lecture quiz scores.

3. Punctuality. Be on time for class. Don’t take off early. If you attend only long enough to take a quiz or see if there are some points available for that day, you will be considered as being absent for the entire class or lab period and you will receive zero points for the item (the exception to this is if you have an excused reason for leaving early or arriving late). If, for unexcused reasons, you miss part of the time set aside for a quiz, you will have only whatever time remains for that quiz. You will not receive extra time and you will not be able to take a makeup for the item.

4. Turning in assignments late. Late assignments will be accepted only if graded assignments have not been returned to other students, the assignment has not been discussed in class, or if a key has not been posted.

SPECIAL DATES OF CONCERN TO THE COURSE
Predicted dates for various items can be found in the tentative schedule within this syllabus. These dates may change for reasons such as we are ahead or behind in topics or if the University closes for some reason (e.g. inclement weather).

COURSE OBJECTIVES AND COURSE DESCRIPTION

Course description: Study of genes and their activities at the molecular level with an emphasis on applications useful in the analysis of genomes and treatment of genetic diseases.

Course objectives: By the end of this course, students should be able to:

- Demonstrate a working knowledge of the concepts of molecular biology and molecular genetics.
- Demonstrate a working knowledge of experimental approaches used in modern molecular biology and molecular genetics. Demonstrate an ability to integrate concepts from various molecular biology topics to develop hypotheses and propose potential solutions to scientific
questions.

- Clearly communicate (verbally and in written formats) concepts and experimental approaches used in molecular biology.
- Read papers from the primary scientific literature and, in verbal and written formats:
  - Identify the scientific question being addressed in the paper.
  - Identify the hypotheses proposed in the paper.
  - Understand, interpret, evaluate and discuss experiments in the paper.
  - Critically evaluate and discuss if (and why) the experiments support or do not support the conclusions made by the authors of the paper.

**COURSE OUTLINE AND SCHEDULE*. MOLECULAR BIOLOGY (BIOL 3333), SPRING 2015.**

* This schedule may change if we get ahead or behind in topics or if the University closes for some reason (e.g. inclement weather).

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<thead>
<tr>
<th>DATE</th>
<th>CLASS TOPIC AND READING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 (Jan 7-9)</td>
<td>• Thurs: Course information. Review the basics of genes in terms of Mendelian genetics. Review of genes as functional molecular units.</td>
</tr>
</tbody>
</table>
| Week 2 (Jan 12-16) | • All week: Gene organization into operons. Transcriptional and translational regulation of gene expression in bacteria.  
                     Review structure and regulation of the *lac* operon on pages 347-355 of Brooker.  
                     Transcriptional regulation of the *trp* operon in bacteria (pages 356-360 in Brooker) |
| Week 3 (Jan 19-23) | • All week: Eukaryotes: Gene organization and transcriptional regulation. (Read all of chapter 15 in Brooker)                                            |
| Week 4 (Jan 26-30) | • Tuesday: Eukaryotic gene organization and transcriptional regulation (chap 15 in Brooker)                                                        
                     • Thursday: Paper discussion 1                                                                                                               |
| Week 5 (Feb 2-6)  | **Tues, Feb 3: Exam 1** (over class material up to this point).  
                     • Thursday: Recombination and gene conversion. Read pages 473-479 in Brooker, chapter 19. Also read the section on DNA repair on pages 461-467 in Brooker, chapter 18. |
<table>
<thead>
<tr>
<th>Week (dates)</th>
<th>Tuesday</th>
<th>Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 6</strong> (Feb 9-13)</td>
<td>Recombination and gene conversion, continued.</td>
<td>Transposable elements, features and characteristics (pages 481 – 491 in Brooker chap. 19).</td>
</tr>
<tr>
<td><strong>Week 7</strong> (Feb 16-20)</td>
<td>Transposable elements as tools in molecular genetics. Read the end of chapter 19 in Brooker. Additional reading will be assigned.</td>
<td>Paper discussion 2</td>
</tr>
</tbody>
</table>
| **Week 8** (Feb 23-27) | Exam 2 (over course material since exam 1) | Genetically modified animals, transgenic animals  
- Transgenic animals (pages 531-527 in Brooker chapter 21)  
- Gene replacements in animals (pages 533 – 537 in Brooker chapter 21)  
- Human gene therapy (pages 545-549 in Brooker chapter 21) |
| **Week 9** (March 2-6) | Reproductive cloning and stem cells (pages 537 – 541 in Brooker chapter 21). Additional reading will be assigned. | Paper discussion 3 |
| **Week 10** (March 9-13) | Gene Regulation in Eukaryotes II: Epigenetics and Regulation at the RNA Level (read all of Brooker chapter 16). | |
| **Week 11** (March 23-27) | Spring break! | |
| **Week 12** (March 30 – April 3) | Gene Regulation in Eukaryotes II: Epigenetics and Regulation at the RNA Level (read all of Brooker chapter 16). | RNA interference. |
| **Week 13** (April 6-10) | Paper discussion 4 | Exam 3 (over course material since exam 2) |
| **Week 14** (April 13-17) | Genomics I: Analysis of DNA, localizing genes to chromosomes, cloning DNA, DNA sequencing on a large scale and metagenomics. (Read chapter 22 in Brooker) | |
| **Week 15** (April 20-24) | Genomics I, continued. | Functional genomics, proteomics, bioinformatics |
| **Week 16** (April 27 – May 1) | Genomics II, continued. Last day of class. | **Wednesday, April 29:** FINAL EXAM at 1:30 pm. The final exam is over course material since exam 3. |
SPECIAL PROJECTS, ASSIGNMENTS, FIELD TRIPS, ETC.
This course does not include field trips. See below for an explanation of exams, quizzes, assignments and primary literature paper write-ups/participation.

EXAMS AND OTHER EVALUATIONS
1. EXAMS AND QUIZZES. Some lecture material builds on previous material. Thus, on any given exam or quiz, you may be responsible for material that was previously covered/assigned and that was previously tested on.

   Early exams and early quizzes. There will be no early exams or quizzes.

   Exam and quiz format. The exam format for exams and quizzes will depend on the topic. The format for all exams or quizzes may not be the same. Depending on the particular exam or quiz, there may be problems to work, data to analyze, and/or processes to explain; these all lend themselves to essay type answers or answers that require that you work through a problem and possibly show your work to demonstrate how you arrived at an answer. Other topics lend themselves to multiple choice/matching/true-false type questions.

   Makeups for lecture exams and quizzes. Makeups for lecture exams and quizzes are possible only if you have an excused absence and the appropriate documentation. There will be no makeups for unexcused absences; if you miss an exam or quiz for an unexcused reason, you will have zero points on that item. Makeup exams and quizzes will be given outside of normal class or lab time. All students that need to take a makeup for a given lecture exam or quiz should take the makeup at the same time. Makeup exams and quizzes will not necessarily consist of the same questions or be in the same format as the regularly scheduled exam. There may be more essay format questions on makeup exams.

   Makeup assignments (other than primary literature paper assignments/participation). You are responsible for checking if there were any assignments, worksheets or handouts on a day that you are absent.

GRADES ON PAPER DISCUSSION WRITE-UPS AND PAPER DISCUSSION PARTICIPATION.
We will read and discuss four papers from the primary literature during the semester.

   Write-ups on primary literature papers: You will need to prepare a typed write-up for two of the four primary literature papers (your choice as to which two). Because we will read four papers during the semester and you can choose to do your write-up on any two of these, there are no makeups for write-ups on the primary literature papers.

   Participation points for discussions on primary literature papers. All students are expected to read the primary literature papers in advance, do any pre-discussion assignments in advance and actively
participate in the in-class discussions. Even though each student will do a write-up on only two of the
four papers that we discuss, all students will be responsible for reading all four papers and participating
in the in-class discussions. Participation points will come from student participation in all four in-class
discussions. Participation points will be primarily based on meaningful contributions to the in-class
discussion, but some points may come from pre-class assignments/worksheets that will be due in
advance of the in-class discussion.
Because successful and meaningful in-class discussions require the participation of all students, there
are no makeups for participation points for in-class discussions. If you miss an in-class paper
discussion for an excused reason, your total participation points will be based your participation on
the other in-class discussions for which you are present. In other words, if you miss one in-class
discussion for an excused reason, your participation points on other three in-class discussions will be
weighted to potentially add up to 40 points maximum.
If you are not present for an in-class paper discussion for an unexcused reason, you will be penalized
by 25% of the total participation points possible (in addition to any points you may be penalized if this
happens to be your seventh or later unexcused absence).
Turning in pre-class assignments/worksheets on the primary literature papers and then not being
present for the in-class discussion (for excused or unexcused reasons) will not result in earning
“partial” points for the missed in-class discussion.

**GRADING POLICY**
The letter grade that you earn in this course will be based on the items below (points possible) and the
grading scale below will be used to determine your final letter grade in the course.

**Grading Scale:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>(89.50 – 100%)</td>
<td>Note that 89.49% is a B and does not round up to 89.5%. Likewise, 79.49% is a C; 69.49% is a D and 59.49% is an F.</td>
</tr>
<tr>
<td>B</td>
<td>(79.50 – 89.49%)</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>(69.50 – 79.49%)</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>(59.50 – 69.49%)</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>(59.49% and below)</td>
<td></td>
</tr>
</tbody>
</table>

**Points possible**

<table>
<thead>
<tr>
<th>Item</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four lecture exams at 100 points each.</td>
<td>400</td>
</tr>
<tr>
<td>Your average on lecture quizzes/activities* (your two lowest lecture quiz/activity scores will be dropped)</td>
<td>100</td>
</tr>
<tr>
<td>Two paper discussion write-ups at 30 points each</td>
<td>60</td>
</tr>
<tr>
<td>Paper discussion participation</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total points</strong></td>
<td>600</td>
</tr>
</tbody>
</table>
No lecture exams scores, paper discussion write-ups or paper discussion participation scores will be dropped. Your two lowest lecture quiz/activity scores will be dropped.

*Lecture quizzes/activities.*

Your lecture quiz/activity **average** will be used to calculate the number of points you earn in this category. In the calculations of your lecture quiz/activity average, your two lowest lecture quiz/activity scores will be dropped.

Your overall lecture quiz/activity average will be calculated by dividing your points by the total points possible in this category and then multiplying that number by 100. An example of how your points in this category will be calculated is shown below.

**Example**

<table>
<thead>
<tr>
<th>Quiz #</th>
<th>Hypothetical student’s scores</th>
<th>Points possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz 1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Quiz/activity 2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 3</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Quiz/activity 4</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 6</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 7</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 8</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Quiz/activity 9</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>69</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

In this hypothetical scenario, the score of five on quiz 5 and the score of three on quiz 7 would be dropped. This gives a total of 61 points out of 70 possible.

To calculate the overall average for this person in the lecture quiz/activity category: \[
\frac{61}{70} \times 100 = 87.143\% 
\]

Since this person has a quiz/activity average of 87.143%, this person would earn 87.143 points out of 100 possible in the lecture quizzes/activities category.

**STUDENTS WITH DISABILITIES**

It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any approved accommodations at the beginning of the course. Any student with questions regarding accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; fax 870 460-1926. McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105. Crossett: Office of Special Student Services representative on campus; phone 870364-6414; fax 870 364-5707.
STATEMENT ON DISRUPTIVE BEHAVIOR

The following action is prohibited under the Student Conduct Code: Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others.

BLACKBOARD

Students officially enrolled in this class at UAM automatically will be enrolled in the Blackboard site for this class. To access the Blackboard site for this class, go to http://www.uamont.edu/academiccomputing/ and follow the onscreen instructions.

I will be putting your scores in this class on Blackboard. Your Blackboard account is password protected. To protect against others seeing your grades, do not share your login information and password with others. Also, after you are finished looking in your Blackboard account, be sure to logout of Blackboard and close the browser window. If you do not wish to have your scores on Blackboard, you must let me know, preferably by email.

If you need help with Blackboard, I will be happy to help you if I can. There are some Blackboard tips available at http://www.uamont.edu/academiccomputing/. For help, you also can call the UAM Office of Academic Computing at 870-460-1663. If you forget your password, you will need to contact the Office of Academic Computing.
COURSE OUTLINE

COURSE: Ornithology/Mammalogy (Biol. 3324). Prerequisites for this course are General Zoology (1153) and General Zoology Laboratory (1161).


INSTRUCTOR: Dr. Robert W. Wiley (Office in Museum). Office hours are 1-4 TH & 2-4 W.

COURSE FORMAT: Lecture 3 hours per week; lab 3 hours per week.

OBJECTIVE: To become familiar with the methods and principles of systematic zoology, and to gain a knowledge of the identification, classification, distribution, and natural history of birds and mammals, with special emphasis on local forms.

COURSE CONTENT:

Taxonomy
 Definitions
 Principles of Classification and Zoological Nomenclature
 Evolution
 Speciation

Birds
 Literature
 Avian Classification and
 Natural History

Mammals
 Literature
 Mammalian Classification
 and Natural History

LAB SCHEDULE: The lab will consist of the following activities: lecture, osteological terminology, vertebrate collecting and observation in the field, cataloging procedures and study specimen preparation, identification of vertebrate study specimens, vertebrate audiovisuals.

GRADING: There will be approximately four lecture tests and two laboratory tests each counting 100 points. A few short, unannounced tests may be given. The final may or may not be a comprehensive exam. Additional work in the form of library assignments, term papers, and lab reports may be assigned. Your final grade will be determined by your final average. A = 100-90; B = 89-80; C = 79-70; D = 69-60; D = 59-0.

Scores on exams will be posted by a code number assigned on the first exam. If scores are not posted, I do not have the exams graded. I do not return exams. However, your are welcome to visit my office any time during the semester to examine any or all of your exams. At that time you may view the exam key and discuss any questions with the instructor.
In the event an exam is missed, a make-up exam will be given near the end of the semester. Exceptions will be made for students missing an exam as a result of partaking in a required activity in another University sponsored course, provided I am notified prior to the activity. It is to your advantage to take exams as scheduled. There is no makeup for short unannounced tests.

**ATTENDANCE**: Lectures and laboratories are the backbone of most all academic courses. All students are expected to attend class. You are at all times responsible for everything that takes place in the classroom or laboratory. In the event a student misses more than one lab field trip or more than four lectures, he will be assigned a written library report to substitute for the educational material and experience missed. It is the students responsibility to see the instructor as soon as possible after missing to receive the assignment. In the event a report is not turned in, is turned in late, or is judged not acceptable, the final grade will be reduced by one letter grade. No extra credit will be given for the report.

A laboratory is as important as any other course and is generally more difficult to make up than a missed lecture. Therefore it is important that you do not miss lab. Additionally, it is important that you attend lab on time so that you don’t miss the instructions presented at the beginning of lab.

**CLASSROOM POLICIES**: No drinks or tobacco use in the classroom. Please do not write on the desks. A seating chart will be established to check roll, learn student names, and discourage students from writing on the desks. Students found cheating will be given a grade of 'F for the course and an attempt will be made to have the student expelled from the University.

**STATEMENT ON DROP DATES**: Students dropping a class between the 11th class day and 10 April will receive the grade of "W". Students dropping a course after 10 April will receive the grade of "W" if passing and the grade of "F" if not passing. The last day to withdraw from class is 3 May. No withdrawals will be permitted during the last three days of class.

**OTHER**: On lab field trips it is unlikely that we will be able to return by 4:00 p.m. due to travel time. From past experience we usually arrive back on campus before 6:00 p.m. In the event you are unable to make this adjustment in your schedule for these trips, I suggest you enroll during another semester when you are able to do so. All field trips are an integral part of the course.

**STUDENTS WITH DISABILITIES**: It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University's commitment to equal educational opportunities. It is the responsibility of
the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in the southeast corner of the Student Services Center; Phone - 870-460-1154; TDD - 870-460-1251; FAX - 870-460-1810.

**DISORDERLY CONDUCT**: The following action is prohibited under the Student Conduct Code. Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others.

**FINAL EXAMS**: Lecture - 10:30-12:30 Wednesday, 15 May 2002, Science Center Room B-19; Lab - 8:00-10:00 Monday, 13 May 2002, Museum.

[15 January 2002]
COURSE
Genetics lecture and lab (BIOL 3354), 4 credit hours
Lecture meeting time and place: MWF 1:10 – 2:00 pm, Science Center room B3
Lab meeting time: Section 51: Monday 2:10 – 5:00 pm, Science Center room B36
Section 52: Tuesday 9:40 am – 12:30 pm, Science Center room B36

NOTE:
There will be some weeks when you will need to come into the lab, outside of normally scheduled lab or lecture time.

PREREQUISITES
BIOL 1083 and BIOL 1091 (Principles of Biology II and Lab, ACTS Equivalent #BIOL 1014) CHEM 1113
and CHEM 1131 (General Chemistry II and lab, ACTS Equivalent #1424).

REQUIRED TEXTBOOKS AND SUPPLEMENTARY MATERIALS
9780073525341. For lab, you also will need a bound composition notebook or a spiral bound
notebook with lined paper.

INSTRUCTOR
Dr. Mary Stewart, Ph.D.
Phone: 870-460-1767
Email Address: stewartm@uamont.edu (Please remember to put the m after stewart in myemail)

OFFICE AND OFFICE HOURS
Office: Science Center, Room B12
Office Hours: Monday, 10:00 – 11:00 am
Tuesday, 2:00 – 4:00 pm
Wedn, Thurs and Fri: 10:00 – 11:00 am and 2:00 – 3:00 pm
Also by appointment.

STATEMENT OF SPECIAL POLICIES SUCH AS ABSENTEEISM, CHEATING, PLAGIARISM, CELL PHONES,
ELECTRONIC DEVICES, LAB SAFETY, ETC.

1. Attendance is required. Lab attendance is always required, regardless of whether we have lab
theory or lab exams during your normal lab time or during lecture time. Grade penalties will
result from unexcused absences from lab, whether lab items occur during lecture time or lab
time. Contact me, in advance if possible, if you have an excused reason for missing class or lab.

Leaving lab early (for unexcused reasons) without satisfactorily completing the work will count as
an unexcused absence from lab.
Excused and unexcused absences. **Excused absences** include, but are not limited to, participating in a UAM sponsored event, being so ill that you visit a medical facility, or a death in your immediate family. For each excused absence, it is your responsibility to contact me to discuss whether your absence is excused and to bring the appropriate written documentation. I reserve the right to contact the appropriate people to determine that your excused absence is valid. If it turns out that your “excused” absence really is not for a valid reason, you will have an unexcused absence.

The information in the paragraph below is from the UAM student handbook:

**“ABSENCES DUE TO PARTICIPATION IN UNIVERSITY-SPONSORED EVENTS”**

At times, a student may participate in a University-sponsored activity that causes him or her to miss one or more class meetings. When this occurs, the sponsor of the activity will provide the student with a memo which includes the event, dates and times of the event, and the student’s name to be provided to each academic instructor. The student will discuss the work and the class(es) to be missed with each academic instructor at least one week prior to the anticipated absence. The student is responsible for all materials covered and any class activities during the absence. The sponsor of the activity will also provide all academic unit heads and Academic Affairs a description of the activity, which includes the location, dates, and a list of campus participants.

**Unexcused absences** include, but are not limited to, items such as going on vacation, having to work, sleeping late, having a paper due in another class, wanting to study for an exam in another class, not being ready for an exam, etc.

1. **No cell phone use in lab! Using your cell phone in lab will be considered as disruptive behavior and you will be asked to leave lab.** This will count as an unexcused absence from lab and you will be docked 20 points. In addition to the 20-point penalty, you will lose other points associated with that lab such as assignments, worksheets, lab participation points and points associated with a lab report for that lab. **For some labs (see pages 10-11), being asked to leave lab will result in you not being allowed to do certain future labs.**

2. **Cheating.** Academic dishonesty and cheating will not be tolerated.
   a. **Cheating:** Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
      i. Copying from another student’s paper;
      ii. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
      iii. Collaboration with another student during the examination;
iv. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
v. Substituting for another person during an examination or allowing such substitutions for oneself.

b. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

c. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

d. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be zero points earned on the item involved. If the item on which student(s) cheat is a ten-point lecture quiz, that quiz will not be dropped. In other words, if you earn zero points on a ten-point quiz because you cheated, your zero on that quiz will not be dropped even if it is one of your two lowest lecture quiz scores.

3. Punctuality. Be on time for class and lab. Don’t take off early. If you attend only long enough to take a quiz or see if there are some points available for that day, you will be considered as being absent for the entire class or lab period and you will receive zero points for the item (the exception to this is if you have an excused reason for leaving early or arriving late). If, for unexcused reasons, you miss part of the time set aside for a quiz, you will have only whatever time remains for that quiz. You will not receive extra time and you will not be able to take a makeup for the item.

Regardless of whether you have an excused reason for being late to lab, if you miss the pre-lab lecture/safety/skills training for that lab, you will not be allowed to do that lab on that day. If you miss the pre-lab lecture/safety/skills training for unexcused reasons, grade penalties will apply and, depending on the particular lab you miss, you may not be allowed to do related future labs (see pages 10-11). If you have an excused reason for being late to lab, you may or may not be allowed to do “makeup” work for that lab, depending on the particular lab experiments being done that day (see pages 10-11).

4. Turning in assignments late. Late assignments will be accepted only if graded assignments have not been returned to other students, the assignment has not been discussed in class, or if a key has not been posted.
Late assignments will have a 10% penalty per weekday (Monday through Friday, excluding holidays). Assignments that are due at the beginning of class or lab will be considered as one day late if they are turned in after the beginning of class or lab (this applies even if the lab assignment is due at the beginning of lecture time). This means if an assignment is due at the beginning of lecture time on Monday and you turn it in after lecture begins on Monday, you will be docked 10% of the points possible for that assignment. If an assignment is due on Monday and you turn it in on Tuesday, you will be docked 10% of the points possible. In an assignment is due on Monday and you turn it in on Wednesday, you will be docked 20% of the points possible.

5. Lab safety policies
   a. No cell phone use in lab! Using your cell phone in lab will be considered as disruptive behavior and you will be asked to leave lab. This will count as an unexcused absence from lab and you will be docked 20 points. In addition to the 20 point penalty, you will lose other points associated with that lab such as assignments, worksheets, lab participation points and points associated with a lab report for that lab. For some labs (see pages 10-11), being asked to leave lab will result in you not being allowed to do certain future labs, and you will lose 20 points per lab you are not allowed to do.
   b. Absolutely no food, drink, candy or gum in lab. Finish or dispose of any food or drink before you come to lab. Any food or drink in the lab will be taken by the instructor and disposed of. Do not chew gum or have candy in your mouth during lab. Do not chew on other items (pens, toothpicks, etc.) or place items in your mouth, nose or eyes during lab.
   c. Personal items in lab: Personal items such as cell phones should not be brought into lab with you. Other personal items such as coats, books, purses, items such as keys that do not fit into your clothing pockets should not be brought into lab with you. If you bring these types of items to lab with you, you will need to place them into a pad-locked cabinet in room B32. Coats can be hung on hooks in room B32. If you do not wish to put the items in B32, then don’t bring them with you. If you have these types of items on your person, such as in a pocket, and you get them out during lab, the items may be taken from you for the duration of lab time or you may be asked to leave the lab and you will have an unexcused absence for that day, which means you lose one letter grade. In the case of cell phone use during lab, you will be asked to leave for the day and you will have an unexcused absence with associated grade penalties.
   d. Safety rules. You are responsible for following all safety rules given by the instructor, whether written or verbal. If you fail to follow safety rules, the behavior will be considered as “disorderly conduct” and you may be asked to leave for the day, penalized one letter grade in the course, assigned an F for the entire course or dropped from the course.
   e. Contact lenses. I strongly discourage wearing contact lenses to lab! We will work with
bacteria and chemicals in lab. Chemicals or fumes may be irritating to contact lens wearers. To avoid placing bacteria or chemicals in your eyes, you should not touch your eyes during lab, whether or not you wear contacts. You should thoroughly wash your hands after leaving lab, before touching your eyes and before handling contact lenses.

f. **Do not apply cosmetics during lab.** You do not want to accidentally introduce bacteria or a lab chemical to your skin or eyes by applying cosmetics in lab!

g. **Visitors.** No visitors allowed in lab. Your children, friends, parents, pets or anyone else not currently enrolled in the course will not be allowed in lab. This policy is for the safety of everyone.

h. **Checked-out lab equipment and financial cost of replacement or repair of this equipment:** A set of lab equipment items will be checked out to you and a lab partner(s). Only you and your lab partner(s) should use these items. You and your lab partner(s) will be responsible for locking these items in your assigned lab drawer and for returning the drawer key to the instructor at the end of every lab period. At the end of the semester, if any of the items are missing or damaged (other than normal wear and tear), you and/or your lab partner(s) will be charged the cost of replacing or repairing the item(s), whichever is appropriate for the item(s).

i. **Disruptive Behavior:** Disorderly conduct is prohibited under the Student Conduct Code. Disorderly conduct is any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others. You may be asked to leave lab for the day for disorderly conduct (this will be considered as an unexcused absence and grade penalties, as described in policy #1, will apply). You may be dropped from the class/lab for disorderly conduct.

### SPECIAL DATES OF CONCERN TO THE COURSE

Predicted dates for lecture exams, lab exams and days when we will have lab items during lecture time are in the tentative schedule within this syllabus. These dates may change for reasons such as we are ahead or behind in topics or if the University closes for some reason (e.g. inclement weather).

**Other dates:** October 29 (Wednesday): Last day to drop this class for a grade of “W”.

### COURSE OBJECTIVES AND COURSE DESCRIPTION

Course description: Principal laws of heredity, including Mendelian and non-Mendelian heredity; molecular genetics, gene expression and its regulation; cytogenetics

Course objectives:
- Describe and apply the rules of Mendelian genetics
• Describe and apply the exceptions to Mendelian genetics
• Obtain and use a working knowledge of the vocabulary and concepts of genetics
• Apply rules of probability and statistical analysis to inheritance
• Discuss various mechanisms of sex determination in different organisms
• Describe chromosomes and their composition, structure and function
• Describe the organization of genes on chromosomes
• Discuss the basis for and the consequences of mutations
• Describe and discuss the processes of DNA replication, transcription and translation
• Demonstrate a working knowledge of the theoretical and technical applications of laboratory methods and experiments
• Demonstrate a working knowledge of molecular genetics theory and applications
• Demonstrate lab skills and knowledge in molecular genetics
• Demonstrate the ability to design, execute and interpret experiments.
• Critically evaluate, analyze and interpret data
• Communicate experimental results in written and verbal formats

COURSE OUTLINE AND SCHEDULE*. GENETICS, FALL 2014.
* This schedule may change if we get ahead or behind in topics or if the University closes for some reason (e.g. inclement weather).
<table>
<thead>
<tr>
<th>DATE</th>
<th>CLASS TOPIC AND READING</th>
<th>LAB</th>
<th>(This is the predicted general order of lab items, but there is a chance that we will get off schedule).</th>
</tr>
</thead>
</table>
• Fri: Chap 1 (introductory material) and Chap 9, Molecular structure of DNA and RNA                  |           |                                                                                                  |
| Aug 25-29  | • Mon and Wedn: Chap 9, Molecular structure of DNA and RNA  
• Fri: Chapter 11, DNA replication                                                                                      | Lab 1:    | • Lab basics, safety, equipment in lab drawers.  
• Working with pipettes  
• Pipette challenge  
• Gel electrophoresis and gel loading (We may do both items today if time allows. We may do one of the items next lab). |
| Sept. 1-5  | • Mon: Holiday, no class or lab today.  
• Wedn and Friday: Chapter 11, DNA replication                                                                                      | Monday Sept. 1: Holiday, no lab today.  
Tuesday, Sept 2: Tuesday lab will not meet this week. |
| Sept. 8-12 | • All week: Chapter 12, Gene transcription and RNA modification.                                                                                      | Lab 2:    | • Genomic DNA isolation  
• Possibly gel electrophoresis and/or gel loading                                                                 |
### Sept. 15-19
- **Monday:** Start chapter 13, Translation. We will look only at select parts of chapter 13. See the reading and objective sheets for materials to read.
- **Wednesday, Sept 17:** LECTURE EXAM 1
  (Lecture exam 1 will be on chapters 1, 9, 11 and 12. Chapter 13 material will be on lecture exam 2, not lecture exam 1).
- **Friday:** Chapter 18, Gene mutation and DNA repair.

### Lab 3
- Lab safety and working with bacteria
- GFP
- Biotechnology
- Transform *Escherichia coli*
- Prepare LB/amp media

**NOTE:** Outside of normally scheduled lab or lecture time, you will need to come into lab this week on Wednesday or Thursday.

<table>
<thead>
<tr>
<th>DATE</th>
<th>CLASS TOPIC AND READING</th>
<th>LAB (This is the predicted general order of lab items, but there is a chance that we will get off schedule).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 22-26</td>
<td><strong>Mon and Wed:</strong> Chapter 18, Gene mutation and DNA repair.</td>
<td><strong>Lab 4</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Friday:</strong> Chapter 10, Chromosome structure</td>
<td>- Plasmid DNA isolation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Restriction enzyme digestion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pour gels today for use next week</td>
</tr>
<tr>
<td>Sept. 29 – Oct 3</td>
<td><strong>Mon and Wed:</strong> Chapter 10, Chromosome structure</td>
<td><strong>Lab 5:</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Friday:</strong> Chapter 3, Chromosome transmission during cell division and sexual reproduction.</td>
<td>- <em>First thing:</em> Load gels with plasmid DNA</td>
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<td></td>
<td></td>
<td>- <em>Second thing:</em> RNA interference (RNA interference is a chapter 13 topic. Questions about RNA interference will be on lecture exam 2).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- <em>Last thing:</em> Stain, examine and photograph gels</td>
</tr>
</tbody>
</table>

149
<table>
<thead>
<tr>
<th>DATE</th>
<th>CLASS TOPIC AND READING</th>
<th>LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 6-10</td>
<td>• Monday and Wedn: Chapter 3, Chromosome transmission during cell division and sexual reproduction.</td>
<td>Lab 6:</td>
</tr>
<tr>
<td></td>
<td>• Friday, October 10: <strong>Lab exam 1 during lecture time</strong> (Lab exam 1 will be over genomic DNA isolation, gel electrophoresis, transformation, plasmids, restriction enzymes, using restriction enzymes to generate plasmid maps)</td>
<td>• Discuss and finishing interpreting last week's lab results</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Meiosis</td>
</tr>
<tr>
<td>Oct. 13-17</td>
<td>• <strong>Monday, October 13: Lecture exam 2</strong> (lecture exam 2 will be over a select portion of chapter 13, chapter 18 and the majority of chapter 3).</td>
<td>Lab 7:</td>
</tr>
<tr>
<td></td>
<td>• Wedn and Friday: Chapter 2, Mendelian inheritance</td>
<td>• Transmission Genetics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Plant seeds of <em>Brassica rapa</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Start working with <em>Nasonia vitripennis</em></td>
</tr>
<tr>
<td>Oct 20-24</td>
<td>• All week: Chapter 2, Mendelian inheritance, part of chapter 3.</td>
<td>Lab 8:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Examine and count <em>B. rapa</em> seedlings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Collect <em>N. vitripennis</em> males and virgin females</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>NOTE that you will need to come into lab this week (possibly several days), outside of normal lab and lecture time, to collect <em>N. vitripennis</em> males and virgin females.</strong></td>
</tr>
<tr>
<td>Oct. 27-31</td>
<td>• All week: Chapter 4, Extensions of Mendelian inheritance</td>
<td>Lab 9:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Finalize experimental design and set matings with <em>N. vitripennis</em>.</td>
</tr>
<tr>
<td>Date</td>
<td>Monday</td>
<td>Wednesday</td>
</tr>
<tr>
<td>------------</td>
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<td>-----------</td>
</tr>
</tbody>
</table>
| Nov. 3-7   | PCR and DNA fingerprinting. Read section 20.2 in chapter 20 of the Brooker textbook. Read the handout on DNA fingerprinting. **Note:** Questions about this material will be on lab exam 2. **Wednesday, November 5: Lecture exam 3.** (Lecture exam 3 will be over chapters 2 and 4 as well as a small portion of Lab 10:  
  - Isolate genomic DNA to use in PCR  
  - Set up PCR and/or restriction digestions  
  - Pour gels for use next week |
| Nov. 10-14 | Monday and Wednesday, Nov 10: Chapter 5, Non-Mendelian inheritance. **Friday, Nov. 14: Lab exam 2 today at 1:10 pm.** If you miss the lab exam today for an unexcused reason, you will earn a zero on the lab exam and will not have the opportunity for a makeup lab exam. Lab exam 2 will be over the theory and practice of bacterial transformation, plasmid DNA, plasmid DNA isolation, GFP, antibiotic resistance and restriction |
| Nov. 17-21 | Monday and Wed: Chap 10 (also select parts of chap 8)  
  - Friday: Chapter 14, Gene regulation in bacteria |
| Nov. 24-25 | Monday : Chapter 14, Gene regulation in bacteria  
  - Wedn and Fri: Thanksgiving break. |
| Dec. 1-5   | Monday, Chapter 14, Gene regulation in bacteria.  
  - Wedn and Friday: Select parts of chapter 15, Gene regulation in eukaryotes I: transcriptional regulation  
  - Lab 12:  
    - Continue to analyze progeny of *N. vitripennis*  
  - Lab 13:  
    - Discussion of *N. vitripennis* results  
    - DNA sequencing or Bioinformatics  
  - Lab 14:  
    - DNA sequencing or Bioinformatics |
| Dec. 8-12  | FINALS WEEK  
  **The genetics final exam will be at 8:00 am Tuesday, Dec. 9.** The final exam will be over chapters 10, 14, 15 and assigned parts of chapter 8.  
  - No genetics labs this week. |
| Finals Week|        |           |              |
SPECIAL PROJECTS, ASSIGNMENTS FIELD TRIPS, ETC.
This course does not include field trips. There will be some weeks when you will need to come into the lab, outside of lecture or lab time. Please arrange this with the instructor.

EXAMS AND OTHER EVALUATIONS
Lecture exams, lecture quizzes and lab exams. Some lecture and lab material builds on previous material. Thus, on any given exam or quiz, you may be responsible for material that was previously covered/assigned and that was previously tested on. Some lecture and lab items overlap, so there may be some questions on quizzes, worksheets and exams that are difficult to classify as “lecture questions” or “lab questions”. Some labs, such as the meiosis lab, are designed to complement lecture material and help you understand lecture material. Thus, some lab topics are integrated with lecture material and will be tested over in lecture exams. Some lecture material applies to lab, so even though we may discuss the material in lecture, but not in lab (or visa versa), you may need to know and apply it for lab work, for lab exams, for lecture exams or for lecture quizzes.

Early exams and early quizzes. There will be no early exams or quizzes in lecture or lab.
Lecture exam, lecture quiz and lab quiz format. The exam format for lecture exams, lecture quizzes and for lab exams may depend on the topics. The format for all exams or quizzes may not be the same. Depending on the particular exam or quiz, there may be problems to work, data to analyze, and/or processes to explain; these all lend themselves to essay type answers or answers that require that you work through a problem and possibly show your work to demonstrate how you arrived at an answer. Other topics lend themselves to multiple choice/matching/true-false type questions.

Makeups for lecture work and for lab exams. Makeups for any lecture work and for lab exams are possible only if you have an excused absence and the appropriate documentation. There will be no makeups for unexcused absences; if you miss a lecture or lab exam or quiz for an unexcused reason, you will have zero points on that item. You are responsible for checking if there were any assignments, worksheets or handouts on a day that you are absent. For the possibility of earning points on makeup work, you must ask about any class work by the date that you are supposed to be back in class.
For example, if your sports team returned to campus on Monday evening, then you should be back in class on Wednesday and you need to ask about making up work that Wednesday. If you decide to skip class on Wednesday, then return to class on Friday and find that there was an assignment due that Friday, you will not have the opportunity to make up the work.

Makeup exams will be given outside of normal class or lab time. If at all possible, all students that need to take a makeup for a given lecture or lab exam should take the makeup at the same time. The instructor will try to schedule a time that works for all people needing to take that makeup, with the time being as soon as feasible after the normally scheduled exam. If we cannot find a mutually agreeable time outside of normal class or lab time, then if lab time allows, makeup exams (whether lecture or lab exams) might be given between November 17 and December 2, during lab time when we are finished with lab work. Makeup exams will be on the same topics as the regularly scheduled exams, but may not consist of the same questions or be in the same format as the regularly scheduled exam. There may be more essay format questions on makeup exams.

**Makeups for lab work and lab experiments.**

There are no makeup for labs “per se”, regardless of whether your absence from lab is for an excused or unexcused reason. If you miss a lab for unexcused reasons, you will be docked 20 points for each lab missed for an unexcused absence. Regardless of your reason for missing lab, you will be responsible for all material from that lab as far as lab exams or assignments.

If, for excused or unexcused reasons you miss certain labs (labs scheduled as labs 1, 3 and 7), in which we learn particular skills or safety issues that impact future labs, I will work with you on a “makeup” for those skills or safety issues. If you miss the lab for unexcused reasons and do the “makeup” skill/training, you will still be docked 20 points. If you fail to do the “makeup” skill/safety training at all, you will not be allowed to do any future labs in which that skill or safety training is required and you will be docked 20 points per lab that you are not allowed to do. You also will not be able to earn any worksheet, lab report, assignment points or other points associated with those labs.

You must contact me and complete the skill/safety training PRIOR TO the next lab in which the skills or safety issues apply. If, for unexcused reasons, you miss the
appointment for “makeup” skill/safety training that we set up, your grade will be docked 20 points in addition to points docked for missing the regularly scheduled lab.

The labs that I will work with you for makeup skill/safety training are:

Lab 1, which is the first lab of the semester, scheduled for Aug. 25-26. Contact me immediately if you miss this lab. You will not be able to do any future labs until you complete general lab safety training. You will not be able to do future labs that require pipetting until you and I work together on pipetting skills. As part of this “makeup” skill training, we will cover general lab safety items and I will show you how to use a pipette and load gels (if applicable), but you will not make up any other parts of the Aug. 25-26 lab.

Lab 3, which is the lab scheduled for Sept. 15-16. Unless you complete this skill/safety training, you will not be able to do the next scheduled lab of Sept. 23-24, which involves using bacteria. You must complete this “makeup” skill/safety training with me regardless of whether you are currently enrolled in microbiology lab or have taken a microbiology lab in the past. As part of this “makeup” training, we will discuss biosafety, basic safety and skills related to working with bacteria, but you will not do Escherichia coli transformation.

Lab 7, which is the lab scheduled for Oct. 13-14. Unless you complete skill training on working with Nasonia vitripennis, you will not be able to do any future labs that involve N. vitripennis. Labs 7, 8, 9, 11 and 12 all involve working with N. vitripennis as part of a single large project that spans several weeks. Note that if the “time window” for working with N. vitripennis is past by the time you contact me about making up this lab, you will not be able to do lab 7 and you will not be able to do future labs that involve N. vitripennis (see the next page).

Labs 7, 8, 9, 11 and 12 (scheduled for Oct 12/13, Oct 20/21, Oct 27/28, Nov 10/11, and Nov 17/18) are all part of a single, multi-week project involving Nasonia vitripennis (a small wasp that parasitizes certain fly species).

If, for excused reasons, you miss even one of these labs (labs 7, 8, 9, 11 and 12), you may not be able to complete the lab series and if this is the case, you will have to do an alternative, independent project(s). If you miss one of these labs (for excused reasons), it may be possible for you to “catch up,” but this will depend on which particular lab you miss, how many of the labs you miss, and/or whether it is feasible for you to “catch up” outside of normal lab time.
If, **for unexcused reasons**, you miss one or more of these labs (labs 7, 8, 9, 11 or 12), you will be docked 20 points per missed lab in addition to any other points associated with the missed lab(s) such as worksheets, points on lab reports, etc. Depending on which lab(s) you miss, I may determine that it is not feasible for you to complete the lab series and you will be given an alternative, independent project(s). You will likely find that the alternative project(s) is/are more work for you than the regularly scheduled lab(s) that you missed.

**Why would it not be feasible for you to do the *N. vitripennis* project if you miss just one of these labs?**

The series of labs scheduled as labs 7, 8, 9, 11 or 12 involve learning to work with the organism *N. vitripennis*, collecting males and virgin females that are in the pupal stage of development, designing appropriate experimental matings, setting up the matings, collecting and examining the progeny and then finally interpreting the results. If you miss when we collect the males and virgin females, then you may have missed the “time window” in which it is possible to collect the males and females. Thus, you will not be able to set up the experiment and you will not be able to complete the rest of the labs in this series. If you do collect the males and virgin females, but then are absent when it is time to set up the matings, you may have missed the “time window” in which the animals are alive, fertile and able to mate; thus you will have no results to analyze in future labs. For the purposes of doing lab reports or worksheets/assignments, you will not be allowed to “just look at and use” the data of other students.

**GRADING POLICY**

The letter grade that you earn in this course will be based on your lecture and lab scores. Three-fourths of your grade will come from lecture scores and one-fourth will come from lab scores.

**Grading Scale:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>(89.50 – 100%)</td>
</tr>
<tr>
<td>B</td>
<td>(79.50 – 89.49%)</td>
</tr>
<tr>
<td>C</td>
<td>(69.50 – 79.49%)</td>
</tr>
<tr>
<td>D</td>
<td>(59.50 – 69.49%)</td>
</tr>
<tr>
<td>F</td>
<td>(59.49% and below)</td>
</tr>
</tbody>
</table>

Note that 89.49% is a B and does not round up to 89.5%. Likewise, 79.49% is a C; 69.49% is a D and 59.49% is an F.
Three lecture exams at 100 points each. 300 points
Final lecture exam at 125 points.

125 points Your average on lecture quizzes/activities* (your two lowest lecture
quiz/activity scores will be dropped)

Two lab exams (each worth 25 points) 50 points
Two lab reports (each worth 25 points) 50 points
Lab worksheets, lab notebook and other lab items 75 points

| Total points | 700 points |

No scores from lab will be dropped. No lecture exams or lab exams will be dropped. Your two lowest lecture quiz/activity scores will be dropped.

Homework: Homework problems will be assigned throughout the semester, but homework will not be graded. Answers to homework will be available so that you can check your own understanding and progress. If you need help with homework, please do not hesitate to talk with me. Give the homework your best try, look at the answers, try to figure out why your answer does not match the keyed answer, and then we can discuss how to approach the problems. If time allows, we may spend some class and/or lab time reviewing homework problems and you should be prepared to participate by discussing your answers, showing others how to work problems and/or by asking questions.

It is very important that you do the homework, study and keep up with genetics material daily/weekly. Cramming the week, weekend or night before an exam is NOT a good approach to doing well in genetics! Much like math classes, problem solving is an important part of genetics. Becoming skilled at successfully solving problems takes time and repetition. If you do not spend sufficient time to study and to do and understand the homework, the probability that you will do well on quizzes, assignments and exams is low!

Lecture quizzes/activities.
Your lecture quiz/activity average will be used to calculate the number of points you earn in this category. In the calculations of your lecture quiz/activity average, your two lowest lecture quiz/activity scores will be dropped.
Your overall lecture quiz/activity average will be calculated by dividing your points by the total points possible in this category and then multiplying that number by 100. An example of how your points in this category will be calculated is shown below.
Example

<table>
<thead>
<tr>
<th>Quiz #</th>
<th>Hypothetical student’s scores</th>
<th>Points possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz 1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 3</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Quiz/activity 4</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 6</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 7</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 8</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 9</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Totals</td>
<td>69</td>
<td>90</td>
</tr>
</tbody>
</table>

In this hypothetical scenario, the score of five on quiz 5 and the score of three on quiz 7 would be dropped. This gives a total of 61 points out of 70 points possible.

To calculate the overall average for this person in the lecture quiz/activity category:

\[ \frac{61}{70} \times 100 = 87.143\% \]

Since this person has a quiz/activity average of 87.143%, this person would earn 87.143 points out of 100 possible in the lecture quizzes/activities category.

**STUDENTS WITH DISABILITIES**

It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any approved accommodations at the beginning of the course. Any student with questions regarding accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870-460-1026; TDD 870-460-1626; fax 870-460-1926.

McGehee: Office of Special Student Services representative on campus; phone 870-222-5360; fax 870-222-1105.

Crossett: Office of Special Student Services representative on campus; phone 870-364-6414; fax 870-364-5707.

**STATEMENT ON DISRUPTIVE BEHAVIOR**

The following action is prohibited under the Student Conduct Code: Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others.
COURSE
Cell Biology, (BIOL 3363). Three credits
Class time: Mon, Wed, Friday: 9:10 am – 10:00 am
Meeting place: Science Center Room B19

PREREQUISITES
CHEM 1113 (Gen Chem II), CHEM 1131 (Gen Chem II lab) and BIOL 3363 (Genetics). In addition to the prerequisite classes listed above, you should have completed Principles of Biology I and II (BIOL 1053 and BIOL 1083) since these are prerequisites for BIOL 3363.

REQUIRED TEXTBOOK
Becker's World of the Cell, 8th edition by Hardin, Bertoni and Kleinsmith. Publisher Benjamin Cummings. ISBN 9780321716026. Other reading material may be handed out or assigned.

INSTRUCTOR
Dr. Mary Stewart
Phone: 870-460-1767
e-mail: stewartm@uamont.edu

Please be sure to put the m after stewart in my email address (stewartm@uamont.edu).

Please visit with me in person if you would like to discuss your grades. I will not discuss your grades by phone.

OFFICE AND OFFICE HOURS
Office: Science Center, Room B12
Office Hours: Monday: 10-11 am
Tuesday and Thursday: 9:30 – 10:30 am and 1:30 – 2:30 pm
Wednesday and Friday: 10 – 11 am and 1:30 – 2:30 pm

STATEMENT OF SPECIAL POLICIES SUCH AS ABSENTEEISM, CHEATING, PLAGIARISM, CELL PHONES, ELECTRONIC DEVICES, ETC.

Absenteism. The opportunity to makeup exams, quizzes and other class work is possible only for excused absences. If you do miss class, you are responsible for checking if there were any announcements, changes to the tentative schedule, assignments or handouts that day.

Excused absences include, but are not limited to, participating in a UAM sponsored event (see the paragraph below from the UAM student handbook), being so ill that you visit a medical facility, or a death in your immediate family. It is your responsibility to contact me to discuss whether your absence is excused and to bring the appropriate documentation for your absence.
The information in the paragraph below is from the UAM student handbook:

“ABSENCES DUE TO PARTICIPATION IN UNIVERSITY-SPONSORED EVENTS

At times, a student may participate in a University-sponsored activity that causes him or her to miss one or more class meetings. When this occurs, the sponsor of the activity will provide the student with a memo which includes the event, dates and times of the event, and the students name to be provided to each academic instructor. The student will discuss the work and the class(es) to be missed with each academic instructor at least one week prior to the anticipated absence. The student is responsible for all materials covered and any class activities during the absence. The sponsor of the activity will also provide all academic unit heads and Academic Affairs a description of the activity, which includes the location, dates, and a list of campus participants.”

Unexcused absences include, but are not limited to, items such as going on vacation, having to work, sleeping late, having a paper due in another class, wanting to study for an exam in another class, not being ready for an exam, etc.

Cheating and plagiarism. Academic dishonesty and cheating will not be tolerated.

a. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   i. Copying from another student’s paper;
   ii. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   iii. Collaboration with another student during the examination;
   iv. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   v. Substituting for another person during an examination or allowing such substitutions for oneself.

b. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

c. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

d. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

Copying other student’s answers to homework is considered plagiarism. The person who copied the answers, as well as the person who allowed their answers to be copied, will both be considered as cheating.

For any instance of academic dishonesty that is discovered, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be zero points earned on the item involved. If you are caught cheating on any item, the student(s) involved will earn a zero on that item. Additionally, for student(s)
involved in cheating, all quiz/homework grades will be used in calculating the final quiz/homework average; no quiz/homework grades will be dropped.

**Cell phones and electronic devices.** Cell phones and other electronic devices are not to be used during class. Turn your cell phones and electronic devices off and put them away during class. If you use your cell phone during class, you may be asked to leave. If your cell phone is out during an exam or quiz, you will be considered as cheating. Turn cell phones off and put them away!

**SPECIAL DATES OF CONCERN TO THE COURSE.**
- Monday, April 27, 2015: All makeups for ten-point quizzes and any in-class activities will be today during class time. Makeup quizzes are possible only if you have a documented excused absence for your absence the day of the quiz/activity.

- Wednesday, April 29, 2015: Cell Biology final at 10:30 am. The final exam date is set by the University and will not change unless the University changes it.

**COURSE OBJECTIVES AND COURSE DESCRIPTION**
By the end of this course, students should be able to
- Describe the components and organelles of a typical cell, their functions and the integration of these components into cellular function.
- Discuss proteins and their properties.
- Describe cell membranes, their properties, how materials are transported across membranes and how proteins are inserted into selected cell membranes.
- Discuss and apply concepts of the endomembrane system.
- Discuss and apply concepts related to cell junctions and the extracellular structures and matrix of animal cells.
- Discuss and apply concepts of signal transduction mechanisms and the application of signaling to the cell cycle and cell function.
- Discuss and apply concepts of the cell cycle and the application of this to cell function.
- Apply cell biology topics to human health situations.
- Describe methods used to explore cell structure and function, discuss how these methods are used in experimental situations and derive conclusions from data obtained with these methods.

**ELL BIOLOGY, SPRING 2015 COURSE OUTLINE AND TENTATIVE SCHEDULE.** Changes to this tentative schedule may occur because of missed class days (e.g. if the University closes because of inclement weather), if we get ahead or behind on a topic, or for other unpredicted events.
<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>READING in Becker's World of the Cell (WotC) is below. For some topics, there may be handouts or other assigned materials.</th>
</tr>
</thead>
</table>
| Jan 7-9 (Friday, Jan 9: last day to register or add classes) | Wedn and Friday  
- Introductory things  
- Visualization of cells (part of chap. 2)  
- Cell structure and Function (chapter 4 topics) | **Topic:** Visualization of cells. The pages to read in chapter 2 of Becker's WotC are:  
- The section on “visualization of cells” on pages 6-8 in chapter 2.  

**Topic:** Cell structure and function. The pages to read in chapter 4 of Becker’s WotC are:  
- Pages 75-99  
  On pages 76 – 78, skip the section about limitations on cell size. On page 99, skip the information on viruses, viroids and prions. |
| Jan 12 –16 | Monday  
- Cell structure and function continued (chap 4).  
Wedn and Friday  
- Proteins | **Topic:** Proteins. The pages to read in Becker’s WotC are:  
- Chapter 3: Pages 41- 54 (skip the info. on nucleic acids)  
| Jan 19 – 23 | Monday: Holiday, no classes.  
Wedn  
- Proteins  
Friday  
- Enzymes (chap 6) | **Topic:** Enzymes. Pages to read in chapter 6 of Becker’s WotC are:  
- Pages 129-138 (skip the section on enzyme kinetics).  
- Pages 144 (beginning with “Enzyme inhibitors act irreversibly or reversibly) through 151. |
| Jan 26 – 30 | Monday and Wedn:  
- Enzymes, continued  
Friday: finish or review topics, or other. |
<table>
<thead>
<tr>
<th>Date Range</th>
<th>Monday, Feb. 2: Exam 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 2 – 6</td>
<td>Exam 1 and Friday Membranes (chap. 7)</td>
</tr>
<tr>
<td></td>
<td><strong>Exam will be over class material, readings and assignments up to this date.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Topic: Membranes. Pages to read in Becker’s WotC are:</strong></td>
</tr>
<tr>
<td></td>
<td>- All of chapter 7</td>
</tr>
<tr>
<td>Feb 9 – 13</td>
<td>Monday and Wedn Membranes</td>
</tr>
<tr>
<td></td>
<td>Friday Transport across membranes (chap. 8)</td>
</tr>
<tr>
<td></td>
<td><strong>Topic: Transport across membranes. Pages to read in Becker’s WotC are:</strong></td>
</tr>
<tr>
<td></td>
<td>- 194 - 216, with the following exceptions</td>
</tr>
<tr>
<td></td>
<td>- On page 200, skip box 8A.</td>
</tr>
<tr>
<td></td>
<td>- On page 201, skip the section “The rate of simple diffusion is directly proportional to the concentration gradient”.</td>
</tr>
<tr>
<td></td>
<td>- On page 216, skip the section “The energetics of transport”.</td>
</tr>
<tr>
<td>Feb 16 – 20</td>
<td>Monday and Wedn Transport across membranes (chap. 8)</td>
</tr>
<tr>
<td></td>
<td>Friday The endomembrane system (chap 12)</td>
</tr>
<tr>
<td></td>
<td><strong>Topic: The endomembrane system. Pages to read in Becker’s WotC are:</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chapter 12 (the endomembrane system) reading</strong></td>
</tr>
<tr>
<td></td>
<td>Pages 324 – 355, with the following exceptions.</td>
</tr>
<tr>
<td></td>
<td>- Skip Box 12A on pages 327-329</td>
</tr>
<tr>
<td></td>
<td>- On page 355, don’t read the section on “The plant vacuole: a multifunctional</td>
</tr>
<tr>
<td>Feb 23 – 27</td>
<td>All week The endomembrane system (chap 12)</td>
</tr>
<tr>
<td>March 2 – 6</td>
<td>Monday, March 2 Exam 2</td>
</tr>
<tr>
<td></td>
<td>Wedn and Friday Protein synthesis and sorting (chap. 22)</td>
</tr>
<tr>
<td></td>
<td><strong>Monday, March 2: EXAM 2. Exam 2 will be over class material, readings and assignments since exam 1.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Topic: Protein synthesis and sorting. Pages to read in Becker’s WotC are:</strong></td>
</tr>
<tr>
<td></td>
<td>- Pages 679 – 705, with the following exceptions.</td>
</tr>
<tr>
<td></td>
<td>- On page 691, skip the information about &quot;Protein synthesis typically utilizes a substantial fraction of a cell’s energy budget&quot;.</td>
</tr>
<tr>
<td>March 9 – 13</td>
<td>All week Protein synthesis and sorting (chap 22).</td>
</tr>
<tr>
<td>Date Range</td>
<td>Topic</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>March 16 – 20</td>
<td><strong>Signal transduction</strong> (chap. 14)</td>
</tr>
<tr>
<td>(March 18: last day to drop a full-term)</td>
<td></td>
</tr>
<tr>
<td>March 23 – 27</td>
<td><strong>Spring Break! No classes this week</strong></td>
</tr>
<tr>
<td>March 30 – April 3</td>
<td><strong>Monday and Wedn</strong>&lt;br&gt;• Signal transduction.**&lt;br&gt;<strong>Friday, April 4:</strong> The cell cycle (part of chapter 19)</td>
</tr>
<tr>
<td>April 6 – 10 (April 6: Preregistration for Summer and Fall 2015 begins)</td>
<td><strong>Monday, April 7:</strong>&lt;br&gt;<strong>Exam 3</strong>&lt;br&gt;<strong>Wedn and Friday:</strong>&lt;br&gt;The cell cycle</td>
</tr>
<tr>
<td>April 13 – 17</td>
<td><strong>Monday</strong>&lt;br&gt;• The cell cycle&lt;br&gt;<strong>Wednesday &amp; Friday</strong>&lt;br&gt;Cancer Cells (chap. 24)</td>
</tr>
<tr>
<td>April 20 – 24</td>
<td><strong>All week:</strong>&lt;br&gt;• Cell adhesions, cell junctions and extracellular structures</td>
</tr>
</tbody>
</table>
April 27 – May 1

**Monday, April 27:** ALL makeups for ten-point quizzes or any in-class activities will be given today during class time.

**Wedn, April 29:** Cell Biology final at 10:30 am.

- **Monday, April 27:** ALL makeups for ten-point quizzes and any in-class activities will be today during class time. Makeups for these items are possible only if you had a documented excused absence on a day we had a quiz or in-class activity.

  The final exam will be over class material, readings and assignments since exam 3.

**SPECIAL PROJECTS, ASSIGNMENTS, FIELD TRIPS, ETC.**
This course does not include field trips.

**EXAMS AND OTHER EVALUATIONS**

**Hour exams**
Hour exams may have questions from class material, textbook readings and/or other assigned material. Exams may have questions in a variety of formats including essay, problem solving, short answer, multiple choice, true/false, ordering, matching and fill-in-the-blank.

There will be four hour exams (three during the semester and one during finals week). Hour exams are somewhat cumulative in that information from some topics carries over to other topics. For example, information about organelles, proteins and other cell macromolecules that we will discuss early in the semester will be applied to later topics in the semester. As another example, the topic of endomembrane systems (chapter 12) will be on exam two. Exam three will contain the topic of protein synthesis and protein sorting (chapter 22). Your success on some of chapter 22 materials will depend on your prior mastery of chapter 12 material.

**Makeup Exams and Early Exams**
There will be no early exams. Makeup exams are possible only if you have an excused absence. If you miss an exam for an excused reason, please contact me as soon as possible about making up an exam. All makeup exams will be scheduled for a time outside of regular class time. I would like to schedule for all students who missed a given exam to take the makeup for that exam at the same time. Makeup exams may not be in the same format as the regular exam and may consist of more essay / free-response type questions than the regular exam.

**Quizzes and in-class activities**
Ten-point in-class quizzes or other in-class activities may or may not be announced in advance.
Makeups and early quizzes/in-class activities. There will be no early quizzes or in-class activities. There will be no makeups for unexcused absences. All makeup quizzes and makeups for any other type of in-class activities will be on Monday, April 27 during normal class time. Depending on the in-class activity, it may not be possible for you to make up the same type of activity the rest of the class did. Thus, you may have to do an alternative activity or quiz as a makeup for an in-class activity.

If you miss an in-class quiz or activity for a UAM sponsored event, you may make up the quiz/activity if you discuss the absence with me at least one week in advance of the absence and have the appropriate sponsor documentation (see the UAM policy on page two of this syllabus). If you miss an in-class quiz/activity for other types of excused absences, makeups are possible only if you bring the appropriate written documentation such as a doctor’s note.

Homework
Ten-point homework assignments may be given out during the semester. If homework is due on a day when you will be out of town for a UAM sponsored, you need to turn the homework in before you leave, not after you return.
If you are absent on the day that homework is handed out, it is your responsibility to check if any assignments were given on the day of your absence. Late work will not be accepted if graded papers have been given back to other students or if a key has been distributed electronically or as a hard-copy.

GRADING POLICY
Letter grade and percent

A  (89.50 – 100%)
B  (79.50 – 89.49%)
C  (69.50 – 79.49%)
D  (59.50 – 69.49%)
F  (59.49% and below)

Note that 89.49% is a B and does not round up to 89.5%. Likewise, 79.49% is a C; 69.49% is a D and 59.49% is an F.

Grades of incomplete (I)
Below is a section from the UAM student handbook regarding grades of incomplete (I): “An incomplete grade is a mark designating deficiencies in course work, which must be completed within one calendar year, or less as designated by the instructor. Permission to receive an I rests with the instructor. When deficiencies are completed, the appropriate grade will be assigned. After the specified year or shorter specified time, an I will become an F if the work has not been completed.”
A grade of incomplete will only be considered if a student has completed at least three exams and has completed 75% of the homework and quizzes. Additionally, based on grades of completed work and on the points possible for the work left to be completed, the student must have a mathematical possibility of passing the class.

The grade that you earn in this course will be based on your scores on four exams and on your quiz/homework/in-class activity average.

<table>
<thead>
<tr>
<th>Item</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four hour exams, each worth 100 points</td>
<td>40</td>
</tr>
<tr>
<td>0 points</td>
<td></td>
</tr>
<tr>
<td>Your quiz/homework/in-class activity average</td>
<td>100 points*</td>
</tr>
<tr>
<td>(see explanation below)*</td>
<td></td>
</tr>
<tr>
<td>Total points possible</td>
<td>50</td>
</tr>
<tr>
<td>0 points</td>
<td></td>
</tr>
</tbody>
</table>

No exam scores will be dropped.

*Calculating your points on ten-point “quiz/homework/in-class activity” items.

Your quiz/homework/in-class activity score will be averaged and the average will be used to determine your points in the “quiz/homework” category. Your two lowest ten-point quiz/homework/in-class activity scores will be dropped and will not be used to calculate your average in the “quiz/homework/in-class activity” category.

Below is an example of how your points in the “quiz/homework” category would be calculated after your two lowest ten-point “quiz/homework/in-class activity” category items are dropped. In this example, only nine ten-point “quiz/homework/in-class activity” items were available in the semester.

<table>
<thead>
<tr>
<th>Your scores on ten-point items</th>
<th>Points possible</th>
</tr>
</thead>
</table>

166
In the example above, the two lowest scores of “5” and “7”, so these would be dropped. Thus, the average for this category would be 94.29% (66/70 X 100 = 94.29%) This person would have 94.29 points (out of 100 possible) in the “quiz/homework/in-class activity” category.

However, if you are caught cheating on any item, the student(s) involved will earn a zero on that item. Additionally, for student(s) involved in cheating, all quiz/homework/in-class activity grades will be used in calculating the final quiz/homework average; no quiz/homework grades will be dropped.

**STUDENTS WITH DISABILITIES:**

It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926; email: whitingm@uamont.edu.

For assistance on a College of Technology campus contact:

McGehee: Office of Special Student Services representative on campus; room 300; phone 870 222-5360; fax 870 222-1105.

Crossett: Office of Special Student Services representative on campus; room A-5; phone 870 364-6414; fax 870 364-5707.

**STUDENT CONDUCT STATEMENT:**

Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of
society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

BLACKBOARD
If you are officially enrolled in this class at UAM, you automatically will be enrolled in the Blackboard site for this class. To access the Blackboard site for this class, go to http://www.uamont.edu/academiccomputing/ and follow the onscreen instructions.

I will be putting your scores in this class on Blackboard. Your Blackboard account is password protected. To protect against others seeing your grades, do not share your login information and password with others. Also, after you are finished looking in your Blackboard account, be sure to logout of Blackboard and close the browser window.

If you do not wish to have your scores on Blackboard, you must let me know, preferably by email.

If you need help with Blackboard, I will be happy to help you if I can. There are some Blackboard tips available at http://www.uamont.edu/academiccomputing/. For help, you also can call the UAM Office of Academic Computing at 870-460-1663. If you forget your password, you will need to contact the Office of Academic Computing.
BIOL 3384  
Herpetology  
Spring 2015  
Lecture 12:10-1:00  
Science Center B-18  
Lab 1:10-4:00  
Science Center B-31  

Instructor: Glenn Manning  
Office: B-27  
Office Phone: 460-1166  
E-mail: manning@uamont.edu  
Webpage: http://www.uamont.edu/facultyweb/Manning/  
Office Hours: MWF 10-12 a.m.; TH 11-12 a.m.; MT 1:30-3 p.m. or by appointment. Changes in this schedule may occur and will be posted outside my door or announced in class.  

BIOL 3384, Herpetology, 4 credit hours  

Objectives: To acquaint the student with the current taxonomy and phylogenetic relationship of animals within the amphibians, reptiles, crocodilians, and turtles. We will look at this through understanding of morphology, function, and life histories of these very unique animals. Special emphasis will be placed on identification of the regional fauna. We will discuss how to locate and survey for these animals.  

Prerequisites: BIOL 1153, General Zoology and BIOL 1161 General Zoology Lab  


Student Learning Outcomes: By the conclusion of the course you should be able to have an understanding how to identify amphibians, reptiles, crocodilians, and turtles. Also how these animals live and operate in their natural surroundings.  

Attendance, Testing, and Cheating: Attendance in this course is mandatory. Attendance will be recorded regularly and anyone missing the equivalent of two weeks of class will be dropped from the course unless appropriate documentation can be provided. Your success in this course is directly dependent on your attendance and participation in lectures.  

Exam attendance is required and make-up exams will be given only under extreme circumstances. Make-up exams will be allowed only in cases of illness with a doctor’s excuse, excused university functions, or family emergencies with a written excuse from a family member. If you are forced to miss an exam you must notify me within 24 hours of the exam. Failure to do so will result in a zero on that exam. If you know ahead of time that you will be absent please let me know and prior arrangements for testing can be made.  

Cheating in any form will not be tolerated and will automatically result in failure of the course. Cellular phones are included in the cheating policy and any appearance of a cellular phone (or other communication devise) during a test will be considered an attempt to cheat by the student.  

Likewise electronic devices such as cellular phones etc. will not be allowed in lecture unless prior approval is given by the instructor.  
You will be given a zero (0) for this course if you free handle a venomous snake or purposely kill an animal without consent from your instructor.  

*******NO EXTRA CREDIT will be given under any circumstances!!!  

Course Grade:  

<table>
<thead>
<tr>
<th>Course Grade</th>
<th>GRADE POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 - 100A</td>
<td>Hour Exam I</td>
</tr>
<tr>
<td>80 - 89B</td>
<td>Hour Exam II</td>
</tr>
<tr>
<td>70 - 79C</td>
<td>Lab Exam I</td>
</tr>
<tr>
<td>60 - 69D</td>
<td>Lab Exam II</td>
</tr>
<tr>
<td>00 - 59F</td>
<td>Project</td>
</tr>
<tr>
<td></td>
<td>Participation</td>
</tr>
<tr>
<td></td>
<td>Total Points</td>
</tr>
</tbody>
</table>

**The project format and due date will be announced at a later date.
Exam dates will be set one week prior to each exam. Each test will cover material beginning with the previous exam, and continuing through the last class day before the exam.

Each student will choose a code number/code name prior to the first test and this will be used to post grades. Grades will be posted either by hard copy or on the Internet. If you do not wish to have your grade posted please let the instructor know prior to the first test. Grades will not be provided over the phone.

**LECTURE CONTENT: (Subject to change)**

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>CHAPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrapod Relationships and Evolutionary Systematics</td>
<td>1</td>
</tr>
<tr>
<td>Evolution of Ancient and Modern Amphibians and Reptiles</td>
<td>3</td>
</tr>
<tr>
<td>Anatomy of Amphibians and Reptiles</td>
<td>2</td>
</tr>
<tr>
<td>Classification and Diversity</td>
<td></td>
</tr>
<tr>
<td>Caecilians</td>
<td>15</td>
</tr>
<tr>
<td>Salamanders</td>
<td>16</td>
</tr>
<tr>
<td>Frogs</td>
<td>17</td>
</tr>
<tr>
<td>Turtles</td>
<td>18</td>
</tr>
<tr>
<td>Crocodilians</td>
<td>19</td>
</tr>
<tr>
<td>Tuataras and Lizards</td>
<td>20</td>
</tr>
<tr>
<td>Snakes</td>
<td>21</td>
</tr>
<tr>
<td>Modes of Reproduction &amp; Parental Care</td>
<td>4</td>
</tr>
<tr>
<td>Reproductive Ecology and Life Histories</td>
<td>5</td>
</tr>
<tr>
<td>Water Balance and Gas Exchange</td>
<td>6</td>
</tr>
<tr>
<td>Thermoregulation, Performance, and Energetics</td>
<td>7</td>
</tr>
<tr>
<td>Communication and Social Behavior</td>
<td>9</td>
</tr>
<tr>
<td>Foraging Ecology and Diets</td>
<td>10</td>
</tr>
<tr>
<td>Defense and Escape</td>
<td>11</td>
</tr>
<tr>
<td>Population Structure and Dynamics</td>
<td>12</td>
</tr>
<tr>
<td>Community and Geographical Ecology</td>
<td>13</td>
</tr>
<tr>
<td>Conservation Biology</td>
<td>14</td>
</tr>
</tbody>
</table>

**LAB CONTENT: (Subject to change)**

| LAB CONTENT                                                                 |         |
| Amphibian identification and anatomy                                     | 14, 21 & 28 Jan |
| Amphibian practical                                                     | 4 Feb   |
| “Reptile” identification and anatomy                                     | 11, 18 & 25 Feb |
| “Reptile practical                                                     | 4 March |
| Perform proper preservation of museum specimens and other such items    | in lieu of bad weather |
| The rest of the labs will be spent in the field, weather permitting      | 11 March - 22 April |

***We will have at least one night time amphibian lab (weather permitting) attendance is strongly encouraged, not mandatory.***

TBA
We will have one weekend (Friday-Sunday field trip). Attendance is strongly encouraged, not mandatory.

Date will be announced at a later date

Tests will be announced at least one week in advance.

DATES TO REMEMBER:

9 January – last day to register or add a class
19 January – MLK Day
18 March – last day to withdraw from a class
23-27 March – Spring Break
28 April – last day of classes

Students with disabilities: It is the policy of the University of AR at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.

Statement on disruptive behavior: The following action is prohibited under the Student Conduct Code: Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others. THIS INCLUDES THE USE OF CELL PHONES (RINGING OR TEXTING DURING CLASS). You will be given a zero (0) for this course if you freely handle a venomous snake or purposely kill an animal without consent from your instructor.

Academic dishonesty:

1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.

2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will fail the course.
SCHOOL OF MATHEMATICAL AND NATURAL SCIENCES SYLLABUS

INSTRUCTOR NAME: Dr. Edmond J. Bacon

TELEPHONE: Office 870-460-1066 Home 870-367-0407 Cell 870-723-4671

INSTRUCTOR EMAIL ADDRESS: bacon@uamont.edu

OFFICE NUMBER: Room B-29 in Science Center

OFFICE HOURS: MW 10:00 – 12:00; MW 2:00 – 3:00; TTH 8:15 – 9:00

COURSE TITLE AND CREDIT HOURS: Biology 3394 Ichthyology, 4 credit hours

COURSE DESCRIPTION: Taxonomy and biology of fishes. Special emphasis is placed on the identification of the local and regional faunas.

PREREQUISITES: Biol. 1153 General Zoology and Biol. 1161 General Zoology Lab


TECHNICAL SUPPORT INFORMATION: Issues with Blackboard: Contact Office of Academic Computing; phone 870-460-1663. Open Monday-Friday, 8 a.m.-4:30 p.m. Help Desk at fendley@uamont.edu or phone 870-460-1663. The computer section in the Library is open during regular Library hours. Click here to see when the Taylor Library is open: http://www.uamont.edu/library/

Issues with Email: Contact the Office of Information Technology; phone 870-460-1036; open Monday-Friday, 8 a.m. – 4:30 p.m.

The Student Handbook for Distance Education is available at the following link: http://www.uamont.edu/AcademicComputing/

MINIMUM TECHNOLOGY REQUIREMENTS: For minimum technology requirements, visit: http://kb.blackboard.com/pages/viewpage.action?pageId=38830689

Example: Access to a working computer with Internet capability.

Operating System: Windows 2000, XP, Vista or Macintosh OS X
Hardware: 256 MB of RAM, 1GB free hard disk space
Microsoft Office 2007 recommended
Connection to the Internet: (broadband connection, such as RoadRunner, Satellite Internet or DSL, is preferred). Broadband connections are recommended for assessments.

**FEEDBACK SCHEDULE**: Information regarding instructor response and availability. *For example:* Most often, a student can expect a response to email within 24 hours Monday through Friday. No emails will be answered after 5 p.m. on Friday until the following Monday.

**ATTENDANCE POLICY /PARTICIPATION REQUIREMENTS:**

It is a University policy that students are expected to attend classes for which they are enrolled. Arriving **late** to class or **leaving early** is unacceptable. Students who are frequently absent from class and laboratory exercises consistently receive lower grades. Some field trips may depart before 1:00 p.m. and return after 5:00 p.m. **A total of 50 points in lab and field quizzes will be given.**

**EMERGENCY OR INTERRUPTION IN COMPUTER SERVICE POLICY:**

Prepare for unexpected problems and emergencies. Understand that problems and glitches do occur in online learning as they do in any learning environment. Have a back-up plan such as using the computers at a local library for submitting assignments in case your computer crashes or your service is interrupted.

**ASSESSMENTS**: The final grade will be based on three lecture exams, three laboratory exams, and laboratory and field quizzes. Laboratory examinations and quizzes constitute 54 percent of the final grade.

<table>
<thead>
<tr>
<th>GRAADING SCALE</th>
<th>GRADE POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100 = A</td>
<td>Lecture Exam I = 100</td>
</tr>
<tr>
<td>80-89 = B</td>
<td>Lecture Exam II = 100</td>
</tr>
<tr>
<td>70-79 = C</td>
<td>Lecture Exam III = 100</td>
</tr>
<tr>
<td>60-69 = D</td>
<td>Lab Exam I = 100</td>
</tr>
<tr>
<td>00- 59 = F</td>
<td>Lab Exam II = 100</td>
</tr>
<tr>
<td></td>
<td>Lab Exam III = 100</td>
</tr>
<tr>
<td></td>
<td>Lab &amp; Field Quizzes = 50</td>
</tr>
</tbody>
</table>

**TOTAL POINTS** = 650

173
STUDENTS WITH DISABILITIES:

It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any approved accommodations at the beginning of the course. Any student with questions regarding accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; fax 870-460-1926.
McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105.

Crossett: Office of Special Student Services representative on campus; phone 870 364-6414; fax 870 364-5707.

STUDENT CONDUCT STATEMENT: Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

ACADEMIC DISHONESTY

1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.

2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name in on the work submitted.
3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be a zero grade for the examination.

COURSE OUTLINE/CALENDER:

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>ASSIGNMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 27 Aug</td>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>27 - 31 Aug</td>
<td>Systematics</td>
<td>Study Guide</td>
</tr>
<tr>
<td>03 - 10 Sep</td>
<td>Basic Fish Anatomy</td>
<td>Supplemental</td>
</tr>
<tr>
<td>17 - 30 Sep</td>
<td>Classification of Fishes</td>
<td>Study Guide &amp; pp. 23-351</td>
</tr>
<tr>
<td><strong>03 OCT</strong></td>
<td><strong>EXAMINATION I</strong></td>
<td><strong>SUPPLEMENTAL &amp; PP. 23-351</strong></td>
</tr>
<tr>
<td>06 - 15 Oct</td>
<td>Fish Anatomy</td>
<td>Study Guide</td>
</tr>
<tr>
<td>17 - 24 Oct</td>
<td>Physiology of Fishes</td>
<td>Study Guide</td>
</tr>
<tr>
<td>27 - 31 Oct</td>
<td>Ecology of Fishes</td>
<td>Study Guide and pp. 23-351</td>
</tr>
<tr>
<td><strong>03 NOV</strong></td>
<td><strong>EXAMINATION II</strong></td>
<td><strong>STUDY GUIDES &amp; PP. 23-351</strong></td>
</tr>
<tr>
<td>05 - 10 Nov</td>
<td>Age and Growth of Fishes</td>
<td>Study Guide</td>
</tr>
<tr>
<td>12 - 14 Nov</td>
<td>Reproduction of Fishes</td>
<td>Study Guide</td>
</tr>
<tr>
<td>17 – 21 Nov</td>
<td>Parasites and Diseases of Fishes</td>
<td>Study Guide</td>
</tr>
<tr>
<td>24 Nov - 05 Dec</td>
<td>Fish Culture</td>
<td>Study Guide</td>
</tr>
<tr>
<td><strong>11 DEC</strong></td>
<td><strong>EXAMINATION III</strong></td>
<td><strong>STUDY GUIDES</strong></td>
</tr>
</tbody>
</table>
**LABORATORY SCHEDULE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 – 28 Aug</td>
<td>Identification of Fishes: Families</td>
</tr>
<tr>
<td>04 Sep</td>
<td>Identification of Fishes: Family Centrarchidae</td>
</tr>
<tr>
<td>11 Sep</td>
<td>Identification of Fishes: Family Ictaluridae</td>
</tr>
<tr>
<td>18 – 25 Sep</td>
<td>Identification of Fishes: Family Percidae</td>
</tr>
<tr>
<td>02 OCT</td>
<td><strong>LABORATORY EXAMINATION I</strong></td>
</tr>
<tr>
<td>09 Oct</td>
<td>Identification of Fishes: Family Catostomidae</td>
</tr>
<tr>
<td>16 - 23 Oct</td>
<td>Identification of Fishes: Family Cyprinidae</td>
</tr>
<tr>
<td>30 Oct</td>
<td>Identification of Fishes: Miscellaneous Species</td>
</tr>
<tr>
<td>06 NOV</td>
<td><strong>LABORATORY EXAMINATION II</strong></td>
</tr>
<tr>
<td>13 Nov</td>
<td>Anatomy of Fishes: Amia Skull and Perca Skull and Skeleton</td>
</tr>
<tr>
<td>13 Nov</td>
<td>Anatomy of Perca and Oncorhynchus</td>
</tr>
<tr>
<td>20 Nov</td>
<td>Review of Fishes</td>
</tr>
<tr>
<td>04 DEC</td>
<td><strong>LABORATORY EXAMINATION III</strong></td>
</tr>
</tbody>
</table>

**SPECIAL DATES OF CONCERN:**

- 22 Aug - last day to register or add a class
- 29 Oct - last day to drop with a W
- 05 Dec – last day of class
- 08 – 12 Dec – Final exam week

**STATEMENT ON DROP DATE:** Students who drop a course before October 29, 2014 will receive the grade of "W."

**GRADE REPORTS:** UAM will no longer mail grade reports to all students. You may access your grades through Campus Connect on the UAM homepage, [http://www.uamont.edu](http://www.uamont.edu). To have your grades mailed to you, complete the grade request form available in the Registrar’s Office in Monticello or the Student Services offices in Crossett and McGehee.
BIOL 3413—Mammalogy  
Fall 2013, B19, Science Center  
MWF 12:10-1:00

**Instructor:** Dr. John L. Hunt.  **E-mail:** huntj@uamont.edu.  **Phone:** 870-460-1466.  **Web page:** [http://www.uamont.edu/facultyweb/Huntj](http://www.uamont.edu/facultyweb/Huntj).  **Office:** B11, Science Center.  **Office hours:** M 2:00-3:00, TTh 9:00-9:30, F 2:00-3:00, or by appointment.


**Objective:** To introduce the student to characteristics, origins, ecology, behavior, reproduction, physiology, and diversity of mammals.

**Lab:** Mammalogy Lab is a separate class, covered by a separate syllabus, with a separate grade.

**Tests and grading:** Grades will be computed as a percentage of 600 points. Of these, 400 points will come from 4 hourly exams, 150 will come from the final exam, and 50 will come from unannounced quizzes. Grading will be on the standard 10-point scale (90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F). There is no curving of the grade or “extra” credit. Points will be earned from scheduled examinations and from unannounced quizzes.

Exams will consist of a mixture of essay, short answer, and objective-type questions, and may include some drawing. Bonus questions may come directly from reading assignments that may never have been discussed in class. Each test will cover material beginning with the previous exam, and continuing through the last class day before the exam. Exams will be on the dates listed below. These dates will not change. The final exam will be Thursday, December 12, at 10:30 a.m. The final exam is comprehensive; all other exams are not comprehensive.

The number of quizzes is approximate. There will be an average of 1 quiz per week at the beginning of one of the lecture periods. There will be at least 10 quizzes during the semester; if there are more, students will be allowed to drop the lowest scores to get down to 10 quizzes. These quizzes will be unannounced and will consist of one to five questions from the previous day’s lecture. Quizzes are designed to encourage daily review and study, and regular attendance and promptness, and therefore, MAY NOT be made up.

**Attendance:** Attendance at all lectures, exams, and lab sessions is mandatory. Attendance will be recorded regularly. Most exam material will come from lectures, so that your success, or lack thereof, in this class is directly related to attendance. Those students who miss more than three class periods without a university-approved excuse will be docked one point from the final grade for each missed class. For example, a
student who earns a 90 average for the class but has five unexcused absences will receive a grade of B for the class. It is the responsibility of the student to provide a university-approved excuse for each class missed on the next class day.

Quizzes may not be made up. However, missed quizzes will not count against the grade of any student who presents the instructor with an approved excuse for his absence. Approved excuses do not include “hung over,” “overslept,” “my car was busted,” “wacky frat party,” or “went hunting with some friends, and that should count, since we killed some squirrels, and squirrels are mammals.” Students with approved excuses may make up missed exams, by arrangement with the instructor, at the convenience of the instructor. Please be aware that make-up exams will NOT be the same exam given during the normal class period. It is important for you to note that you are responsible for material covered in every class and every lab session, even if you miss the class with an excused absence. It is your responsibility to obtain the material you have missed from your classmates.

**Class web page.** The class web page may be found at:
http://www.uamont.edu/facultyweb/Huntj/mammalogy.htm. On this page there are lists of terms to know and lecture outlines for each of the chapters of the text we will cover. These outlines are general in nature, and are not meant to replace detailed notes which you should take in class. Test scores will be posted on the class web page shortly after each exam. Your score will be listed by an anonymous code word selected by you.

**Class policies:** Mammalogy is a demanding class, with a large number of terms and concepts to be mastered. Expect to spend a great deal of out-of-class time studying. The instructor is here to help you; please feel free to ask questions at any time. You are encouraged to seek my help outside of regular class hours if you are so inclined.

Please do not hold conversations with classmates during lecture. You may tape lectures if you so desire, but this should not substitute for the taking of detailed class notes. **DO NOT BRING CELL PHONES TO CLASS!** If your cell phone rings during my lecture, I will respond in the only manner available to me—by adjusting your grade. You may not text-message or keep your cell phone on your desk during class. **IF I SEE YOU TEXT-MESSAGING OR SURFING THE WEB DURING CLASS, YOU WILL BE ASKED TO LEAVE.** If this occurs twice, you will be assigned a grade of F for the course. No electronic devices other than tape recorders are allowed in class—this includes laptops and i-pods. Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on pages 39-45 of the 2013-2015 UAM Catalog.

The last date to drop this course with a W (and for most other courses at UAM) is October 30. A grade of I will only be given if a student has completed 75% of the work of the course, with a mathematical possibility of obtaining a passing grade, and will be given only for University-approved excuses, with the approval of the Dean of Math and Sciences.

**Students with disabilities:** It is the policy of the University of Arkansas-Monticello to accommodate students with disabilities in accordance with federal law. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring
accommodations should contact the Office of Special Student Services located in Harris Hall, Room 120, phone 870-460-1026; TDD 870-460-1626; fax 870-460-1926.

**Academic dishonesty:** Cheating will not be tolerated. The Academic Code of the University of Arkansas-Monticello may be found on page 40 of the 2013-2015 UAM Catalog. Please note the following definitions of academic dishonesty:

5. **Cheating:** Students shall not give, receive, offer, or solicit information on examinations, quizzes, or other class work. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.

6. **Collusion:** Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

7. **Duplicity:** Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

8. **Plagiarism:** Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

Please note that the instructor has wide latitude in taking corrective action in response to cheating; expect the harshest possible response in this class. In other words, if I catch you cheating even once, I will assign a grade of F for the course. You will not be allowed to have a cell phone of any sort on your desk during exams (or any other time during class).

**Material to be covered:** These topics will be covered in the order listed below. Students are expected to read the indicated chapters as we cover each topic.

- Introduction and review (Chapter 1); History of mammalogy (Chapter 2); Techniques for study (Chapter 3); Evolution of mammals (Chapter 4); Skin, skeleton, muscle (Chapter 6); Locomotion (Chapter 6); Foods and feeding (Chapter 7); Nervous systems (Chapter 8); Environmental adaptations (Chapter 9); Reproduction (Chapter 10); Monotremes and marsupials (Chapter 11); Insectivora and relatives (Chapter 12); Chiroptera (Chapter 13); Primates (Chapter 14); Cingulata and relatives (Chapter 15); Carnivora (Chapter 16); Cetacea (Chapter 17); Rodentia and Lagomorpha (Chapter 18); Proboscidea and relatives (Chapter 19); Hoofed mammals (Chapter 20); Communication (Chapter 21); Reproductive behavior (Chapter 22); Social behavior (Chapter 23); Habitat selection (Chapter 24); Populations and life history (Chapter 25); Community ecology (Chapter 26); Zoogeography (Chapter 5); Parasites and diseases (Chapter 27); Domestication (Chapter 28); Conservation (Chapter 29).
**Important dates:**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>First day of class</td>
<td>August 21</td>
</tr>
<tr>
<td>Labor day (no class)</td>
<td>September 2</td>
</tr>
<tr>
<td>Exam I</td>
<td>September 20</td>
</tr>
<tr>
<td>Exam II</td>
<td>October 14</td>
</tr>
<tr>
<td>Weekend Field Trip (Lab)</td>
<td>October 18-20</td>
</tr>
<tr>
<td>Last day to drop</td>
<td>October 30</td>
</tr>
<tr>
<td>Exam III</td>
<td>November 11</td>
</tr>
<tr>
<td>Thanksgiving holiday</td>
<td>November 27-29</td>
</tr>
<tr>
<td>Last day of class</td>
<td>December 6</td>
</tr>
<tr>
<td>Comprehensive final exam</td>
<td>December 12 (10:30 a.m.)</td>
</tr>
</tbody>
</table>
Course Title and Credit Hours: Biology 3434, Regional Flora, 4 credit hours

Course Description: The identification, preparation, and classification of regional vascular plants

Prerequisite: Biology 2143 (A.C.T. equivalent BIOL 1034) (General Botany) and Biology 2171 (General Botany Lab)


Student Learning Outcomes: To familiarize students with regional vascular plants, plant identification, specimen preparation, and the principles of plant classification and nomenclature.

Statement of Special Policies:

Class Attendance: Attendance will be taken during every lecture. In general, students who attend class regularly make better grades. As a courtesy to the students in the class and the instructor, please be on time.

Classroom Policies: Use of tobacco products is not permitted on UAM grounds.

Cell phones and all electronics should be turned off and put away during class. Any cell phone that is found on a student’s desk during a quiz will result in an automatic zero.

Cheating/Plagiarism: Cheating will not be tolerated. The Academic Dishonesty policy found on page 4-5 of this syllabus will be applied to all exams.
### Course Content Outline/Calendar:

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture/Lab* Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Th Jan 8</td>
<td>Introduction/Botanical Nomenclature</td>
</tr>
<tr>
<td>T Jan 13</td>
<td>Descriptive Terminology-vegetative characters *</td>
</tr>
<tr>
<td>Th Jan 15</td>
<td>Class cancelled by instructor</td>
</tr>
<tr>
<td>T Jan 20</td>
<td>Descriptive Terminology-flowers*</td>
</tr>
<tr>
<td>Th Jan 22</td>
<td>Quiz 1 - Descriptive Terminology-vegetative characters/flowers</td>
</tr>
<tr>
<td>T Jan 27</td>
<td>Descriptive Terminology-fruits*</td>
</tr>
<tr>
<td>Th Jan 29</td>
<td>Quiz 2- Descriptive Terminology-fruits</td>
</tr>
<tr>
<td>T Feb 3</td>
<td>Plant Collecting and Documentation*; Use of Keys*;</td>
</tr>
<tr>
<td>Th Feb 5</td>
<td>Review of Plant Evolution; Plant Classification; Basal Angiosperm Groups</td>
</tr>
<tr>
<td>T Feb 10</td>
<td>Basal Angiosperm Groups*/Eudicots, Part 1*</td>
</tr>
<tr>
<td>Th Feb 12</td>
<td>Quiz 3- Basal Angiosperm Groups; Eudicots, Part 1</td>
</tr>
<tr>
<td>T Feb 17</td>
<td>Eudicots, Part 2*</td>
</tr>
<tr>
<td>Th Feb 19</td>
<td>Quiz 4- Eudicots, Part 2</td>
</tr>
<tr>
<td>T Feb 24</td>
<td>Eudicots, Part 3*</td>
</tr>
<tr>
<td>Th Feb 26</td>
<td>Quiz 5 - Eudicots, Part 3</td>
</tr>
<tr>
<td>T Mar 3</td>
<td>Monocots, Part 1*</td>
</tr>
<tr>
<td>Th Mar 5</td>
<td>Quiz 6-Monocots, Part 1</td>
</tr>
<tr>
<td>T Mar 10</td>
<td>Monocots, Part 2*</td>
</tr>
<tr>
<td>Th Mar 12</td>
<td>Quiz 7-Monocots, Part 2</td>
</tr>
<tr>
<td>Day</td>
<td>Date</td>
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<td>T</td>
<td>Mar 17</td>
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<td>Th</td>
<td>Mar 19</td>
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<tr>
<td>M-F</td>
<td>Mar 23-27</td>
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<td>T</td>
<td>Mar 31</td>
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<td>Th</td>
<td>Apr 2</td>
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<td>T</td>
<td>Apr 7</td>
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<td>Apr 9</td>
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<td>Apr 14</td>
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<td>Th</td>
<td>Apr 16</td>
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<td>Apr 21</td>
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<td>Th</td>
<td>Apr 23</td>
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<tr>
<td>T</td>
<td>Apr 28</td>
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</tbody>
</table>

**Fieldtrips:** Fieldtrip opportunities will most likely occur on weekends (usually on Saturday) in March and April. Transportation will be provided for each field trip.
Provisions for tests and evaluations:

Scores on exams will be posted on the instructor's web site, http://www.uamont.edu/facultyweb/fawley, by a code number unless a student requests not to have his/her scores posted.

Rescheduling Exams: If you are unable to take an exam at the scheduled time, please notify the instructor well before the day of the exam to reschedule at an earlier time.

Make-up Quizzes: Due to time constraints, there will be no make-up labs or make-up quizzes. However, students can drop 1 in-lab evaluation and 1 quiz during the semester.

Grading Policy:

<table>
<thead>
<tr>
<th>Course</th>
<th>Points</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>180</td>
<td>90-100 A</td>
</tr>
<tr>
<td>In-Lab Evaluation</td>
<td>280</td>
<td>80-89 B</td>
</tr>
<tr>
<td>Plant Collection Assignments</td>
<td>200</td>
<td>70-79 C</td>
</tr>
<tr>
<td></td>
<td>660</td>
<td>60-69 D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Below 60 F</td>
</tr>
</tbody>
</table>

Special dates of concern:

- Wednesday, January 7: First day of classes.
- Monday, January 19: Martin Luther King, Jr. Day
- Tuesday, January 9: Last day to register of add classes.
- Friday, February 27: Deadline to file for Aug and Dec 2015 graduation
- M-F (March 23-27): Spring Break!
- Wednesday, March 18: Last day to drop W.
- Monday, April 6: Preregistration for Fall and Summer 2015 begins
- Friday, April 17: Preregistration for Fall and Summer 2015 ends.
- Tuesday, April 28: Last day of classes.
- W-T, Apr 29-May 5: Final exam period.
- Friday, May 8: Commencement

Students with disabilities:

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For assistance on a College of Technology campus contact:
McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105.
Crossett: Office of Special Student Services representative on campus; phone 870 364-6414; fax 870 364-5707.

Student conduct statement:

Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

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   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.

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For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will a potential grade reduction to F (zero points) on the specific assignment or exam.
BIOL 3451—Mammalogy Lab
Fall 2013, B31, Science Center
Thursday 1:40-4:30

Instructor: Dr. John L. Hunt. E-mail: huntj@uamont.edu. Phone: 870-460-1466. Web page: http://www.uamont.edu/facultyweb/Hunt/. Office: B11, Science Center. Office hours: MWF, 8:00-9:00, Monday, Tuesday, and Friday, 2:00-3:00, or by appointment.


Objective: To introduce the student to diversity of mammals in Arkansas, and to techniques used to study them.

Tests and grading: Grading will be on the standard 10-point scale (90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F). There is no curving of the grade or “extra” credit. Points will be earned from scheduled examinations, from a major paper, from lab exercises, and from announced and unannounced quizzes. Exams will consist of a mixture of practical, essay, short answer, and objective-type questions, and may include some drawing.

Attendance: Attendance at all lab meetings and exams is mandatory. Please note that some labs require attendance early in the morning, late at night, and on weekends. There will be a weekend field trip to the Ouachita Mountains Biological Station near Mena, October 18-20. Check out their website at: http://www.theombs.org/

Your success in this course is directly dependent upon your attendance and participation in the lab. To this end, one percentage point will be removed from your class grade for each unexcused lab absence. It is the responsibility of the student to provide a university-approved excuse for each class missed on the next class day. It is important for you to note that you are responsible for material covered in every lab, even if you miss the lab with an excused absence. It is your responsibility to obtain the material you have missed.

Missed exams: Missed exams may be made up only by students with an approved university excuse, by arrangement with the instructor. Approved university excuses do not include “had to work,” “hung over,” “overslept,” or “my car is busted.” Please be aware that any made-up exam may NOT be the same exam given during the normal class period. Students are responsible for all material presented in class, even with an approved university excuse for missing a class. It is the responsibility of the student to obtain missed material from classmates.

Class policies: Mammalogy lab is a demanding class, with a large number of terms and concepts to be mastered. Expect to spend a great deal of out-of-class time
studying. The instructor is here to help you; please feel free to ask questions at any time. You are encouraged to seek my help outside of regular class hours if you are so inclined.

Mammalogy lab is designed as a FIELD LAB. You should come prepared to spend the entire lab time outdoors, rain or shine. Some labs will require you to get wet, muddy, or dirty. Labs will often entail moving through heavy brush and thorns, climbing up steep hills, and providing blood meals for mosquitoes, ticks, chiggers, and flies. If this doesn’t sound like fun to you, you may be in the wrong line of work. Use common sense in deciding what to bring into the field with you. You may want sunglasses, hat, sunscreen, insect repellent, machete, and water. You should always dress appropriately--don’t wear nice clothes. Long pants and heavy shoes are always recommended.

Use of tobacco products in University vehicles or on University property is strictly prohibited (this means no “dippin’”). You may bring food or snacks, but you must not leave paper or trash in the van or at any of the field sites we visit.

Please do not hold conversations with classmates during lecture. You may tape lectures if you so desire, but this should not substitute for the taking of detailed class notes. **DO NOT BRING CELL PHONES TO CLASS!** If your cell phone rings during my lecture, I will respond in the only manner available to me—by adjusting your grade. You may not text-message or keep your cell phone on your desk during class. **IF I SEE YOU TEXT-MESSAGING OR SURFING THE WEB DURING CLASS, YOU WILL BE ASKED TO LEAVE.** If this occurs twice, you will be assigned a grade of F for the course. No electronic devices other than tape recorders are allowed in class—this includes laptops and i-pods. Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on pages 39-45 of the 2013-2015 UAM catalog.

The last date to drop this course with a W (and for most other courses at UAM) is October 30. A grade of I will only be given if a student has completed 75% of the work of the course, with a mathematical possibility of obtaining a passing grade, and will be given only for University-approved excuses, with the approval of the Dean of Math and Sciences.

**Students with disabilities:** It is the policy of the University of Arkansas-Monticello to accommodate students with disabilities in accordance with federal law. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall, Room 120, phone 870-460-1026; TDD 870-460-1626; fax 870-460-1926.

**Academic dishonesty:** Cheating will not be tolerated. The Academic Code of the University of Arkansas-Monticello may be found on page 40 of the 2013-2015 UAM Catalog. Please note the following definitions of academic dishonesty:

9. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, or other class work. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
c. Collaboration with another student during the examination;
d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
e. Substituting for another person during an examination or allowing such substitutions for one’s self.

10. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

11. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

12. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

Please note that the instructor has wide latitude in taking corrective action in response to cheating; expect the harshest possible response in this class. In other words, if I catch you cheating even once, I will assign a grade of F for the course. You will not be allowed to have a cell phone of any sort on your desk during exams (or any other time during class).

**Tentative schedule:** Because of the vagaries of weather, the schedule of the mammalogy lab must be considered to be somewhat fluid. The following schedule is subject to change with or without notice. Be prepared!

- **August 22**  Introduction
- **August 29**  Skulls & Bones
- **September 5**  Mammals of Arkansas
- **September 12**  Library
- **September 19**  Basic trapping (will require activity outside regular lab hours)
- **September 26**  Scientific Writing
- **October 3**  TBD
- **October 10**  Mammals of Arkansas/Skull & Bones review
- **October 17**  Mid-term Exam
- **October 18-20**  Weekend field trip
- **October 24**  Trapping grid (will require activity outside regular lab hours)
- **October 31**  Tracks and Scats
- **November 7**  TBD (First draft of paper due)
- **November 14**  Zoo trip
- **November 21**  TBD (Final draft of paper due)
- **November 27-29**  Thanksgiving holiday
- **December 5**  Lab Final
BIOL 3484  
General Ecology  
4 Credit Hours  
Fall 2014  
Lecture: 9:10-10:00 MWF  
RM B19  
Lab: T 1:40-4:30  
RM B31

Instructor: Dr. Christopher G. Sims  
Office: B 4  
Office Phone: 460-1664  
E-mail: simsc@uamont.edu  
Web Site: www.uamont.edu/facultyweb/sims

Office Hours: 8:00-9:00 or 1:00-2:00 MWF; TH 9:00-11:00. I will be in the office at other times as well. Changes in this schedule may occur and will be posted outside my door or announced in class.


Prerequisites: BIOL 2153 and 2161 General Zoology (ACTS #: BIOL 1054), BIOL 2143 and 2171 General Botany (ACTS #: 1034) and 6 hours of chemistry

Objectives: In this course we will study the environment and its components including energy flow, population and community structure, ecological succession, how evolution influences ecological structure.

Course Grade:
- Exam 1: 100 pts.
- Exam 2: 100 pts.
- Exam 3: 100 pts.
- Final Exam: 100 pts.
- 3 journal article summaries 20 pts each.
- Lab (lab summaries, paper discussions, etc.) 100 pts.
- Total for Course: 500 pts.

Grade Scale (percentage):
A = 100-89.5, B = 89.4-79.5, C = 79.4-69.5, D = 69.4-59.5, F ≤ 59.4

*******NO EXTRA CREDIT will be given under any circumstances!!!

Assignments and grading may change at the discretion of the instructor. Prior notice will be given in all cases. Each student will choose a code number/code name prior to the first test and this will be used to post grades. Grades will be posted on my website. If you do not wish to have your grade posted please let the instructor know prior to the first test. Grades will not be provided over the phone.

Attendance, Testing, and Cheating: Attendance in this course is mandatory and will be recorded regularly.

Exam attendance is required and make-up exams will be given only under extreme circumstances. Make-up exams will be allowed only in cases of illness with a doctor’s excuse, excused university functions, or family emergencies with a written excuse from a family member. If you are forced to miss an exam you must notify me within 24 hours of the exam. Failure to do so will result in a zero on that exam. If you know ahead of time that you will be absent please let me know and prior arrangements for testing can be made.

Cheating in any form will not be tolerated and will automatically result in failure of the course. Cellular phones are included in the cheating policy and any appearance of a cellular phone (or other communication devise) during a test will be considered an attempt to cheat by the student.

Likewise electronic devises such as cellular phones etc. will not be allowed in lecture unless prior approval is given by the instructor.

Students with disabilities: It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to
to inform the instructor of any approved accommodations at the beginning of the course. Any student with questions regarding accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; fax 870 460-1926.

Statement on disruptive behavior: The following action is prohibited under the Student Conduct Code: Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others.

Tentative Lecture Schedule (some topics will not be covered):

<table>
<thead>
<tr>
<th>Chapters:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction and Background</td>
</tr>
<tr>
<td>The Physical Environment</td>
</tr>
</tbody>
</table>

Exam I

The Organism and Its Environment 7-8

Exam II

Populations 9-13

Exam III

Species Interactions 14-15
Communities 16-18

Final

Wed. Dec. 10, 10:30 A.M.

Tests will be announced at least one week in advance.

Tentative Lab Schedule (dates will change so be sure to keep up):

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-Aug</td>
<td>Intro to stats.</td>
</tr>
<tr>
<td>2-Sep</td>
<td>Muscle Sampling</td>
</tr>
<tr>
<td>9-Sep</td>
<td>Muscle Sampling Analysis</td>
</tr>
<tr>
<td>16-Sep</td>
<td>Paper Discussion 1</td>
</tr>
<tr>
<td>23-Sep</td>
<td>Test #1</td>
</tr>
<tr>
<td>30-Sep</td>
<td>Plot Sampling</td>
</tr>
<tr>
<td>6-Oct</td>
<td>Plot Sampling Analysis</td>
</tr>
<tr>
<td>14-Oct</td>
<td>Paper Discussion 2</td>
</tr>
<tr>
<td>21-Oct</td>
<td>Test #2</td>
</tr>
<tr>
<td>28-Oct</td>
<td>Succession</td>
</tr>
<tr>
<td>5 Oaks Field trip (we will be late returning to campus)</td>
<td></td>
</tr>
<tr>
<td>4-Nov</td>
<td></td>
</tr>
<tr>
<td>11-Nov</td>
<td>Test #3</td>
</tr>
<tr>
<td>18-Nov</td>
<td>Winter Territoriality</td>
</tr>
<tr>
<td>25-Nov</td>
<td>Paper Discussion 3</td>
</tr>
<tr>
<td>2-Dec</td>
<td>TBA</td>
</tr>
</tbody>
</table>

Important Dates:
August 20 (Wed) – First day of classes for sessions 1 and 8W1. Admission application deadline.
August 22 (Fri) – Last day to register or add classes for sessions 1 and 8W1.
September 1 (Mon) – Labor Day Holiday. Offices and classes closed.
September 6 (Sat) – Parent/Family Appreciation Day.
October 3 (Fri) – Deadline to apply for May graduation.
October 11 (Sat) – Homecoming
October 29 (Wed) – Last day to drop a session 1 class or withdraw from the term (not applicable to other sessions). Grade(s) will be W.

**November 3 (Mon) - Preregistration for Spring 2015 begins.**

**November 14 (Fri) - Preregistration for Spring 2015 ends.**

**November 26 (Wed) - Classes closed.**

**November 27-28 (Thurs-Fri) - Thanksgiving Holiday. Offices and classes closed.**

**December 5 (Fri) - Last day of classes.**

**December 8-12 (Mon-Fri) - Final exam period.**

**Academic dishonesty:**

1. **Cheating:** Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
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For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be failure in the course.
Biology 3493—Environmental Science  
Department of Mathematical and Natural Sciences  
Fall 2014, MWF 11:10-12:00  
Science Center, Room B3

Instructor: Dr. John L. Hunt. Office: B-11, Science Center. Phone: 870-460-1466  
E-mail: huntj@uamont.edu. Web page: http://www.uamont.edu/facultyweb/Huntj.  
Office Hours: 9-10 M-F, 2-3 M, T, Th, F, or by appointment.


Class Web Page. The class web page may be found at:  
http://www.uamont.edu/facultyweb/huntj/Environmental%20Science.htm. On this page there are lists of terms to know and lecture outlines for each of the chapters of the text we will cover. These outlines are general in nature, and are not meant to replace detailed notes which you should take in class. Test scores will be posted on the class web page shortly after each exam. Your score will be listed by an anonymous code word selected by you.

Course Objectives: The class is a survey of the environment, to provide an understanding of and respect for the ecosystems upon which humans are dependent. We will focus on human impacts on the environment.

Grading: Grading is on the standard 10-point scale. Points will be computed as a percentage of 500 points. In the unlikely event that a curve is applied to the grade, it will be done at the end of the course. There are no “bonus” points, and no “extra” credit. Points will consist of the following:

- Three 100-point exams 300
- 10 unannounced quizzes 50
- Final exam (comprehensive) 150

Exam dates are September 19, October 15, November 10, and December 8.  
**These dates will not change.** Exams will consist of a mixture of essay, short answer, and objective-type questions, and may also require some drawing. Only the final exam will be comprehensive. The final exam will be on Monday, December 8, at 1:30 p.m. There will be at least one quiz per week; these quizzes will be unannounced and will consist of one to five questions from the lecture material from the previous day. Quizzes are designed to encourage daily review and study, as well as regular attendance and promptness, and therefore MAY NOT be made up. Note: the number of quizzes is approximate. There may be more than 10 quizzes; if this occurs you may drop your lowest quiz grades. Slight changes in the grading scheme may occur at the discretion of
the instructor.

**Attendance:** Attendance at all lectures and exams is mandatory. Most exam material will come from
lectures, so that your success, or lack thereof, in this class is directly related to attendance. Those students who
miss more than three class periods without a university-approved excuse will be docked one point from the final
grade for each missed class. For example, a student who earns a 90 average but has five unexcused absences will
receive a grade of B for the class. It is the responsibility of the student to provide a university-approved excuse for
each class missed on the next class day.

Missed exams may be made up only by students with an approved university excuse, by arrangement with
the instructor. Approved university excuses do not include “hung over,” “overslept,” or “my car is busted.” Please
be aware that any made-up exam may NOT be the same exam given during the normal class period. Students are
responsible for all material presented in class, even with an approved university excuse for missing a class. It is
the responsibility of the student to obtain missed material from classmates.

**Class policies.** The points in this class are not concentrated near the end—you need to do well early in the
semester. The instructor is here to help you. Please feel free to ask questions at any time. You are encouraged to
seek help outside of regular class hours if you are so inclined, either during office hours or by appointment.

Please do not hold conversations with classmates during lecture. You may tape lectures if you so desire,
but this should not substitute for the taking of detailed class notes. **DO NOT BRING CELL PHONES TO
CLASS!** If your cell phone rings during my lecture, I will respond in the only manner available to me—by
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The last date to drop this course with a W (and for most other courses at UAM) is October 29. A grade of I
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**Subjects to be covered (with suggested reading assignments where appropriate):** Lecture subjects will follow the order in the textbook, beginning at Chapter 1 and continuing until we run out of time. We may skip some chapters, but the instructor will give you advance warning of any impending skips.

**Important dates:**

- **August 20**  First day of class.
- **September 1**  Labor Day—no class.
- **September 19**  Exam I.
- **October 15**  Exam II.
- **October 31**  Last day to drop.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 10</td>
<td>Exam III.</td>
</tr>
<tr>
<td>November 26-28</td>
<td>Thanksgiving holiday—no class.</td>
</tr>
<tr>
<td>December 5</td>
<td>Last day of class.</td>
</tr>
<tr>
<td>December 8</td>
<td>Final Exam, 1:30 p.m. <strong>Comprehensive!!!</strong></td>
</tr>
</tbody>
</table>
SCHOOL OF MATHEMATICAL AND NATURAL SCIENCES SYLLABUS

INSTRUCTOR NAME: Dr. Edmond J. Bacon

TELEPHONE: Office 870-460-1864 Home 870-367-0407 Cell 870-723-4671

INSTRUCTOR EMAIL ADDRESS: bacon@uamont.edu

OFFICE NUMBER: Room B 20 in Science Center

OFFICE HOURS: MW 9:00 – 10:00, 1:30 – 3:00; T 9:30 – 11:00; 1:30 – 3:00

COURSE TITLE AND CREDIT HOURS: Biology 3503 Marine Biology, 3 credits

Required Text: Castro and Huber. 2013. Marine Biology. 8th or 9th Edition

PREREQUISITES: Biol. 2153 and 2161 or Biol. 2083 and 2091

COURSE OBJECTIVES:

To acquaint the student with the biological, chemical, and geological features of marine ecosystems with special emphasis on the identifications of common organisms found in the Gulf of Mexico.

STUDENT LEARNING/OUTCOMES:

By the conclusion of this course the student should understand the morphology, function, ecology, and life histories of common marine ecosystems and animals living in the oceans of the world.

TECHNICAL SUPPORT INFORMATION: Include the information below in your syllabus: Issues with Blackboard: Contact Office of Academic Computing; phone 870-460-1663. Open Monday-Friday, 8 a.m.-4:30 p.m. Help Desk at fendley@uamont.edu or phone 870-460-1663. The computer section in the Library is open during regular Library hours. Click here to see when the Taylor Library is open: http://www.uamont.edu/library/Issues with Email: Contact the Office of Information Technology; phone 870-460-1036; open Monday-Friday, 8 a.m. – 4:30 p.m.
ATTENDANCE POLICY /PARTICIPATION REQUIREMENTS:

It is a University policy that students are expected to attend classes for which they are enrolled. Arriving late to class or leaving early is unacceptable. Students who are frequently absent from the class typically receive lower grades. Make up exams and quizzes will be given at the end of the semester for students with official documentations for absences. Cell telephones and electronic devices must be turned off during the class. No head phones or electronic devices are allowed to be used during examinations. Students will not be given the exam until they comply with these regulations.

EMERGENCY OR INTERRUPTION IN COMPUTER SERVICE POLICY:

Prepare for unexpected problems and emergencies. Understand that problems and glitches do occur in online learning as they do in any learning environment. Have a back-up plan such as using the computers at a local library for submitting assignments in case your computer crashes or your service is interrupted.

ASSESSMENTS: The final grade will be based on three laboratory exams and laboratory exercises.

<table>
<thead>
<tr>
<th>GRADING SCALE</th>
<th>GRADE POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100 = A</td>
<td>Exam I = 150</td>
</tr>
<tr>
<td>80-89 = B</td>
<td>Exam II = 150</td>
</tr>
<tr>
<td>70-79 = C</td>
<td>Exercise I = 50</td>
</tr>
<tr>
<td>60-69 = D</td>
<td>Exercise II = 50</td>
</tr>
<tr>
<td>00-59 = F</td>
<td>TOTAL POINTS = 400</td>
</tr>
</tbody>
</table>
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STUDENT CONDUCT STATEMENT: Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

ACADEMIC DISHONESTY:

1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
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   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
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For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be a zero grade for the examination.

COURSE OUTLINE/CALENDER:

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>CHAPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Science of Marine Biology</td>
<td>1</td>
</tr>
<tr>
<td>The Sea Floor</td>
<td>2</td>
</tr>
<tr>
<td>Chemical and Physical Features of the Oceans</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Biology</td>
<td>4</td>
</tr>
<tr>
<td>The Microbial World</td>
<td>5</td>
</tr>
<tr>
<td>Multicellular Primary Producers</td>
<td>6</td>
</tr>
<tr>
<td>An Introduction to Marine Ecology</td>
<td>10</td>
</tr>
</tbody>
</table>

HOUR EXAM I 1, 2, 3, 4, 5, 6, &10

Marine Animals 7, 8, & 9
Marine Ecology 10
Life Between the Tides 11
Estuaries 12
Life on the Continental Shelf 13
Coral Reefs 14
Life Near the Surface 15
The Ocean Depths 16

HOUR EXAM II 7 - 16
SPECIAL DATES OF CONCERN:

08 Jan - last day to register or add a class
18 Mar – last day to drop a class
23–27 Mar – Spring Break
28 Apr – last day of class
29 Apr–05 May – Final Exam Period
SCHOOL OF MATHEMATICAL AND NATURAL SCIENCES

INSTRUCTOR NAME: Dr. Edmond J. Bacon

TELEPHONE: Office 870-460-1864 Home 870-367-0407 Cell 870-723-4671

INSTRUCTOR EMAIL ADDRESS: bacon@uamont.edu

OFFICE NUMBER: Room B 20 in Science Center

OFFICE HOURS: MW 9:00 – 10:00, 1:30 - 3:00; T 9:30 – 11:00; 1:30 – 3:00

COURSE TITLE AND CREDIT HOURS: Biology 3511 Marine Biology Lab, 1 credit

Required Text: Castro and Huber. 2013. Marine Biology. 8th or 9th Edition

PREREQUISITES: Biol. 2153 and 2161 or Biol. 2083 and 2091

COURSE FORMAT AND/OR OBJECTIVES

To acquaint the student with the biological, chemical, and geological features of marine ecosystems with special emphasis on the identifications of common organisms found in the Gulf of Mexico.

STUDENT LEARNINGS OUTCOMES:

By the conclusion of this course you should understand the classification, morphology, function, identification, and life histories of common marine invertebrates in the Gulf of Mexico.

ATTENDANCE POLICY /PARTICIPATION REQUIREMENTS:

It is a University policy that students are expected to attend classes for which they are enrolled. Arriving late to class or leaving early is unacceptable. Students who are frequently absent from the laboratory exercises consistently receive lower grades. Make up exams will be given at the end of the semester for students with official documentations for absences.
ASSESSMENTS:

<table>
<thead>
<tr>
<th>GRADING POLICY</th>
<th>GRADING SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Exam I</td>
<td>90 - 100 = A</td>
</tr>
<tr>
<td>Lab Exam II</td>
<td>80 - 89 = B</td>
</tr>
<tr>
<td>TOTAL POINTS</td>
<td>70 - 79 = C</td>
</tr>
<tr>
<td></td>
<td>60 - 69 = D</td>
</tr>
<tr>
<td></td>
<td>00 - 59 = F</td>
</tr>
</tbody>
</table>

**BASIS OF FINAL GRADE:** The final grade is based on two lab examinations.

**CELL PHONES AND ELECTRONIC DEVICES:**

All cell phones and electronic devices must be turned off during the class and laboratory. Computers including ipads are allowed to be used during lectures and laboratory exercises, but cannot be used during examinations.

**STUDENTS WITH DISABILITIES:** It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.

**STUDENT CONDUCT STATEMENT:** Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

**ACADEMIC DISHONESTY:**
1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.

2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be a zero grade for the examination.

COURSE OUTLINE/CALENDER:

LABORATORY
<table>
<thead>
<tr>
<th>TOPIC</th>
<th>CHAPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of Water</td>
<td>2 and Study Guides</td>
</tr>
<tr>
<td>Primary Productivity</td>
<td>4, 5, &amp; 6</td>
</tr>
<tr>
<td>Marine Algae and Plants</td>
<td>4, 5, &amp; 6</td>
</tr>
<tr>
<td>LABORATORY EXAM I</td>
<td>2, 4, 5, 6 AND STUDY GUIDES</td>
</tr>
<tr>
<td>Identification of Marine Animals</td>
<td>7, 8, 9 and Study Guides</td>
</tr>
<tr>
<td>LABORATORY EXAM II</td>
<td>7, 8, 9, AND STUDY GUIDES</td>
</tr>
</tbody>
</table>

SPECIAL DATES OF CONCERN:

- 09 Jan - last day to register or add a class
- 18 Mar - last day to drop a class
- 23–27 - Mar – Spring Break
- 28 Apr - last day of class
- 29 Apr - 05 May - Final Exam Period
Instructor:  Dr. Christopher G. Sims  
Office:  B 4  
Office Phone:  460-1664  
E-mail:  simsc@uamont.edu  
Web Site:  http://www.uamont.edu/facultyweb/Sims/  
Office Hours:  MWF 8:00-9:00 or 2:00-3:00; T 9:00-11:00; H 1:00-3:00. I will be in the office at other times as well. Changes in this schedule may occur at any time and will be posted outside my door or announced in class. If you need to see me it is strongly recommended that you e-mail and we can schedule an appointment.

Course Title and Credits: Ornithology (BIOL 3524); 4 Credit Hours

Course Description: In this course we will study the taxonomy and natural history of birds, emphasizing the local fauna. This will include knowledge of the basic biology of avian taxa as well as the evolutionary history that has resulted in such a diverse and interesting group of vertebrates. Along with this you will develop an ability to identify multiple species by sight as well as by song.

Prerequisites: BIOL 2153 and BIOL 2161  


Attendance, Testing, and Cheating: Attendance in this course is mandatory and will be recorded regularly.  

You will be allowed 3 unexcused absences during the semester. After the third unexcused absence your grade will be reduced one percentage point for each unexcused absence thereafter.

Field trip attendance is mandatory in order to develop adequate identification skills. Failure to attend on field trip days will result in loss of 1 letter grade from your semester grade.

Exam attendance is required and make-up exams will be given only under extreme circumstances. Make-up exams will be allowed only in cases of illness with a doctor’s excuse, excused university functions, or family emergencies with a written excuse from a family member. If you are forced to miss an exam you must notify me within 24 hours of the exam. Failure to do so will result in a zero on that exam. If you know ahead of time that you will be absent please let me know and prior arrangements for testing can be made.  

Cheating in any form will not be tolerated and will automatically result in failure of the course. Cellular phones are included in the cheating policy and any appearance of a cellular phone (or other communication devise) during a test will be considered an attempt to cheat by the student.  

******Likewise electronic devices such as cellular phones etc. will not be allowed in lecture unless prior approval is given by the instructor. Failure to follow this rule will result in the student being asked to leave class.
Ethics Rule: Anyone known to be actively engaged in killing protected species of any kind (avian or other) will automatically receive an F in this course and will be reported immediately to the state and federal authorities. It is illegal to kill any species of animal that is not designated as a game species with a legal season or an introduced species that is not protected.

Course Grade: Lecture and Lab:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>4 Lecture Exams:</td>
<td>100 pts. each</td>
</tr>
<tr>
<td>Lab Exam over avian orders and families:</td>
<td>100 pts.</td>
</tr>
<tr>
<td>Morphology Test</td>
<td>100 pts.</td>
</tr>
<tr>
<td>Paper summaries (2 @ 20 pts. each)</td>
<td>40 pts.</td>
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<tr>
<td>Lab Final (field identification):</td>
<td>100 pts.</td>
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<tr>
<td>Total</td>
<td>640 pts.</td>
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</tbody>
</table>

Point spread:
A = 640-572.8 pts., B = 572.7-508.8 pts., C = 508.7-444.8 pts., D = 444.7-380.8 pts., F < 380.7

*******NO EXTRA CREDIT will be given under any circumstances!!!

Each student will choose a code number/code name prior to the first test and this will be used to post grades. Grades will be posted on my website (see above). If you do not wish to have your grade posted please let the instructor know prior to the first test. Grades will not be provided over the phone or E-mail.

<table>
<thead>
<tr>
<th>Lecture Schedule:</th>
<th>Chapter #:</th>
<th>Lab:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Diversity of Birds</td>
<td>1</td>
<td>Introduction</td>
</tr>
<tr>
<td>History</td>
<td>2</td>
<td>Field Trip</td>
</tr>
<tr>
<td>Flight</td>
<td>5</td>
<td>Topography of a bird</td>
</tr>
<tr>
<td>Physiology &amp; Feeding</td>
<td>6</td>
<td>Field Trip</td>
</tr>
<tr>
<td>Brains and Senses</td>
<td>7</td>
<td>Feathers and feather tracts</td>
</tr>
<tr>
<td>Exam #1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocal Communication</td>
<td>8</td>
<td>Plumage and coloration</td>
</tr>
<tr>
<td>The Annual Cycles of Birds</td>
<td>9</td>
<td>Field Trip</td>
</tr>
<tr>
<td>Migration &amp; Navigation</td>
<td>10</td>
<td>Skeleton</td>
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<tr>
<td>Exam #2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual Communication</td>
<td>4, 11, 12</td>
<td>External Characters</td>
</tr>
<tr>
<td>Social Behavior</td>
<td>11</td>
<td>Field Trip</td>
</tr>
<tr>
<td>Reproduction</td>
<td>14</td>
<td>Field Identification</td>
</tr>
<tr>
<td>Exam #3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nests &amp; Incubation</td>
<td>15</td>
<td>Field Technique Demonstration</td>
</tr>
<tr>
<td>Parents and Offspring</td>
<td>16</td>
<td>Field Trip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Campus Birding</td>
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<tr>
<td></td>
<td></td>
<td>Field Trip</td>
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<td></td>
<td></td>
<td>Orders and Families</td>
</tr>
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<td></td>
<td></td>
<td>Field Trip</td>
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<tr>
<td></td>
<td></td>
<td>Territoriality</td>
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</tbody>
</table>
Field Trip

<table>
<thead>
<tr>
<th>Final</th>
<th>Thursday, May 3, 10:30-12:30 PM</th>
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</thead>
<tbody>
<tr>
<td>Tests will be announced at least one week in advance.</td>
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</tbody>
</table>

**********The Lab schedule is a tentative schedule and will change often with weather etc. Check your UAM e-mail often for announcements and changes.

**Important Dates:**

January 8 (Wed) - First day of classes for sessions 1 and 8W1 classes. Admission application deadline.
January 10 (Fri) - Last day to register or add classes.
January 13 (Mon) – First day of classes for sessions 6W1 and C2.
January 20 (Mon) - Martin Luther King Holiday. Offices and classes closed.
February 21 (Fri) - Deadline to apply for August and December graduation.
March 19 (Wed) - Last day to drop a Spring 2014 (session 1) class or withdraw from the term (not applicable to 8W1, 8W2, 6W1, C1, C2, or M1 session classes). Grade(s) will be W.
March 24-28 (Mon-Fri) - Spring Break.
April 7 (Mon) - Preregistration for Summer and Fall 2014 begins.
April 18 (Fri) - Preregistration for Summer and Fall 2014 ends.
April 29 (Tues) - Last day of classes (sessions 1 & 8W2).
April 30 - May 6 (Wed-Tues) - Final exam period.
May 9 (Fri) - Commencement.

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**Academic dishonesty:**

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   a. Copying from another student’s paper;
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   c. Collaboration with another student during the examination;
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For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be given a failing grade (F) in the course.
COURSE
Microbiology (BIOL 3553). Three credit hours
Class time: Mon, Wedn, Fri: 11:10 am – noon
Meeting place: Science Center Auditorium

PREREQUISITES
Six hours of chemistry and three hours of biology

OR
Anatomy & Physiology II lecture (BIOL 2243) and lab (BIOL 2301) (ACTS equivalent number 2414) and three additional hours of BIOL courses.

REQUIRED TEXTBOOK

INSTRUCTOR
Dr. Mary Stewart, Ph.D.
Phone: 870-460-1767
e-mail: stewartm@uamont.edu

Please be sure to put the m after stewart in my email address (stewartm@uamont.edu).

OFFICE AND OFFICE HOURS
Office: Science Center, Room B12
Office Hours: Monday: 10-11 am
Tuesday and Thursday: 9:30 – 10:30 am and 1:30 – 2:30 pm
Wednesday and Friday: 10 – 11 am and 1:30 – 2:30 pm

STATEMENT OF SPECIAL POLICIES SUCH AS ABSENTEEISM, PUNCTUALITY, CHEATING, PLAGIARISM, CELL PHONES, ELECTRONIC DEVICES, ETC.

Absenteeism. Attendance is required. The opportunity to makeup exams, quizzes or other work is possible only for excused absences.

Excused absences include, but are not limited to, participating in a UAM sponsored event (see the paragraph below from the UAM student handbook), being so ill that you visit a medical facility, or a death in your immediate family. It is your responsibility to contact me to discuss whether your absence is excused and to bring the appropriate documentation for your absence.
The information in the paragraph below is from the UAM student handbook:

**ABSENCES DUE TO PARTICIPATION IN UNIVERSITY-SPONSORED EVENTS**

At times, a student may participate in a University-sponsored activity that causes him or her to miss one or more class meetings. When this occurs, the sponsor of the activity will provide the student with a memo which includes the event, dates and times of the event, and the student’s name to be provided to each academic instructor. The student will discuss the work and the class(es) to be missed with each academic instructor at least one week prior to the anticipated absence. The student is responsible for all materials covered and any class activities during the absence. The sponsor of the activity will also provide all academic unit heads and Academic Affairs a description of the activity, which includes the location, dates, and a list of campus participants.

Unexcused absences include, but are not limited to, items such as going on vacation, having to work, sleeping late, having a paper due in another class, wanting to study for an exam in another class, not being ready for an exam, etc.

**Punctuality.** Be on time for class and do not leave early. If you are late for class or leave class early for unexcused reasons, you may miss a quiz and you will not have the opportunity to take a makeup quiz. Quizzes will have a time limit of 10 minutes maximum, but the quiz may end before 10 minutes passes if all students present at the outset of quiz time finish before 10 minutes is up. Quizzes may be at the beginning of class, at the end of class or anytime in between. If you are late for a quiz at the beginning of class and arrive before the 10-minute time limit is up, you will be able to take the quiz, but will have only whatever time remains in the 10-minutes. If you come to class just long enough to take a quiz and then leave before class is over, you will be considered as being absent for the entire class period and you will receive zero points for the quiz even if you took it.

**Cheating and plagiarism.** Academic dishonesty and cheating will not be tolerated.

**Cell phones:** If your cell phone is out during an exam or quiz, you will be considered as cheating. Turn cell phones off and put them away!

**Hats:** If you wear a baseball hat or any type of hat with a “bill” to an exam or quiz, you must either remove the hat and put it away or turn it around so that the bill is at the back of your head, rather than covering your eyes.

a. **Cheating:** Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   i. Copying from another student’s paper;
   ii. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   iii. Collaboration with another student during the examination;
   iv. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   v. Substituting for another person during an examination or allowing such substitutions for oneself.

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reflects the ideas of the party consulted rather than those of the person whose name in on the work submitted.

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d. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be zero points earned on the item involved. If you are caught cheating on any item, the student(s) involved will earn a zero on that item. Additionally, for student(s) involved in cheating, all quiz grades will be used in calculating the final quiz average; no quiz grades will be dropped.

Cell phones and electronic devices. Cell phones and other electronic devices are not to be used during class. Turn your cell phones and electronic devices off and put them away during class. If you use your cell phone during class, you may be asked to leave. If your cell phone is out during an exam or quiz, you will be considered as cheating. Turn cell phones off and put them away!

SPECIAL DATES OF CONCERN TO THE COURSE.

- **Friday, April 17.** Makeup exams and quizzes for excused absences: All makeups for exams 1, 2 and 3, as well as all makeup quizzes (for quizzes up to this date) will be Friday, April 17 during class time. If you have an excused absence for missing more than one exam or more than two quizzes, see me in advance to arrange alternate times.
- **Thursday, April 30:** Microbiology final at 1:30 pm.

COURSE OBJECTIVES AND COURSE DESCRIPTION

Microbiology is a topic that is relevant to many aspects of our everyday lives such as health, disease, food safety, water safety and agriculture. In this course, students will explore principles that apply to microbiology including chemistry and cell biology. Topics that students should gain a working knowledge of include:

- History of microbiology
- Biological and chemical concepts, particularly as applied to microorganisms
- Basic classification, characteristics and behavior of microorganisms
- Host-microbe interactions that result in infection
- Fundamentals of immunology
- Principles of asepsis, sterilization, and disinfection
- Principles of chemotherapy, as applied to treatment of microbial infections
- General methods for the prevention and control of infectious disease transmission
- Principles of epidemiology as they apply to the effect of microorganisms on the human population
- Microbial growth and metabolism
- Microbial genetics
**COURSE OUTLINE AND SCHEDULE** (changes to this tentative schedule may occur because of missed class days (e.g. if the University closes for inclement weather) or if topics take a different amount of time than expected).

If an exam is scheduled for a day on which the University closes for reasons such as inclement weather, the exam will take place on the next regularly scheduled class day when the University reopens.

<table>
<thead>
<tr>
<th>DATE</th>
<th>CLASS TOPIC AND READING IN THE COWAN TEXTBOOK</th>
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</table>
| Jan 7-9 (Friday, Jan 9: last day to register or add) | • Wedn: General items  
• Fri: Chapter 1 topics |
| Jan 12 – 16 | • Mon and Wedn: Chapter 1 topics  
• Friday: Chapter 2, The chemistry of biology |
| Jan 19 – 23 | • Mon, Jan 19: Holiday, no classes  
• Wedn and Fri: Chapter 2, continued |
| Jan 26 – 30 | • All week: Chapter 4, Prokaryotic profiles |
| Feb 2 – 6 | • **Monday, Feb 2: Exam 1 (over chapters 1, 2 and 4)**  
• Wedn and Fri: Chapter 5, Eukaryotic cells and microorganisms |
| Feb 9 – 13 | • Mon and Wedn: Chap. 5 continued  
• Fri: Chapter 9, Microbial genetics |
| Feb 16 – 20 | • All week: Chap 9, continued |
| Feb 23 – 27 | • All week: Chap. 6 |
| March 2 – 6 | • Mon: Chap 6  
• **Wednesday, March 4: Exam 2 (over chapters 5, 9 and 6)**  
• Wedn and Fri: Chapter 7, Microbial Nutrition, Ecology and Growth |
| March 9 – 13 | • Mon: Chapter 7  
• Wedn and Fri: Chapter 8, The metabolism of microbes |
| March 16 – 20 (March 18: last day to drop a full-term class with a “W”) | • Mon and Wedn: Chapter 8  
• Fri: Chapter 12, Drugs, microbes, host – the elements of chemotherapy |
| March 23 – 27 | • Spring break: No classes |
| March 30 – April 3 | • Mon and Wedn: Chapter 12  
• **Friday, April 3: Exam 3 (over chapters 7, 8 and 12).** |
| April 6 – 10 (April 6: Preregistration for Summer and Fall 2015 begins) | • Mon and Wedn: Chapter 13, Microbe – human interactions  
• Friday, April 10: Chapter 14, Host defenses I |
| April 13 – 17 | • Mon and Wedn: Chapter 14  
• **Friday, April 17: All makeup quizzes (for quizzes up to this date) and all makeups for exams 1, 2 and 3 will be Friday, April 17 at 11:10 am.** |
| April 20 – 24 | • All week: Chapter 15 |
| April 27 – May 1 | • Monday, April 27: Chapter 15  
• **Thursday, April 30: Microbiology final at 1:30 pm** |
SPECIAL PROJECTS, ASSIGNMENTS, FIELD TRIPS, ETC. This course does not include field trips or special projects.

Early Exams, early quizzes, makeup exams and makeup quizzes.
Early exams or quizzes will not be given. Makeup exams and quizzes are possible only for excused absences. All makeup quizzes and all makeup exams for exams 1, 2 and 3 will be during class time on Friday, April 17 during normal class time (11:10 am – noon). If you have an excused absence for missing more than one exam or more than two quizzes, see me to arrange alternate times.

Quizzes/Activities
We will have several ten-point in-class quizzes/activities that may or may not be announced in advance. Quizzes/activities may be at the beginning of class time, at the end of class time or anytime in between. Quizzes will have a maximum time limit of 10 minutes, but quizzes may not take the full 10 minutes. If you are late for a quiz at the beginning of class and arrive before quiz is over you will be able to take the quiz, but will have only whatever time remains. Note that if the quiz did not take a full 10 minutes and quizzes have already been picked up, the quiz will be considered “over” and you will not be able to take the quiz. If you come to class just long enough to take a quiz/activity and then leave before class is over, you will be considered as being absent for the entire class period and you will receive zero points for the quiz/activity even if you did it.

GRADING POLICY

<table>
<thead>
<tr>
<th>Letter grade and percent</th>
<th>Points Possible</th>
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</thead>
<tbody>
<tr>
<td>A (89.50 – 100%)</td>
<td>300 points</td>
</tr>
<tr>
<td>B (79.50 – 89.49%)</td>
<td>120 points</td>
</tr>
<tr>
<td>C (69.50 – 79.49%)</td>
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<tr>
<td>D (59.50 – 69.49%)</td>
<td></td>
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<tr>
<td>F (59.49% and below)</td>
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</tbody>
</table>

Note that 89.49% is a B and does not round up to 89.5%. Likewise, 79.49% is a C; 69.49% is a D and 59.49% is an F.

The grade that you earn in this course will be based on your scores on four exams and on your quiz/activity average.

<table>
<thead>
<tr>
<th>Item</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three hour exams, each worth 100 points</td>
<td>300 points</td>
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<tr>
<td>One final exam (Approximately 100 points will be on material</td>
<td>120 points</td>
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<td>with after exam 3 and approximately 20 points will be on</td>
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<tr>
<td>comprehensive material. On the last page of this syllabus, you will</td>
<td></td>
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<tr>
<td>find the list of key concepts for the comprehensive portion of the</td>
<td></td>
</tr>
<tr>
<td>exam.)</td>
<td></td>
</tr>
<tr>
<td>Your quiz/activity average (see explanation on the next page)*</td>
<td>100 points*</td>
</tr>
<tr>
<td>Total points possible</td>
<td>520 points</td>
</tr>
</tbody>
</table>

For the calculation of your final grade, no exam scores will be dropped. However, for the calculation of your quiz/activity average, your two lowest scores on ten-point quizzes/activities will be dropped.

*Calculating your points in the quizzes/activities category. Your two lowest scores on ten-point quizzes/activities will be dropped. Your quiz scores on the remaining quizzes will be averaged and the average will be used to determine your points in the “quizzes/activities” category.
Below is an example of how your points in the quizzes/activities category would be calculated if we have nine ten-point quizzes/activities in the semester.

Example scores on ten-point quizzes

<table>
<thead>
<tr>
<th>Quiz</th>
<th>Points possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz 1</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 2</td>
<td>8</td>
</tr>
<tr>
<td>Quiz 3</td>
<td>7</td>
</tr>
<tr>
<td>Quiz 4</td>
<td>9</td>
</tr>
<tr>
<td>Quiz 5</td>
<td>10</td>
</tr>
<tr>
<td>Quiz/activity 6</td>
<td>10</td>
</tr>
<tr>
<td>Quiz 7</td>
<td>9</td>
</tr>
<tr>
<td>Quiz 8</td>
<td>5</td>
</tr>
<tr>
<td>Quiz 9</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
</tr>
</tbody>
</table>

In this example, I would drop the two lowest quiz scores, which are the scores of “7” on quiz 3 and “5” on quiz 8. After dropping these two scores, the person would have a total of 66 points out of 70. To calculate a percent in the “quizzes/activities category” for this example, I would use the formula: 66/70 X 100 = 94.29%. In this example, the person would have a 94.29 percent on quizzes/activities and thus would have 94.29 points (out of 100 possible) in the quizzes/activities category.

Grades of incomplete (I)

Below is a section from the UAM student handbook regarding grades of incomplete (I):

“An incomplete grade is a mark designating deficiencies in course work, which must be completed within one calendar year, or less as designated by the instructor. Permission to receive an I rests with the instructor. When deficiencies are completed, the appropriate grade will be assigned. After the specified year or shorter specified time, an I will become an F if the work has not been completed.”

A grade of incomplete will only be considered if a student has completed at least three exams and has completed at least five of the quizzes. Additionally, based on grades of completed work and on the points possible for the work left to be completed, the student must have a mathematical possibility of passing the class.

STUDENTS WITH DISABILITIES:

It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any approved accommodations at the beginning of the course. Any student with questions regarding accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; fax 870 460-1926.

McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105.

Crossett: Office of Special Student Services representative on campus; phone 870 364-6414; fax 870 364-5707.
STUDENT CONDUCT STATEMENT:
Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

BLACKBOARD
If you are officially enrolled in this class at UAM, you automatically will be enrolled in the Blackboard site for this class. To access the Blackboard site for this class, go to http://www.uamont.edu/academiccomputing/ and follow the onscreen instructions.

I will be putting your scores in this class on Blackboard. Your Blackboard account is password protected. To protect against others seeing your grades, do not share your login information and password with others. Also, after you are finished looking in your Blackboard account, be sure to logout of Blackboard and close the browser window.

If you do not wish to have your scores on Blackboard, you must let me know, preferably by email.

If you need help with Blackboard, I will be happy to help you if I can. There are some Blackboard tips available at http://www.uamont.edu/academiccomputing/. For help, you also can call the UAM Office of Academic Computing at 870-460-1663. If you forget your password, you will need to contact the Office of Academic Computing.

KEY CONCEPTS FOR THE COMPREHENSIVE PORTION OF EXAM 4. ALL OR ONLY SOME OF THE KEY CONCEPTS LISTED BELOW MAY BE ON EXAM 4.

- Compare and contrast prokaryotic and eukaryotic cells.
- Distinguish between bacteria, fungi, viruses, helminthes and prions. Also describe the structural features of bacteria, fungi, viruses, helminthes and prions.
- Compare and contrast the features of the cell wall of gram-positive bacteria and gram-negative bacteria. Be able to describe the flow of genetic information in eukaryotes and prokaryotes. This includes the concepts of DNA structure/function, mRNA structure/function, tRNA structure/function, transcription, translation, the cellular location of DNA, the cellular location of transcription and the cellular location of translation.
INSTRUCTOR
Mrs. Lauren Morgan
Phone: 870-460-1816
e-mail: morganl@uamont.edu

Please be sure to use your UAM email account to e-mail me. If you use other email accounts, your email will be caught in my spam filter and I may not receive it.

Please be sure to put the I after morgan in my email address (morganl@uamont.edu).

OFFICE AND OFFICE HOURS
Office: Science Center, Room B15
Office Hours: M 1-3, T 10-12, W 9-10; 1-2, H 8-9; 11:30-12:30, F 8-10.
Also by appointment.

COURSE
Microbiology Lab (BIOL 3561), One credit hour.
Meeting place: Science Center Room B36

PREREQUISITES
To take this laboratory course, you must be currently enrolled in Microbiology Lecture (BIOL 3553) or you must have successfully completed BIOL 3553 in the past.

REQUIRED TEXTBOOK
The lab book required for this course is a custom lab manual available at the UAM bookstore. It is called:
Microbiology Lab
BIOL 3561
Mary Stewart
Univ Of Arkansas at Monticello
Mathematics and Natural Sciences

STATEMENT OF SPECIAL POLICIES SUCH AS ABSENTEEISM, PUNCTUALITY, CHEATING, PLAGIARISM, CELL PHONES, ELECTRONIC DEVICES, ETC.

Cell phones Cell phones and electronic devices. Cell phones and other electronic devices are not to be used during lab. TURN YOUR CELL PHONES OFF AND PUT THEM AWAY! Use of or having a CELL PHONE on your desk during a quiz, exam, or when reviewing graded papers will result in a ZERO on the quiz or exam.
If you are caught using your cell phone in the lab room (B36) or have your cell phone out, for any reason, you will automatically have a 20 point deduction from your lab points—no exceptions, no excuses.

**Absenteeism. Attendance is required.** There are no makeups for labs missed for unexcused absences. If you miss lab for an unexcused absence, you will be docked 20 points in addition to losing any points available for that day, such as exam points, worksheet points, etc. **Missing lab for unexcused reasons will hurt your grade! Do not miss lab for unexcused reasons!**

**Punctuality. Be on time for lab.**

If, for excused or unexcused reasons, you miss all or part of the pre-lab lecture, which will start at the beginning of lab on non-exam days and after the exam on exam days, you will not be allowed to attend lab that day. If you miss the pre-lab lecture for excused reasons, you will be able to make up the lab at another time. If you miss the pre-lab lecture for unexcused reasons, you will not be able to makeup the lab, you will counted as absent for an unexcused reason and you will lose points as described above under absenteeism.

**Excused absences** include, but are not limited to, participating in a UAM sponsored event (see the paragraph below from the UAM student handbook), being so ill that you visit a medical facility, or a death in your immediate family. It is your responsibility to contact me to discuss whether your absence is excused and to bring the appropriate documentation for your absence.

The information in the paragraph below is from the UAM student handbook:

**“ABSENCES DUE TO PARTICIPATION IN UNIVERSITY-SPONSORED EVENTS**

At times, a student may participate in a University-sponsored activity that causes him or her to miss one or more class meetings. When this occurs, the sponsor of the activity will provide the student with a memo which includes the event, dates and times of the event, and the students name to be provided to each academic instructor. The student will discuss the work and the class(es) to be missed with each academic instructor at least one week prior to the anticipated absence. The student is responsible for all materials covered and any class activities during the absence. The sponsor of the activity will also provide all academic unit heads and Academic Affairs a description of the activity, which includes the location, dates, and a list of campus participants.”

**Unexcused absences** include, but are not limited to, items such as going on vacation, having to work, sleeping late, having a paper due in another class, wanting to study for an exam in another class, not being ready for lab, etc.

**Determination of an absence being excused or unexcused is at the instructor's discretion.**

**Cheating and plagiarism.** Academic dishonesty and cheating will not be tolerated.

1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   f. Copying from another student’s paper;
2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be failure of the lab course.

SPECIAL DATES OF CONCERN TO THE COURSE.
For additional dates, such as tentative lab exam dates or other due dates, see the tentative schedule within this syllabus.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>07 Jan</td>
<td>First day of classes</td>
</tr>
<tr>
<td>09 Jan</td>
<td>Last day to register or add spring classes</td>
</tr>
<tr>
<td>19 Jan</td>
<td>MLK holiday. All classes and offices closed</td>
</tr>
<tr>
<td>18 Mar</td>
<td>Last day to drop with W</td>
</tr>
<tr>
<td>23-27 Mar</td>
<td>Spring Break</td>
</tr>
<tr>
<td>06 Apr</td>
<td>Preregistration for summer and fall begins</td>
</tr>
<tr>
<td>17 Apr</td>
<td>Preregistration for summer and fall ends</td>
</tr>
<tr>
<td>28 Apr</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>29 Apr-May 5</td>
<td>Final exams begin (29 April)</td>
</tr>
</tbody>
</table>

COURSE OBJECTIVES AND COURSE DESCRIPTION
A laboratory course designed to supplement the basic lecture course in microbiology with experimentation and demonstration.

In this lab, students will carry out hands-on work to learn and apply lab methods and theory that are used to examine and identify microbes. By the end of the semester, students should be able to:

- Describe the parts of a microscope and their purposes.
- Properly use a microscope to examine and identify microbes.
- Prepare microscope slides and perform staining methods commonly used in microbiology.
- Describe the basis for how stains can be used to distinguish between different microbes.
- Use appropriate aseptic techniques and standard culture methods used in microbiology labs.
- Identify and distinguish between different types of microbes.
- Describe the growth requirements for microbes and some of the media used to culture microbes.
- Describe and use methods designed to destroy microbes or inhibit their growth.
- Carry out experimental tests to identify bacteria based on their biochemical properties. Also, explain the theory behind these tests and describe their applications.

**COURSE OUTLINE AND TENTATIVE SCHEDULE.** Changes to this tentative schedule may occur because of missed class days (e.g. if the University closes because of inclement weather or if labs take a different amount of time than expected).

<table>
<thead>
<tr>
<th>DATE (week of)</th>
<th>Lab exercise(s) and pages in the lab book. PLEASE NOTE that the page numbers in this tentative schedule are the numbers in the green boxes in the <strong>top right corner</strong> of the lab book pages. On some pages of the lab book, there are page numbers in the bottom right corner of the lab book pages; ignore those!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 6-8</td>
<td>No labs this week</td>
</tr>
</tbody>
</table>
| Jan 13-15      | **TAKE NOTE OF THE INSTRUCTIONS ON PROPER LAB ATTIRE! BE SURE YOU DRESS APPROPRIATELY FOR LAB!**  
- Start and finish exercise 1, Lab Safety, pages 3-8 of the lab book. Also, read the Laboratory Safety Guidelines on page 1 of the lab book and the lab safety rules in the handout that will be given out during lab time.  
- Start exercise 6 and aseptic technique discussion. Students are **not** to take samples of their mouths, noses, other body places and not to take samples of the bathroom. Plates for this exercise have to be wrapped in parafilm. |
| Jan 20-22      | **Start exercise 7, Aseptic technique, pages 17 – 24.**  
- Finish exercise 6, Ubiquity of bacteria, pages 11-16 in the lab book.  
- **Start exercise 50, Streak plate isolation, pages 29 – 35. Make streak plates of **unknown**.** |
| Jan 27-29      | **Finish exercise 50, streak plate isolation of an unknown.**  
- **Start and finish exercise 40 (pages 25 – 28), using the streak plate you made of your unknown and using the streak plate you made for exercise 6.**  
- Make a “fishtail” streak of your unknown on a **TSA slant** today (OR, if your unknown streak plate did not turn out well, you may need to redo a streak plate of your unknown today and then make a **TSA slant next week**)  
- **Start and finish exercise 2, Microscopes, pages 37 – 39 (we will not do the measurements**  

220
<table>
<thead>
<tr>
<th>Date</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 3-5</td>
<td><strong>Lab exam 1</strong> (25 points). This lab exam will be on exercises 1, 2, 6, 7, 40, 50, and on lab media and microbial growth information.</td>
</tr>
<tr>
<td></td>
<td>- Start and finish exercise 42, Simple Staining, pages 49 – 54.</td>
</tr>
<tr>
<td></td>
<td><strong>Feb 10-12</strong></td>
</tr>
<tr>
<td></td>
<td>- <strong>Start a starch agar slant of your unknown today.</strong> You will need this for the endospore stain next week. If you do not start a starch agar slant today, you will not have material to work with next week and you will be out of luck as far as doing the endospore stain next week!</td>
</tr>
<tr>
<td></td>
<td>- Start and finish exercise 45, Gram staining, pages 55 – 60.</td>
</tr>
<tr>
<td></td>
<td>- Start and finish the KOH string test (read the handout on the KOH test).</td>
</tr>
<tr>
<td></td>
<td><strong>Feb 17-19</strong></td>
</tr>
<tr>
<td></td>
<td>- Start and finish exercise 46, Endospore staining, pages 61 – 64 (we will use the Schaeffer-Fulton method).</td>
</tr>
<tr>
<td></td>
<td><strong>Feb 24-26</strong></td>
</tr>
<tr>
<td></td>
<td>- <strong>Lab exam 2</strong> (25 points). The lab exam will be on the KOH string test, exercises 42, 45, 46 (heat fixed smears, simple stain, gram stain, endospore stain) and on bacteria cell shape and arrangement identification.</td>
</tr>
<tr>
<td></td>
<td>- Examine exercise 34, Identification of bacterial unknowns, pages 141 – 162.</td>
</tr>
<tr>
<td></td>
<td>- Start exercise 81, Starch hydrolysis, pages 79 – 81.</td>
</tr>
<tr>
<td></td>
<td>- Start exercise 85, Gelatinase test, pages 83 – 85.</td>
</tr>
<tr>
<td></td>
<td>- Start exercise 32, pages 103 – 112. Today, you will do the procedure in the lab book for “period two” by inoculating KIA, SIM and urea media. (We will interpret the results of exercise 32 two weeks from today).</td>
</tr>
<tr>
<td></td>
<td>- Inoculate a TSB (tryptic soy broth) tube with your unknown. You must start this today so that you can use it for the citrate test in a future lab period.</td>
</tr>
<tr>
<td></td>
<td><strong>There will be a limited amount of time next week to redo a Gram stain or an endospore stain. If you want to redo either of these stains for your unknown, keep reading.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>NEXT WEEK IS THE LAST CHANCE TO REDO THE GRAM STAIN AND ENDOSPORE STAIN ON YOUR UNKNOWN!</strong> You also can redo the Gram and endospores stains on controls next week if you wish to earn a better grade on your staining of controls. (There is one more day later this semester when you can redo the Gram stain or endospore stain on controls, but not on your unknown).</td>
</tr>
</tbody>
</table>
If you need/wish to redo a Gram stain on your unknown next week, **YOU MUST SIGN UP ON THE SIGNUP SHEET TODAY!** By signing up, the instructor will know to start a fresh culture of your unknown one day prior to your lab period next week. If you don’t sign up today, then you won’t have a fresh culture of your unknown next week for the Gram stain and you won’t be able to do the Gram stain next week on your unknown.

If you need/wish to redo an endospore stain on your unknown next week, **YOU MUST START A NEW STARCH AGAR SLANT OF YOUR UNKNOWN TODAY!** If you don’t start a starch agar slant of your unknown today, you won’t be able to do the endospore stain next week on your unknown.

| Mar 3-5 | • Finish exercise 81, starch hydrolysis, pages 79 – 81.  
• Finish exercise 85, gelatinase test, pages 83 – 85.  
• Redo Gram stain and/or endospore stains on unknowns as needed. This is the last chance to redo these stains on your unknown. You also can do the Gram stain on controls today.  
• **DUE NO LATER THAN THE END OF LAB TODAY:** The sheet that indicates the Gram identity of your unknown and whether your unknown forms endospores. Next week, I will hand these back to you so that you will know whether you were correct or incorrect.  
• Make sure that you do the 7.5-point worksheet (to be handed out today) on exercise 32 BEFORE you come to lab next week. This 10-point work sheet is due at the beginning of lab next week. Papers turned in after lab starts will earn zero points. |
| Mar 10-12 | • **Note that there is a 7.5-point worksheet on exercise 32 (pages 103 to 112) due AT THE BEGINNING OF LAB TODAY!** Worksheets turned in after lab starts will earn zero points!  
• Today, I’ll let you know if you were correct about the Gram identity of your unknown and if you were correct about its ability to form endospores.  
• Finish exercise 32 (KIA, SIM and urea), pages 103 – 112. (Note: Before lab, be sure to read the information in the lab book about exercise 32. Also, be sure to read the handout about the tests used in exercise 32).  
• Start exercise 76, citrate test, pages 99 – 102. You will **not** inoculate the citrate tube with bacteria from “your unknown pet” that is on a TSA slant. **Instead, you need to inoculate the citrate tube with your unknown from the liquid TSB culture that you started last week!**  
• Start nitrate reduction test, page 119. Note that you should read only part of the information in the lab book for the nitrate reduction test. We will carry out the nitrate reduction test with a different method than the lab book describes (a handout for the method will be given). The portions on page 119 in the lab book that you should read are
1. The italicized introductory paragraph on page 119 (which begins with “The nitrate reduction test is used....”).
2. The first paragraph on page 119 under “Principles and Applications”. The paragraph begins “Anaerobic respiration involves....”.
3. Pay attention to figure 74.1 on page 119.

- Start exercise 69, Phenol Red Broth, pages 91 – 94.
- Start exercise 71, Methyl Red and Voges-Proskauer Tests, pages 95 – 98.

| Mar 17-19 | Lab exam 3 (25 points) on exercises 53, 72, 32, 81 and 85 (fluid thioglycolate, catalase test, identification of Enterobacteriaceae, starch hydrolysis, and the gelatinase test)

**NOTE: TODAY, YOU WILL RECEIVE A WORKSHEET ON SERIAL DILUTIONS THAT IS DUE AT THE BEGINNING OF LAB the week of APRIL 7-9!** Worksheets turned in after lab starts the week of APRIL 7-9 will earn zero points!

- Decide on foods to test the week of April 7 – 11.
- Finish exercise 71, Methyl Red and Voges-Proskauer tests, pages 95 – 98.
- Finish exercise 74, Nitrate reduction test.
- Finish exercise 69, Phenol red broth, pages 91 – 94.
- By the end of lab today, you should be able to figure out the genus name and species name of your unknown. If you cannot do this, then you probably need to redo some lab tests. Keep reading and be sure to sign up for the appropriate materials for the next lab period.

**SIGN UP TODAY FOR ANY MEDIA YOU NEED FOR NEXT WEEK TO REDO LAB EXPERIMENTS ON YOUR UNKNOWN.** If you don’t sign up for media today, then there will not be media for you to use next lab period and you will not be able to redo any lab experiments next lab period or at any other time.

| Mar 24-26 | NO CLASS—Spring Break

| Mar 31- Apr 2 | Catch up / Make up day:
Lab this week is for redoing lab tests that you need to redo on your unknown. This is the last chance to redo any lab tests.

If you missed a lab(s) prior to today (for excused reasons only), this is the only day to makeup those labs.
For some things that you start today, such as inoculating media with bacteria, you will need to interpret the results next week.

If you wish to redo the Gram stain on controls (*Escherichia coli* and *Micrococcus luteus*), today is the last chance to do so.

If you wish to redo the endospore stain on the control (*Bacillus megaterium*), today is the last chance to do so.

If you do not want to redo lab tests on your unknown and you do not want to redo the Gram or endospore stain, then you do not need to come to lab today.

<table>
<thead>
<tr>
<th>Apr 7-9</th>
<th>NOTE THAT THE WORKSHEET ON SERIAL DILUTIONS IS DUE AT THE BEGINNING OF LAB TODAY! Worksheets turned in after lab starts will earn zero points!</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• <strong>Lab exam 4</strong> (25 points). This lab exam is on exercises 76, 69, 71 and 74 (citrate test, phenol red test, methyl red test, Voges-Proskauer test, and the nitrate reduction test).</td>
</tr>
<tr>
<td></td>
<td>• Start exercise 20 (Kirby Bauer) and the exercise on antibacterial effects of chemicals.</td>
</tr>
<tr>
<td></td>
<td>• Start exercise 30, food on pages 123 - 127.</td>
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<tr>
<td></td>
<td>• Interpret the results of experiments you set up last week.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Apr 14-16</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Finish exercise 20 (Kirby Bauer) and the exercise on antibacterial effects of chemicals.</td>
</tr>
<tr>
<td></td>
<td>• Finish exercise 30, food on pages 123 - 127.</td>
</tr>
<tr>
<td></td>
<td>• <strong>DUE TODAY by the end of your lab period: Unknown reports due.</strong></td>
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<tr>
<td></td>
<td>• <strong>All makeup lab exams for lab exams 1, 2, 3 and 4 will be during your lab period this week.</strong></td>
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<thead>
<tr>
<th>Apr 21-23</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>• <strong>Lab exam 5</strong> (20 points). This lab exam is on exercise 20 (antibiotics and the Kirby Bauer test), the exercise on antibacterial effects of chemicals, exercise 30 (serial dilutions and determining CFUs in food).</td>
</tr>
</tbody>
</table>

| Apr 28-30 | No class |
| Apr 29-May 5 | Finals week: No microbiology labs during finals week |

**SPECIAL PROJECTS, ASSIGNMENTS, FIELD TRIPS, ETC.**
This course does not include field trips. A portion of your grade will be based on an “unknown report”. Information on the unknown report will be handed out in lab.

PROVISIONS FOR TESTS AND EVALUATIONS:
Exams and Other Evaluations:
Lab exams
Your grade in this class will be based on several items, including lab exams (see the next page for a list of items on which your grade is based).

Lab exams. There are five lab exams scheduled during the semester. All lab exams are not necessarily of the same point value. All questions on exams may not be of the same value. Additionally, exams of equal point values may have a different number of questions. For example, a 25-point exam might have 12 questions while a different 25-point exam may have 5, 10, or 20 questions.

Be on time for lab exams! Lab exams will be given during the first 15 minutes of lab. If you come in late, you will have only the amount of time remaining in the 15 minutes to complete the exam.

Makeup lab exams There will be no early lab exams. If you miss a lab exam for an excused reason, you may take a makeup lab exam. All makeups for lab exams 1, 2, 3 and 4 will be during your lab period of a designated week (see the tentative schedule within this syllabus). Makeups for lab exam 5 (excused absences only) will be arranged---contact me!

There are no makeups for any lab work in the case of unexcused absences.

Grade Posting
Scores on exams will be posted by a code number assigned on the first exam unless a student requests not to have his/her scores posted.

GRADING POLICY

Letter grade and percent
A (89.5 – 100%)
B (79.5 – 89.4%)
C (69.5 – 79.4%)
D (59.5 – 69.4%)
F (59.4% and below)

Grades of incomplete (I)

Below is a section from the UAM student handbook regarding grades of incomplete (I):
“An incomplete grade is a mark designating deficiencies in course work, which must be completed within one calendar year, or less as designated by the instructor. Permission to receive an I rests with the instructor. When deficiencies are completed, the appropriate grade will be assigned. After the specified year or shorter specified time, an I will become an F if the work has not been completed.”

Because of the nature of the work in this lab and the difficulties in scheduling time to makeup lab work, a grade of incomplete will only be considered if no more than two-week’s worth of wet-bench lab work
remains to be completed and at least four of the lab exams have been completed. One week’s worth of wet-bench work typically will require one lab period (about three hours) to set up the exercises and one additional lab period (about three hours) to interpret the results. Wet-bench work is work in which lab media must be inoculated, microscope slides must be prepared, or other hands-on work at the lab bench must be done.

The grade that you earn in this course will be based on your scores on the items listed below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab exams</td>
<td>120 points</td>
</tr>
<tr>
<td>Various items that may include participation, worksheets, unannounced quizzes, and or lab book sheets</td>
<td>25 points</td>
</tr>
<tr>
<td>Streak plate</td>
<td>15 points</td>
</tr>
<tr>
<td>Gram stain of controls</td>
<td>15 points</td>
</tr>
<tr>
<td>Endospore stain of control</td>
<td>15 points</td>
</tr>
<tr>
<td>Identification of your unknown as Gram positive or negative</td>
<td>10 points</td>
</tr>
<tr>
<td>Identification of your unknown as an endospore former or non-former</td>
<td>10 points</td>
</tr>
<tr>
<td>Unknown report</td>
<td>30 points</td>
</tr>
<tr>
<td>Total points possible</td>
<td>240 points</td>
</tr>
</tbody>
</table>

No lab scores on any items will be dropped.

If you are caught using your cell phone in the lab room (B36) or have your cell phone out, for any reason, you will automatically have a 20 point deduction from your lab points—no exceptions, no excuses.

If you miss lab for an unexcused absence, you will be docked 20 points in addition to losing any points available for that day, such as exam points, worksheet points, etc. On top of those lost points, you also may lose points on your unknown lab report if you were not in lab (for unexcused reasons) to start or complete tests necessary for the unknown identification. Take-home message: Do not miss lab for unexcused reasons!

There will be a grade deduction if you improperly clean, use or store a microscope. You will be assigned a specific microscope to use during the semester and that is the only microscope that you should use. To prolong the life of the microscopes and maintain their quality, it is important that you follow the instructions that the instructor provides for microscope cleaning, use and storage. If you improperly clean, use or store a microscope, grade penalties will be assessed as follows:

1st offense: You will be docked six points.
2nd offense: You will be docked six more points.
3rd offense: You will be docked 15 more points.
4th offense and any thereafter: You will be docked 15 additional points for each offense.

Improperly cleaning, using or storing a microscope includes, but is not limited to the following:

- storing the microscope with any objective other than the 4X objective rotated into place over the stage
- failing to clean immersion oil off of any of the objectives
- putting a microscope away with a slide left on the stage
- storing the microscope with the stage in any position other than its lowest
- storing the microscope with a slide on the stage
- failing to properly wrap the electrical cord of the microscope
- failing to follow any of the instructions given for microscope use

If, because of your misuse and failure to follow instructions for the proper use of an item, you damage a microscope or other equipment so that it requires repair or replacement, you will be charged the financial cost of the repair or replacement. The Nikon microscopes that we use cost approximately $1400.00 each.

Before you use your microscope (or other equipment), it is important that you check it and let the instructor know of any problems. Otherwise, the instructor will have to assume that you caused the problem.

STUDENTS WITH DISABILITIES:
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McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105.
Crossett: Office of Special Student Services representative on campus; phone 870 364-6414; fax 870 364-5707.

STUDENT CONDUCT STATEMENT:
Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

OTHER COURSE POLICIES

SAFETY. You are responsible for following all safety rules. Safety rules will be discussed in lab, are found in the required laboratory manual and are found on a handout that will be given in laboratory. If you fail to follow safety rules, the behavior will be considered as “disorderly conduct” and you will be asked to leave the lab (this will count as an unexcused absence and grade penalties will apply).
So that you are aware of what to wear and bring to lab, below is a PARTIAL list of lab safety rules.

1. Absolutely no food, drink, candy or gum in lab. Finish or dispose of any food or drink before you come to lab. Do not walk into the lab with food or drink in your hand and throw it into the trashcans in lab. Dispose of any food or drink before you come into the lab room! Disregarding this safety rule will be considered as disorderly conduct. Do not chew gum or candy during lab. Do not chew on other items (pens, toothpicks, etc.) or place items in your mouth, nose or eyes during lab.

2. Attire. Rules for lab attire are for safety purposes. You must wear closed shoes (completely closed, no open toes, heels or sides). Sandals are not allowed. You must wear shirts that completely cover your midriff. “Spaghetti strap” shirts and tank tops are not to be worn in lab, or if they are worn, you must wear a closed and sleeved shirt over the top. When you sit down, your pants or skirt should cover your knees. These policies are for your safety and are meant to potentially reduce the amount of bacteria that would land on exposed skin if you should spill or splash bacteria. If you arrive in lab with improper attire, you will not be allowed to participate in lab that day unless you come back that day with proper attire and there is sufficient time remaining in the lab period to complete the lab work. If you do not come back to lab with appropriate attire that day, you will be considered as absent for an unexcused reason and grade penalties will apply.

3. Minimize the amount of “things” you bring to lab. Bring as few books (for other classes), backpacks, bags, etc. as possible to lab. All personal items (phones, backpacks, books, purses, coats, etc.) that you bring with you and that do not fit into the pockets of your clothing will be stored in room B32, which is adjacent to room B36, in which lab is held. Those items will not be in room B36 with you. If you do not want to store those items in room B32, then do not bring them with you.

4. NO CELL PHONE USE IN LAB! If you are caught using your cell phone in the lab room, or have your cell phone out, for any reason, you will automatically have a 20 point deduction from your lab points—no exceptions, no excuses.

5. Contact lenses and putting things into your eyes. If you are a contact lens wearer, wear glasses to lab instead of your contacts. Do not rub your eyes or put your fingers or anything else into your eyes during lab.
Instructor: Dr. John L. Hunt. Office: B-11, Science Center. Phone: 870-460-1466
E-mail: huntj@uamont.edu. Website: http://www.uamont.edu/facultyweb/Huntj/
Office Hours: 9-10 M-F, 2-3 M, T, Th, F, or by appointment.

Prerequisites: BIOL 2153, BIOL 2161.


Course Objectives: To provide an understanding of the anatomy of vertebrates by focusing on basic principles of structure, development, function and evolution of organs and organ systems in the different vertebrate groups. The course also explores evolution of and evolutionary relationships between vertebrate groups.

Grading: Approximately one-third (28%) of the grade for this class is from the lab. The lab is covered under a separate syllabus.

Grading is on the standard 10-point scale. Points will be computed as a percentage of 725 points. There is no “extra” credit. Points will consist of the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three 100-point exams</td>
<td>300</td>
</tr>
<tr>
<td>10 5-point unannounced quizzes</td>
<td>50</td>
</tr>
<tr>
<td>One 25-point mini exam</td>
<td>25</td>
</tr>
<tr>
<td>Final exam (comprehensive)</td>
<td>150</td>
</tr>
<tr>
<td>Lab grade</td>
<td>200</td>
</tr>
</tbody>
</table>

Exam dates are September 17, October 13, November 7, and December 11. These dates will not change. Exams will consist of a mixture of essay, short answer, and objective-type questions, and may include some drawing. Bonus questions may come directly from reading assignments that have never been discussed in class. Material for each exam will begin at the previous exam and will continue through the last class day before each exam. Only the final WILL be comprehensive. The final exam will be on Thursday, December 11, at 1:30 p.m. There will be approximately one quiz per week; these quizzes will be unannounced and will consist of one to five questions from the previous day’s lecture. Quizzes are designed to encourage daily review and study, and regular attendance and promptness, and therefore MAY NOT be made up. If more than
10 quizzes are given, students will be allowed to drop their lowest quiz scores to get down to 10 quizzes. The 25-point mini-exam will cover vertebrate taxonomy, and will occur on the next class day after we complete the lectures on taxa. Minor changes to the grading scheme may be made at the discretion of the instructor.

Class web page. The class web page may be found at: http://www.uamont.edu/facultyweb/Huntj/Comparative.htm. On this page there are lists of terms to know and lecture outlines for each of the chapters of the text we will cover. These outlines are general in nature, and are not meant to replace detailed notes which you should take in class. Test scores will be posted on the class web page shortly after each exam. Your score will be listed by an anonymous code word selected by you.

Attendance: Attendance at all lectures, exams, and lab sessions is mandatory. Attendance will be recorded regularly. Most exam material will come from lectures, so that your success, or lack thereof, in this class is directly related to attendance. Those students who miss more than three class periods without a university-approved excuse will be docked one point from the final grade for each missed class. For example, a student who earns a 90 average for the class but has five unexcused absences will receive a grade of B for the class. It is the responsibility of the student to provide a university-approved excuse for each class missed on the next class day.

Quizzes may not be made up. However, missed quizzes will not count against the grade of any student who presents the instructor with an approved excuse for his absence. Approved excuses do not include “hung over,” “overslept,” “my car was busted,” “wacky frat party,” or “went fishing with some friends, and that should count, since we cut up some fish, and fish are vertebrates.” Students with approved excuses may make up missed exams, by arrangement with the instructor, at the convenience of the instructor. Please be aware that make-up exams will NOT be the same exam given during the normal class period. It is important for you to note that you are responsible for material covered in every class and every lab session, even if you miss the class with an excused absence. It is your responsibility to obtain the material you have missed from your classmates.

Class policies: Comparative anatomy is a challenging subject with many complex concepts and a language of its own. Please plan on massive amounts of study. The instructor is here to help you; please feel free to ask questions at any time. You are encouraged to seek help outside of regular class hours if you are so inclined.

Please do not hold conversations with classmates during lecture. You may tape lectures if you so desire, but this should not substitute for the taking of detailed class notes. **DO NOT BRING CELL PHONES TO CLASS!** If your cell phone rings during my lecture, I will respond in the only manner available to me—by adjusting your grade. You may not text-message or keep your cell phone on your desk during class. **IF I SEE YOU TEXT-MESSAGING OR SURFING THE WEB DURING CLASS, YOU WILL BE ASKED TO LEAVE.** If this occurs twice, you will be assigned a grade of F for the course. No electronic devices other than tape recorders are allowed in class—this includes laptops and i-pods. Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on pages 39-45 of the 2013-2015 UAM Catalog.

The last date to drop this course with a W (and for most other courses at UAM) is October 29. A grade of I will only be given if a student has completed 75% of the work of the course, with a mathematical possibility of
obtaining a passing grade, and will be given only for University-approved excuses, with the approval of the Dean of Math and Sciences.

**Lab:** The lab is a required component of this course. Details on the lab are included on a separate syllabus. Many students consider laboratory sessions an opportunity to pull up their lecture grade. Please be aware that the comparative anatomy lab is challenging, and requires a great deal of work and study—whether it hurts or helps your grade will depend entirely upon the amount of effort you put forth.

**Academic dishonesty:** Cheating will not be tolerated. The Academic Code of the University of Arkansas-Monticello may be found on page 40 of the 2013-2015 UAM Catalog. Please note the following definitions of academic dishonesty:

1. **Cheating:** Students shall not give, receive, offer, or solicit information on examinations, quizzes, or other class work. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for one’s self.
2. **Collusion:** Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
3. **Duplicity:** Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
4. **Plagiarism:** Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

Please note that the instructor has wide latitude in taking corrective action in response to cheating; expect the harshest possible response in this class. In other words, if I catch you cheating even once, I will assign a grade of F for the course. You will not be allowed to have a cell phone of any sort on your desk during exams (or any other time during class).

**Students with disabilities:** It is the policy of the University of Arkansas—Monticello to accommodate individuals with disabilities pursuant to federal law and the commitment of the University to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall, Room 120, phone 870-460-1026, TDD 870-460-1626, fax 870-460-1926.
**Material to be covered:** These topics will be covered in the order listed below. Students are expected to read the indicated chapters as we cover each topic.

Introduction (Chapter 1); Evolution (Chapter 2); Phylogenies; Fossilization; Taxa (Chapters 2 and 3 and handout); Form and Function (Chapter 4); Development (Chapter 5); Integument (Chapter 6); Skull and Jaws (Chapter 7); Vertebræ (Chapter 8); Limbs (Chapter 9); Muscles (Chapter 10); Respiratory System (Chapter 11); Circulatory System (Chapter 12); Digestive System (Chapter 13); Urogenital System (Chapter 14); Endocrine System (Chapter 15); Nervous System and Brain (Chapter 16); Sensory Structures (Chapter 17).

**Important dates:**

- First day of class: August 20 (Lab will also meet on this day!)
- Labor day (no class): September 1
- Exam I: September 17
- Exam II: October 13
- Last day to drop: October 29
- Exam III: November 7
- Thanksgiving holiday: November 26-28
- Last day of class: December 5
- Final exam: December 11 (1:30 p.m.)—**Comprehensive!!!**
Biology 3574—Comparative Anatomy Laboratory  
School of Mathematical and Natural Sciences  
Fall 2014, Wednesday 2:10-5:00  
Science Center, Room B31

Instructor: Dr. John L. Hunt. Office: B-11, Science Center. Phone: 870-460-1466  
E-mail: huntj@uamont.edu. Website: http://www.uamont.edu/facultyweb/Huntj/  
Office Hours: 9-10 M-F, 2-3 M, T, Th, F, or by appointment.

Prerequisites: BIOL 2153, BIOL 2161.


Course Objectives: To provide a basic understanding of vertebrate anatomy, with a focus on the evolution of shared morphological characteristics.

Grading: This lab is a component of the Comparative Anatomy course. Grading for the course is on the standard 10-point scale (90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F). Points will be earned from 4 scheduled 50-point practical examinations, which will be added into your Comparative Anatomy grade. There is no “extra” credit.

Attendance: Your success in this course is directly dependent upon your attendance and participation in the lab. To this end, one percentage point will be removed from your class grade for each unexcused lab absence. It is the responsibility of the student to provide a university-approved excuse for each class missed on the next class day. It is important for you to note that you are responsible for material covered in every lab, even if you miss the lab with an excused absence. It is your responsibility to obtain the material you have missed.

Class policies. The points in this class are not concentrated near the end—you need to do well early in the semester. The instructor is here to help you. Please feel free to ask questions at any time. You are encouraged to seek help outside of regular class hours if you are so inclined.

Comparative anatomy lab is a difficult lab that requires a great deal of study and memorization. Many students consider laboratory sessions an opportunity to pull up their lecture grade. However, whether this lab hurts or helps your lecture grade will depend entirely upon the amount of effort you put forth. The lab will be open at various times during the semester; please feel free to study and review in the lab during these times. You MUST attend all lab sessions, and you are expected to remain for the duration of the lab. Any lab in which a student skips out early, or spends lab time texting or surfing the web, will be treated as an absence. Lab time is limited—be sure and read the appropriate lab manual sections before you come to lab.
Each student will select a lab partner before the second lab. Lab sessions are somewhat unstructured, and each pair of students may work at its own pace. However, you MAY NOT ditch your lab partners—students caught doing so will be docked points. All students must participate in dissections, no matter how gross and disgusting they might seem. Soon, you’ll get used to the smell, and manipulating cat guts will seem fun to you.

Lab dissections are messy by their nature. Please be aware that preservative chemicals smell bad and can ruin clothing—please dress appropriately. Shoes are required at all times, and sandals or open-toed shoes are probably not a good idea. You will want latex gloves (probably several pairs per lab), which WILL NOT be provided for you. If you do not use gloves, you will find that the smell of preservative materials and shark innards will permeate your skin, vastly reducing your enjoyment of pizza consumption and “romantic” activities.

This course involves the frequent use of chemicals. Although preservative chemicals are much safer today than in years past, short and long-term health hazards are associated with the use of all chemicals. These health risks are significantly higher for students with chemical allergies, students who are asthmatic, and students who are pregnant. It is the responsibility of the student to properly use safety equipment and follow all safety rules to minimize health risks.

It is your responsibility to clean up after your dissections. Students who leave messes for the instructor or their lab partners to clean up will be penalized through the only means possible—their grade. Your instructor will explain proper disposal of animal parts to you.

Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on pages 39-45 of the 2013-2015 UAM Catalog.

Please do not hold conversations with classmates during lecture. **DO NOT BRING CELL PHONES TO CLASS!** If your cell phone rings during my lecture, I will respond in the only manner available to me—by adjusting your grade.

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<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Chapter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 20</td>
<td>Introduction, protochordates</td>
<td>Chapters 1, 2</td>
</tr>
<tr>
<td>August 27</td>
<td>External anatomy, integument</td>
<td>Chapter 4</td>
</tr>
<tr>
<td>September 3</td>
<td>Agnathans, lamprey</td>
<td>Chapter 3</td>
</tr>
<tr>
<td>September 10</td>
<td>FIRST PRACTICAL</td>
<td></td>
</tr>
<tr>
<td>September 17</td>
<td>Skulls</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>September 24</td>
<td>Skeletal systems</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>October 1</td>
<td>SECOND PRACTICAL</td>
<td></td>
</tr>
<tr>
<td>October 8</td>
<td>Muscular systems</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>October 15</td>
<td>Muscular systems</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>October 22</td>
<td>Digestive systems</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>October 29</td>
<td>THIRD PRACTICAL</td>
<td></td>
</tr>
<tr>
<td>November 5</td>
<td>Circulatory, respiratory systems</td>
<td>Chapter 8</td>
</tr>
<tr>
<td>November 12</td>
<td>Urogenital systems</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>November 19</td>
<td>Nervous systems</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>November 26</td>
<td>THANKSGIVING BREAK</td>
<td></td>
</tr>
<tr>
<td>December 3</td>
<td>FOURTH PRACTICAL</td>
<td></td>
</tr>
</tbody>
</table>
SCHOOL OF MATHEMATICAL AND NATURAL SCIENCES SYLLABUS

INSTRUCTOR NAME: Dr. Edmond J. Bacon

TELEPHONE: Office 870-460-1864 Home 870-367-0407 Cell 870-723-4671

INSTRUCTOR EMAIL ADDRESS: bacon@uamont.edu

OFFICE NUMBER: Room B-29 in Science Center

OFFICE HOURS: MW 9:00 – 10:00; 1:30 – 3:00; T 9:30 – 11:00; 1:30 – 3:00

COURSE TITLE AND CREDIT HOURS: Biology 358V Field Studies II, 2 hours credit

Required Text: Pflieger, W. L. 1997. Fishes of Missouri

PREREQUISITES: Biol. 2153 and 2161

COURSE OBJECTIVES:

To acquaint the student with the ecology of freshwater fishes with special emphasis on identifications of common fishes in Arkansas.

STUDENT LEARNING/OUTCOMES:

By the conclusion of this course the student should be able to identify, know the common names, and scientific names of common fishes in Arkansas.

FEEDBACK SCHEDULE: Information regarding instructor response and availability. For example: Most often, a student can expect a response to email within 24 hours Monday through Friday. No emails will be answered after 5 p.m. on Friday until the following Monday.

ATTENDANCE POLICY /PARTICIPATION REQUIREMENTS:

It is a University policy that students are expected to attend classes for which they are enrolled. Arriving late to class or leaving early is unacceptable. Students who
are frequently absent from the class typically receive lower grades. Make up exams and quizzes will be given at the end of the semester for students with official documentations for absences. **Cell telephones and electronic devices must be turned off during the class. No head phones or electronic devices are allowed to be used during examinations. Students will not be given the exam until they comply with these regulations.**

**ASSESSMENTS:** The final grade will be based on two laboratory exams.

<table>
<thead>
<tr>
<th>GRADING SCALE</th>
<th>GRADE POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100 = A</td>
<td>Exam I = 100</td>
</tr>
<tr>
<td>80-89 = B</td>
<td>Exam II = 100</td>
</tr>
<tr>
<td>70-79 = C</td>
<td>TOTAL POINTS = 200</td>
</tr>
<tr>
<td>60-69 = D</td>
<td></td>
</tr>
<tr>
<td>00-59 = F</td>
<td></td>
</tr>
</tbody>
</table>

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**ACADEMIC DISHONESTY:**

1. **Cheating:** Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
a. Copying from another student’s paper;
b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
c. Collaboration with another student during the examination;
d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
e. Substituting for another person during an examination or allowing such substitutions for oneself.

2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be a zero grade for the examination.

COURSE OUTLINE/CALENDER:

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>CHAPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of Freshwater Fishes I</td>
<td>Game Fishes</td>
</tr>
<tr>
<td>LABORATORY EXAM I</td>
<td>STUDY GUIDE</td>
</tr>
<tr>
<td>Identification of Freshwater Fishes II</td>
<td>Misc. Species</td>
</tr>
<tr>
<td>LABORATORY EXAM II</td>
<td>STUDY GUIDE II</td>
</tr>
</tbody>
</table>
SPECIAL DATES OF CONCERN:
09 Jan  - last day to register or add a class
18 Mar – last day to drop a class
23–27 Mar – Spring Break
28 Apr – last day of class
29 Apr–05 May – Final Exam Period
SCHOOL OF MATHEMATICAL AND NATURAL SCIENCES SYLLABUS

INSTRUCTOR NAME: Dr. Edmond J. Bacon

OFFICE LOCATION: Science Center Room B-29

TELEPHONE: Office 870-460-1864 Home 870-367-0407 Cell 870-723-4671

INSTRUCTOR EMAIL ADDRESS: bacon@uamont.edu

OFFICE HOURS: MWF 10:00 - 11:00; T 9:30 – 11:00

COURSE TITLE AND CREDIT HOURS: Biology 3584 Invertebrate Zoology, 4 credits

COURSE DESCRIPTION:
Classification, phylogenetic relationships, morphology, function, and life histories of invertebrates, emphasizing freshwater and marine invertebrates.

PREREQUISITES: Biol. 1153 and 1161.


STUDENT LEARNINGS OUTCOMES:
By the conclusion of this course you should understand the classification, morphology, function, identification, and life histories of common freshwater invertebrates in the region.

ATTENDANCE POLICY / PARTICIPATION REQUIREMENTS:
It is a University policy that students are expected to attend classes for which they are enrolled. Arriving late to class or leaving early is unacceptable. Students who are frequently absent from the laboratory exercises consistently receive lower grades. Some field trips may extend beyond 4:30 p.m. Make up exams will be given at the end of the semester for students with official documentations for absences.

CELL PHONES AND ELECTRONIC DEVICES:
All cell phones and electronic devices must be turned off during the class and laboratory. Computers including ipads are allowed to be used during lectures and laboratory exercises, but cannot be used during examinations.

**COURSE OUTLINE/CALENDER FOR LECTURE:**

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>CHAPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Aug - 30 Sep</td>
<td>Phylum Arthropoda: Part I</td>
<td>15, 17 and 19</td>
</tr>
<tr>
<td><strong>01 – 04 OCT</strong></td>
<td><strong>HOUR EXAM I</strong></td>
<td><strong>15, 17 AND 19</strong></td>
</tr>
<tr>
<td>07 - 21 Oct</td>
<td>Phylum Arthropoda: Part II</td>
<td>16</td>
</tr>
<tr>
<td>23 - 28 Oct</td>
<td>Phylum Annelida</td>
<td>14</td>
</tr>
<tr>
<td><strong>30 OCT</strong></td>
<td><strong>EXAMINATION II</strong></td>
<td><strong>14 AND 16</strong></td>
</tr>
<tr>
<td>01 - 15 Nov</td>
<td>Phylum Mollusca</td>
<td>20</td>
</tr>
<tr>
<td>18 Nov</td>
<td>Phylum Nematoda</td>
<td>12</td>
</tr>
<tr>
<td>20 Nov</td>
<td>Phylum Rotifera</td>
<td>12</td>
</tr>
<tr>
<td><strong>22 NOV</strong></td>
<td><strong>EXAMINATION III</strong></td>
<td><strong>12 AND 20</strong></td>
</tr>
<tr>
<td>25 Nov</td>
<td>Phylum Platyhelminthes</td>
<td>10</td>
</tr>
<tr>
<td>25 Nov</td>
<td>Lophophorates</td>
<td>21</td>
</tr>
<tr>
<td>02 - 06 Dec</td>
<td>The Protists</td>
<td>5</td>
</tr>
<tr>
<td><strong>09 - 13 DEC</strong></td>
<td><strong>EXAMINATION IV</strong></td>
<td><strong>5, 10, AND 21</strong></td>
</tr>
</tbody>
</table>

**LABORATORY SCHEDULE:**

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Aug - 27 Sep</td>
<td>PHYLUM ARTHROPODA: Hexapods</td>
</tr>
<tr>
<td><strong>30 SEP</strong></td>
<td><strong>LABORATORY EXAM I</strong></td>
</tr>
<tr>
<td>01 – 21 Oct</td>
<td>Phylum Arthropoda: Crustaceans</td>
</tr>
<tr>
<td>23 – 28 Oct</td>
<td>Phylum Rotifera: Rotifers</td>
</tr>
<tr>
<td>30 Oct</td>
<td>Phylum Gastrotrich: Gastrotrichs</td>
</tr>
<tr>
<td>30 Oct</td>
<td>Phylum Nematomorpha: Horsehair Worms</td>
</tr>
<tr>
<td><strong>01 NOV</strong></td>
<td><strong>LAB EXAMINATION II</strong></td>
</tr>
<tr>
<td>04 - 15 Nov</td>
<td>Phylum Annelida: Annelids</td>
</tr>
<tr>
<td>18 - 22 Nov</td>
<td>Phylum Mollusca: Molluscs</td>
</tr>
<tr>
<td>25 Nov – 02 Dec</td>
<td>The Protists</td>
</tr>
<tr>
<td><strong>03 - 06 DEC</strong></td>
<td><strong>LAB EXAMINATION III</strong></td>
</tr>
</tbody>
</table>

**ASSESSMENTS:** The final grade will be based on four lecture examinations, two laboratory examinations,
laboratory reports, and a scientific paper.

<table>
<thead>
<tr>
<th>GRADING SCALE</th>
<th>GRADE POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100 = A</td>
<td>Lecture Exam I = 100 Lab Exam I = 100</td>
</tr>
<tr>
<td>80-89 = B</td>
<td>Lecture Exam II = 100 Lab Exam II = 100</td>
</tr>
<tr>
<td>00-79 = C</td>
<td>Lecture Exam III = 100 Lab Exam III = 100</td>
</tr>
<tr>
<td>60-69 = D</td>
<td>Lecture Exam IV = 100 *Collection = 100</td>
</tr>
<tr>
<td>00-59 = F</td>
<td></td>
</tr>
</tbody>
</table>

*Collection is optional

**SPECIAL DATES OF CONCERN:**

23 Aug - last day to register or add a class
30 Oct - last day to drop with a W
06 Dec – last day of class

**STUDENTS WITH DISABILITIES:** It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.

**STUDENT CONDUCT STATEMENT:** Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

**ACADEMIC DISHONESTY:**

1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.

2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name in on the work submitted.
3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be a zero grade for the examination.
Instructor: Dr. John L. Hunt. Office: B-11, Science Center. Phone: 870-460-1466
E-mail: huntj@uamont.edu. Web page: http://www.uamont.edu/facultyweb/Huntj.
Office Hours: 10-11 MWF; 8:30-9:30 TTh; 2-3 MTThF, or by appointment.

ISBN: 9781936221448 (Available from the UAM bookstore, $87.50 new; $43.75 rental).

Class Web Page. The class web page may be found at: www.uamont.edu/facultyweb/Huntj/Evolution.htm. On this page there are lists of terms to know and lecture outlines for each of the topics we will cover. These outlines are general in nature, and are not meant to replace detailed notes which you should take in class. Test scores will be posted on the class web page shortly after each exam. Your score will be listed by an anonymous code word selected by you.

Course Objectives: To provide an understanding of evolutionary theory and processes, including selection, adaptation, and speciation. The course also explores classification of organisms and scientific nomenclature.

Grading: Grading is on the standard 10-point scale. Points will be computed as a percentage of 525 points. There are no “bonus” points, and no “extra” credit. Points will consist of the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three 100-point exams</td>
<td>300</td>
</tr>
<tr>
<td>10 unannounced quizzes</td>
<td>50</td>
</tr>
<tr>
<td>One 25-point homework assignment</td>
<td>25</td>
</tr>
<tr>
<td>Final exam (partially comprehensive)</td>
<td>150</td>
</tr>
</tbody>
</table>

Exams will consist of a mixture of essay, short answer, and objective-type questions, and may also require some drawing. Exams will occur on dates listed below; these dates will not change. Only the final exam will be comprehensive. The final exam will be on Friday, May 1, at 1:30 p.m. There will be at least one quiz per week; these quizzes will be unannounced and will consist of one to five questions from the lecture material from the previous day. Quizzes are designed to encourage daily review and study, as well as regular attendance and promptness, and therefore MAY NOT be made up. Note: the number of quizzes is approximate. There may be more than 10 quizzes; if this occurs you drop your lowest quiz grades. Slight changes in the grading scheme may occur at the discretion of the instructor.
Attendance: Attendance at all lectures, exams, and lab sessions is mandatory. Attendance will be recorded regularly. Most exam material will come from lectures, so that your success, or lack thereof, in this class is directly related to attendance. Those students who miss more than three class periods without a university-approved excuse will be docked one point from the final grade for each missed class thereafter. For example, a student who earns a 90 average for the class but has four unexcused absences will receive a grade of B for the class. It is the responsibility of the student to provide a university-approved excuse for each class missed on the next class day.

Missed exams may be made up only by students with an approved university excuse, by arrangement with the instructor. Approved university excuses do not include “hung over,” “overslept,” or “my car is busted.” Please be aware that any make-up exam may NOT be the same exam given during the normal class period. **Students are responsible for all material presented in class, even with an approved university excuse for missing a class.** It is the responsibility of the student to obtain missed material from classmates—the instructor will not provide notes for you.

**Class policies.** The points in this class are not concentrated near the end—you need to do well early in the semester. The instructor is here to help you. Please feel free to ask questions at any time. You are encouraged to seek help outside of regular class hours if you are so inclined, either during office hours or by appointment.

Please do not hold conversations with classmates during lecture. You may tape lectures if you so desire, but this should not substitute for the taking of detailed class notes. **DO NOT BRING CELL PHONES TO CLASS!** If your cell phone rings during my lecture, I will respond in the only manner available to me—by adjusting your grade. You may not text-message or keep your cell phone on your desk during class. **If I see you text-messaging during class, you will be asked to leave.** If this occurs twice, you will be assigned a grade of F for the course. No electronic devices other than tape recorders are allowed in class—this includes laptops and i-pods. You may not read outside material, study other classes, or work crossword puzzles during class. Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on pages 39-45 of the 2013-2015 UAM Catalog.

The last date to drop this course with a W (and for most other courses at UAM) is March 18. A grade of I will only be given if a student has completed 75% of the work of the course, with a mathematical possibility of obtaining a passing grade, and will be given only for University-approved excuses, with the approval of the Dean of Math and Sciences.

**Academic dishonesty:** Cheating will not be tolerated. The Academic Code of the University of Arkansas-Monticello may be found on page 40 of the 2013-2015 UAM Catalog. Please note the following definitions of academic dishonesty:

Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, or other class work. This includes but is not limited to the following classes of dishonesty: a) Copying from another student’s paper; b) Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor; c) Collaboration with another student during the examination; d) Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the
unreleased contents of coming examinations or the use of any such material; e) Substituting for another person during an examination or allowing such substitutions for oneself.

Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

Please note that the instructor has wide latitude in taking corrective action in response to cheating; expect the harshest possible response in this class. In other words, if I catch you cheating even once, I will assign a grade of F for the course. You will not be allowed to have a cell phone of any sort on your desk during exams (or any other time during class).

**Students with disabilities:** It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the commitment of the University to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall, Room 120, phone 870-460-1026, TDD 870-460-1626, fax 870-460-1926.

**Subjects to be covered (with suggested reading assignments where appropriate):** Introduction, History of Evolutionary Theory (Chapters 1 and 2); Evidence for Evolution (Chapter 3); Genetics and Embryological Development (Chapter 5); Natural Selection (Chapter 6); Random Events in Populations (Chapter 6); Adaptation (Chapter 8); Classification (Chapter 4); What is a Species? (Chapter 10); Speciation (Chapters 10 and 11); Geographic Variation and Subspecies; Biogeography; The Origin of Life; The Fossil Record (Chapter 3); Evolution of Humans (Chapter 14); Rates of Evolution; Coevolution (Chapter 12); Extinction; Domestication; Nomenclature.

**Important dates:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 8</td>
<td>First day of class.</td>
</tr>
<tr>
<td>February 3</td>
<td>Exam I.</td>
</tr>
<tr>
<td>February 26</td>
<td>Exam II.</td>
</tr>
<tr>
<td>March 18</td>
<td>Drop date.</td>
</tr>
<tr>
<td>March 23-27</td>
<td>SPRING BREAK (Woo-hoo!)</td>
</tr>
<tr>
<td>April 7</td>
<td>Exam III</td>
</tr>
<tr>
<td>April 28</td>
<td>Last day of class.</td>
</tr>
<tr>
<td>May 1</td>
<td>Final Exam, 1:30 p.m.</td>
</tr>
</tbody>
</table>

246
Class Website:  http://www.uamont.edu/facultyweb/huntj/Biology1063.htm
Dr. Hunt’s Website:  http://www.uamont.edu/facultyweb/huntj/
UAM Home Page:  http://www.uamont.edu/
UAM Bookstore:  http://www.bkstr.com/uamontstore/home

Dr. Hunt’s Phone Number:  870-460-1466
Special Student Services:  870-460-1026
BIOL 3801
Department of Mathematical and Natural Sciences
Mammalian Anatomy
Fall 2004, Lab 1:10 -4:00 Wednesday
Science Center, Room B31

Instructor: Dr. John L. Hunt.
Office: B-11, Science Center.
Phone: 870-460-1466
E-mail: huntj@uamont.edu.
Office Hours: M, F, 1:00-4:00; T, Th, 9:00-11:00; or by appointment.

Prerequisites: BIOL 1153, BIOL 1161.


Required Dissecting Equipment: Scissors, scalpel, forceps, blunt probe, sharp probe, rubber gloves.

Course Objectives: To provide a basic understanding of vertebrate anatomy, with a focus on the evolution of shared morphological characteristics.

Grading: Grading is on the standard 10-point scale (90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F). In the unlikely event that a small curve is applied, it will be done at the end of the course. There is no “extra” credit. Points will be earned from 4 scheduled 50-point practical examinations, and the final grade will be computed as a percentage of 200 points. There is no “extra” credit.

Attendance: Your success in this course is directly dependent upon your attendance and participation in the lab. All exams are in practical format, and therefore, make-ups WILL NOT be possible. It is important for you to note that you are responsible for material covered in every lab, even if you miss the lab with an excused absence. It is your responsibility to obtain the material you have missed.

Class policies. The points in this class are not concentrated near the end—you need to do well early in the semester. The instructor is here to help you. Please feel free to ask questions at any time. You are encouraged to seek help outside of regular class hours if you are so inclined.

Comparative/mammalian anatomy lab is a difficult lab that requires a great deal of study and memorization. Many students consider laboratory sessions as an opportunity to pull up their lecture grade. However, whether this lab hurts or helps your lecture grade will depend entirely upon the amount of effort you put forth. The lab will be open at various times during the semester; please feel free to study and review in the lab during these times. You MUST attend all lab sessions, and you are expected to
remain for the duration of the lab. Lab time is limited—be sure and read the appropriate lab manual sections before you come to lab.

Each student will select a lab partner before the second lab. Lab sessions are somewhat unstructured, and each pair of students may work at its own pace. However, you MAY NOT ditch your lab partners—students caught doing so will be docked points. All students must participate in dissections, no matter how gross and disgusting they might seem. Soon, you’ll get used to the smell, and manipulating cat guts will seem fun to you.

Lab dissections are messy by their nature. Please be aware that preservative chemicals smell bad and can ruin clothing—please dress appropriately. Shoes are required at all time, and sandals or open-toed shoes are probably not a good idea. You will want latex gloves (probably several pairs per lab), which WILL NOT be provided for you. If you do not use gloves, you will find that the smell of preservative materials and shark innards will permeate your skin, vastly reducing your enjoyment of pizza consumption, and “romantic” activities.

This course involves the frequent use of chemicals. Although preservative chemicals are much safer today than in years past, short and long-term health hazards are associated with the use of all chemicals. These health risks are significantly higher for students with chemical allergies, students who are asthmatic, and students who are pregnant. It is the responsibility of the student to properly use safety equipment and follow all safety rules to minimize health risks.

It is your responsibility to clean up after your dissections. Students who leave messes for the instructor or their lab partners to clean up will be penalized through the only means possible—their grade. Your instructor will explain proper disposal of animal parts to you.

Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on page 46 of the 2003-2005 UAM Catalog.

**Academic dishonesty:** Cheating will not be tolerated. The Academic Code of the University of Arkansas-Monticello may be found on page 65 of the 2003-2005 UAM Catalog. Please note that the instructor has wide latitude in taking corrective action in response to cheating; expect the harshest possible response in this class.

**Students with disabilities:** It is the policy of the University of Arkansas—Monticello to accommodate individuals with disabilities pursuant to federal law and the commitment of the University to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall, Room 120, phone 870-460-1026, TDD 870-460-1626, fax 870-460-1926.

**Lab schedule (with associated chapters of the lab manual):**

August 25 Introduction, Taxonomy (Chapter 1)
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1</td>
<td>Protochordates (Chapter 2)</td>
</tr>
<tr>
<td>September 8</td>
<td>External anatomy, integument (Chapter 4)</td>
</tr>
<tr>
<td>September 15</td>
<td>Agnathans, lamprey (Chapter 3)</td>
</tr>
<tr>
<td>September 22</td>
<td>FIRST PRACTICAL</td>
</tr>
<tr>
<td>September 29</td>
<td>Skulls (Chapter 5)</td>
</tr>
<tr>
<td>October 6</td>
<td>Skeletal systems (Chapter 5)</td>
</tr>
<tr>
<td>October 13</td>
<td>Muscular systems (Chapter 6)</td>
</tr>
<tr>
<td>October 20</td>
<td>SECOND PRACTICAL</td>
</tr>
<tr>
<td>October 27</td>
<td>Digestive systems (Chapter 7)</td>
</tr>
<tr>
<td>November 3</td>
<td>Circulatory, respiratory systems (Chapter 8)</td>
</tr>
<tr>
<td>November 10</td>
<td>THIRD PRACTICAL</td>
</tr>
<tr>
<td>November 17</td>
<td>Urogenital systems (Chapter 9)</td>
</tr>
<tr>
<td>November 24</td>
<td>Nervous systems (Chapter 10)</td>
</tr>
<tr>
<td>December 1</td>
<td>Review</td>
</tr>
<tr>
<td>December 8</td>
<td>FOURTH PRACTICAL</td>
</tr>
</tbody>
</table>
Instructor: Dr. Christopher G. Sims
Office: B 4
Office Phone: 460-1664
E-mail: simsc@uamont.edu
Web Site: http://www.uamont.edu/facultyweb/Sims/

Office Hours: MWF 1:30-3:00; TH 9:00-11:00. I will be in the office at other times as well. Changes in this schedule may occur at any time and will be posted outside my door or announced in class. If you need to see me it is strongly recommended that you e-mail and we can schedule an appointment.

Course Title and Credits: Waterfowl Ecology (BIOL 4594); 4 Credit Hours

Course Description: In this course we will study the environment and its components including energy flow, population and community structure, ecological succession, how evolution influences ecological structure.

Prerequisites: BIOL 3484


Attendance, Testing, and Cheating: Attendance in this course is mandatory and will be recorded regularly. You will be allowed 3 unexcused absences during the semester. After the third unexcused absence your grade will be reduced one percentage point for each unexcused absence thereafter. Field trip attendance is mandatory in order to develop adequate identification skills. Failure to attend on field trip days will result in loss of 1 letter grade from your semester grade.

Exam attendance is required and make-up exams will be given only under extreme circumstances. Make-up exams will be allowed only in cases of illness with a doctor’s excuse, excused university functions, or family emergencies with a written excuse from a family member. If you are forced to miss an exam you must notify me within 24 hours of the exam. Failure to do so will result in a zero on that exam. If you know ahead of time that you will be absent please let me know and prior arrangements for testing can be made. Cheating in any form will not be tolerated and will automatically result in failure of the course. Cellular phones are included in the cheating policy and any appearance of a cellular phone (or other communication devise) during a test will be considered an
attempt to cheat by the student.

******Likewise electronic devices such as cellular phones etc. will not be allowed in lecture unless prior approval is given by
the instructor. Failure to follow this rule will result in the student being asked to leave class.

Ethics Rule: Anyone known to be actively engaged in killing protected species of any kind (avian or other) will automatically receive an F
in this course and will be reported immediately to the state and federal authorities. It is illegal to kill any species of animal that is not
designated as a game species with a legal season or an introduced species that is not protected.

Course Grade: Lecture and Lab:

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Lecture Exams:</td>
<td>100 pts. each</td>
</tr>
<tr>
<td>Lab Exam Waterfowl Identification:</td>
<td>100 pts.</td>
</tr>
<tr>
<td>Waterfowl Morphology Test</td>
<td>100 pts.</td>
</tr>
<tr>
<td>Taxonomy</td>
<td>100 pts.</td>
</tr>
<tr>
<td>Journal Article Summaries and Discussion</td>
<td>100 pts</td>
</tr>
<tr>
<td>Total:</td>
<td>800 pts.</td>
</tr>
</tbody>
</table>

Point spread (grade based on a percentage of 800 possible points):
A = 100-89.5 pts., B = 89.4-79.5 pts., C = 79.4-69.5 pts., D = 69.4-59.5 pts., F < 59.4

*******NO EXTRA CREDIT will be given under any circumstances!!!

Each student will choose a code number/code name prior to the first test and this will be used to post grades. Grades will be posted on
my website (see above). If you do not wish to have your grade posted please let the instructor know prior to the first test. Grades will
not be provided over the phone or E-mail.

Tentative Lecture Schedule (topics are subject to change):

Introduction and Historical Overview
Classification
Courtship Behavior, Mating Systems, and Pair-Bond Formation
Test #1
Reproductive Ecology
Nesting, Brood Rearing and Molt
Feeding Ecology
Test #2
Winter Ecology
Major Habitats
Individual Species Accounts and Ecological Requirements
Test #3
Conservation and Management
Final

Lab Schedule:
The Lab schedule is a tentative schedule and will change often with weather etc. Check your UAM e-mail often for announcements and changes.

Waterfowl Morphology
Field observation and ID (all weeks permitted by weather)
Field trips (2) to active waterfowl management area (private and/or government)

Important Dates:
January 7 (Wed) First day of classes for sessions 1 and 8W1. Admission application deadline.
January 9 (Fri) Last day to register or add classes.
January 19 (Mon) Martin Luther King Holiday. Offices and classes closed.
February 27 (Fri) Deadline to apply for August and December graduation.
March 18 (Wed) Last day to drop a session 1 class or withdraw from the term (not applicable to other sessions). Grade(s) will be W.
March 23-27 (Mon-Fri) Spring Break.
April 6 (Mon) Preregistration for Summer and Fall 2015 begins.
April 17 (Fri) Preregistration for Summer and Fall 2015 ends.
April 28 (Tues) Last day of classes for sessions 1 and 8W2.
April 29 –May 5 (Wed-Tues) Final exam period.
May 8 (Fri) Commencement.

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Student conduct statement: Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

Academic dishonesty:
1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.
2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.
For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be given a failing grade (F) in the course.
Instructor: Dr. Christopher G. Sims
Office: B 4
Office Phone: 460-1664
E-mail: simsc@uamont.edu
Web Site: http://www.uamont.edu/facultyweb/Sims/

Office Hours: 1:30-3:00; TH 9:00-11:00. I will be in the office at other times as well. Changes in this schedule may occur at any time and will be posted outside my door or announced in class. If you need to see me it is strongly recommended that you e-mail and we can schedule an appointment.

Course Title and Credits: Vertebrate Physiology (BIOL 4634); 4 Credit Hours

Course Description: To convey knowledge of vertebrate physiology and physiological principles that shape the way the vertebrate body functions.

Prerequisites: BIOL 3363 and eight hours of chemistry or by instructor’s permission


Attendance, Testing, and Cheating: Attendance in this course is mandatory and will be recorded regularly. You will be allowed 3 unexcused absences during the semester. After the third unexcused absence your grade will be reduced one letter grade for each unexcused absence thereafter.

Exam attendance is required and make-up exams will be given only under extreme circumstances. Make-up exams will be allowed only in cases of illness with a doctor’s excuse, excused university functions, or family emergencies with a written excuse from a family member. If you are forced to miss an exam you must notify me within 24 hours of the exam. Failure to do so will result in a zero on that exam. If you know ahead of time that you will be absent please let me know and prior arrangements for testing can be made. Cheating in any form will not be tolerated and will automatically result in failure of the course. Cellular phones are included in the cheating policy and any appearance of a cellular phone (or other communication devise) during a test will be considered an attempt to cheat by the student.

*****Likewise electronic devices such as cellular phones etc. will not be allowed in lecture unless prior approval is given by the instructor. Failure to follow this rule will result in the student being asked to leave class.
Course Grade:
Exam 1: 100 pts.
Exam 2: 100 pts.
Exam 3: 100 pts.
Final Exam: 100 pts.
Lab (article summaries, lab summaries, notebooks etc.) 100 pts.
Total for Course: 500 pts.

Grade Scale (percentage):
A = 100-89.5, B = 89.4-79.5, C = 79.4-69.5, D = 69.4-59.5, F < 59.4

********NO EXTRA CREDIT will be given under any circumstances!!!

Each student will choose a code number/code name prior to the first test and this will be used to post grades. Grades will be posted on my website (see above). If you do not wish to have your grade posted please let the instructor know prior to the first test. Grades will not be provided over the phone or E-mail.

Lecture Schedule:

<table>
<thead>
<tr>
<th>Chapter #</th>
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<tbody>
<tr>
<td>1</td>
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<td>15</td>
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</tbody>
</table>

Tests will be announced at least one week in advance.

Important Dates:
January 7 (Wed) First day of classes for sessions 1 and 8W1. Admission application deadline.
January 9 (Fri) Last day to register or add classes.
January 19 (Mon) Martin Luther King Holiday. Offices and classes closed.
February 27 (Fri) Deadline to apply for August and December graduation.
March 18 (Wed) Last day to drop a session 1 class or withdraw from the term (not applicable to other sessions). Grade(s) will be W.
March 23-27 (Mon-Fri) Spring Break.
April 6 (Mon) Preregistration for Summer and Fall 2015 begins.
April 17 (Fri) Preregistration for Summer and Fall 2015 ends.
April 28 (Tues) Last day of classes for sessions 1 and 8W2.
April 29 –May 5 (Wed-Tues) Final exam period.
May 8 (Fri) Commencement.

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Vertebrate Physiology Syllabus Addendum

Lab

The actual lab exercises to be conducted have not been determined as yet. You will be notified each week as to the exercise to be conducted.

All lecture exams will be given during lab time to ensure enough time for completion.

Grading

Lab Summaries: 20 pts. each (number to be determined)
Paper Summaries: 20 pts. each (2-4 of these this semester)
Paper discussions: 10 pt. participation (2-4 of these this semester)

Lab grade calculation:

Lab is worth 100 pts. toward your total grade in the course (1/5 of the final grade).

To calculate your lab grade keep up with the total # of points you accrue during the semester.
Also keep up with the total possible points for the semester.

(total points / total possible points) x 100 = your lab grade

I will drop your lowest lab grade (any 20pt. assignment), however failure to turn in or attempt an assignment will not be considered for the drop grade and will count as a 0.
Mammalian Histology (Biology 4664). Prerequisites: Biol 1153, 1161


Recommended: Histology Atlas (the most popular are listed below)
1. Color Atlas of Histology by L.P. Gartner and J.L. Hiatt Williams & Wilkins
2. Color Atlas of Basic Histology by I. Berman Lange Medical Books
3. Color Atlas of Histology by Erlandsen and Mangey Mosby
4. DiFiore's Atlas of Histology and Functional Correlations by Eroschenko Williams & Williams

Dr. Russell O. Nordeen Office Room B27 Science Center. Phone: 460-1564
e-mail nordeen@uamont.edu Office hours M-F 10-1 IAM W 1-5 PM Th 2-3 PM and by appointment.

Lecture three hours per week, laboratory three hours per week. Lab activities will follow lecture content and will be closely integrated with lecture material. It is crucial that students read ahead in order to understand lab observations.

Study of cells and tissues with emphasis on identification of characteristic features important in understanding structure-function relationships.

CHAPTER ASSIGNMENTS
p. 426-431
p. 426-431
Chapters 1-2
Chapters 5 Chapters 4 & I O
Chapters 6
Chapters 7 & 20
Chapters 3, 8 & 11
Chapter 9
Chapter 12
Chapters 13 -15
Chapter 16
Chapter 18
Chapter 19
Chapter 17
Chapter 21
GRADING There will be five lecture exams each counting 100 points including a final exam that will be comprehensive. In addition there will be four laboratory exams each worth 100 points. Quizzes will be given each lab and may be based on reading assigned for the lab or slides viewed during lab. Each quiz will be worth 10 points. The top 10 quizzes will be added together for a total possible of 100 quiz points. **There will be no make up quizzes.** Your lowest exam score (excluding the final exam score) be replaced by the quiz scores thus total points for the course = 900. **There are no make-up exams without an authorized university excuse; students must notify the instructor one week in advance and a memo of the reason for the authorized university excuse provided.** In this instance, it is up to the student to schedule a suitable make-up exam time. Your grade will be determined by adding exam scores and dividing by 900 to determine an average:

- A = 90-100;  
- B = 80-89;  
- C = 70-79;  
- D = 60-69;  
- F = 0-59

Students are responsible for supplying their own Scantron forms for all exams. Scores on exams will be posted by a code number assigned on the first exam. If scores are not posted, the exams have not been graded. Exams will viewed during lab. However, you are welcome to view your exam and discuss any question with the instructor during office hours or by appointment. The last day to view exams is Friday, December 8.

ATTENDANCE All students are expected to attend labs and are responsible for everything that takes place in the lab. Additionally, it is important that you attend lab on time so that you don't miss instructions presented at the beginning of lab or lab quizzes. If a student misses a quiz due to being late or leaving early that quiz score will be recorded as a 0. Students may be officially dropped from the lab the third time they are not present (page 80 of UAM catalog).

LABORATORY AND CLASSROOM POLICIES No food, drinks or tobacco use in the laboratory or lecture room. Students found cheating on examinations or will be given a grade of "F" for the course and might be expelled from the University. The following action is prohibited under the Student Conduct Code. Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others. Cell phones should be turned off during laboratory and lecture or in case of emergency put on silent mode.

STATEMENT ON DROP DATES Students dropping a class on or before November 8th will receive the grade of "W". Students dropping a course after November 8th will receive the grade of "F" if passing and the grade of "F" if not passing. No withdrawals will be permitted during the last three days of class.

OTHER Students are encouraged to bring the textbook to lecture and lab. Students must purchase at least a one inch three ring binder for the lab guide. Students are encouraged to bring colored pencils to lab for drawing purposes.

IMPORTANT DATES
- Wednesday, August 23
- Tuesday, August 29
- Monday, September 4
- Friday, October 6
- Monday, November 6
- Wednesday, November 8
Friday, November 17
Wednesday, November 22-Friday, November 24
Tuesday, December 5
Friday, December 8
Wednesday, December 13 10:30-12:30 AM Science Center B3

First day of classes.
Last day to register or add classes. Labor Day Holiday.
Deadline to file for May graduation. Preregistration for spring begins
Last day to drop with W. Preregistration for spring ends.
Thanksgiving Holiday
Last day to withdraw from class. Last day of class.
Final exam

STUDENTS WITH DISABILITIES
It is the policy of the University of Arkansas-Monticello to accommodate individuals with
disabilities pursuant to federal law and the University's commitment to equal educational
opportunities. It is the responsibility of the student to inform the instructor of any necessary
accommodations at the beginning of the course. Any student requiring accommodations should
contact the Office of Special Student Services located in Harris Hall Room 120, phone 870-460-
1026; TDD 870-460-1626; fax 870-460-1926.
DESCRIPTION: Study of the response of living organisms to drugs.

PREREQUISITES: Junior or senior standing.


STUDENT LEARNING OBJECTIVES: Know the different properties, sources, effects, administration, dosages, responses, and nomenclature of common drugs. Understand the action of drugs with receptors and the mechanism of the action of drugs.

REQUIRED CALCULATOR: Any non-graphing calculator is required for the exams. You may not borrow calculators or use the calculator function on a cell phone. GRAPHING CALCULATORS ARE NOT ALLOWED.

REQUIRED ATTENDANCE: You will be expected to attend every class meeting and arrive on time. If an absence occurs; it is the student’s responsibility to obtain the missed lecture material. *If you do not have time for class; do NOT expect my time later.*

CELL PHONES: TURN OFF YOUR CELL PHONES. You may not leave class to access your cell phone and return. Your career is more important than what/who is on the other end of your phone. However, you will be given enough rope to hang yourself. I will not ask anyone to turn off their cell phone. *If you do not have time for class because of your cell phone; do NOT expect my time later.* Accessing a cell phone during an exam constitutes cheating, and a score of zero will be recorded. Accessing a cell phone while reviewing confidential materials or exams will result in withdrawal/failure for the class.
COURSE CONTENT AND EXAM SCHEDULE:

Exam I  Intro, Geriatrics, Dosage, ANS (Symp. & Parasymp.)  Chap 1-7  Thurs. 2/05/15
Exam II Relaxants, anesthetics, CNS, Sedatives, Antianxieties Chap 8-12  Thurs. 2/26/15
Exam III Drugs of abuse, Antiepileptics, Antiparkinson Chap 13-17  Thurs. 4/02/15
Exam IV Anesthetics, Analgesics, Disinfectants Chap 18-20,28,44 Tues. 4/28/15
Final Exam Comprehensive  Thurs. 04/30/15 at 8:00 am NOT 8:10 am

EVALUATION:  There will be four exams of 100 points each and a comprehensive final exam of 200 points for a total of 600 points. The test format is predominantly matching, but may also include calculations, short answer, and multiple choice. The percentage score from the comprehensive final will substitute for ONE missed exam. Second and subsequent missed exams will have a zero recorded as the grade. Exams may not be made up or given late for any reason. If an absence is planned for a University sponsored event, exams should be taken early.

GRADING:  
A  90.0-100.0%  
B  80.0-90.0%  
C  70.0-80.0%  
D  60.0-70.0%  
F  ≤ 60.0%  

ACADEMIC MISCONDUCT:  Cheating will not be tolerated.  Penalties for violations are described on page 55 of the 2013-15 UAM catalog and include withdrawing the student from the class or awarding the student a failing grade for the course. Accessing a cell phone during an exam constitutes cheating, and a score of zero will be recorded. Accessing a cell phone while reviewing confidential materials or exams will result in withdrawal/failure for the class.

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Student Conduct Statement:  Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress
academically. This includes cell phone use during class. Seats may be assigned to prevent problems.
E-mail: huntj@uamont.edu. Web page: http://www.uamont.edu/facultyweb/Huntj.
Office Hours: 10-11 MWF; 8:30-9:30 TTh; 2-3 MTThF, or by appointment.

Suggested text: None. Some material will be provided by the instructor.

Course Objectives and Topics to Be Covered: To introduce the student to the techniques and concepts of basic biological research. Each student will select a research project and spend the semester working on it, including field and lab work, work on a research paper, and presentation of results at meetings as deemed appropriate by the instructor.

Tests and grading: Grades will be based on participation in and quality of research and writing assignments. Students will be expected to spend at least three hours per week working on the project for each hour of credit they receive. Each student will meet with the instructor at the beginning of the course and receive specific instructions about what is expected to earn the desired grade. The requirements for each student will vary based on the project selected; however, such requirements will be clearly established by agreement between student and instructor.

Class policies. The points in this class are not concentrated near the end—you need to do well early in the semester. The instructor is here to help you. Please feel free to ask questions at any time. You are encouraged to seek help outside of regular class hours if you are so inclined, either during office hours or by appointment.

Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on pages 39-45 of the 2013-2015 UAM Catalog.

The last date to drop this course with a W (and for most other courses at UAM) is March 18. A grade of I will only be given if a student has completed 75% of the work of the course, with a mathematical possibility of obtaining a passing grade, and will be given only for University-approved excuses, with the approval of the Dean of Math and Sciences.

Academic dishonesty: Cheating will not be tolerated. The Academic Code of the University of Arkansas-Monticello may be found on page 40 of the 2013-2015 UAM Catalog. Please note the following definitions of academic dishonesty:
1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, or other class work. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
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   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.

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3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

Please note that the instructor has wide latitude in taking corrective action in response to cheating; expect the harshest possible response in this class. In other words, if I catch you cheating even once, I will assign a grade of F for the course.

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Instructor Name: Karen Fawley, Ph.D
Instructor Location of Office: Museum of Natural History, Room 101
Instructor Phone: 870-460-1165
Instructor E-mail Address: fawley@uamont.edu
Instructor Website: http://www.uamont.edu/facultyweb/fawley
Office hours: T, 11-12:30pm; W, 2-4pm; Th 11:30-12:30; 2-3:30pm
Course Title and Credit Hours: Biology 4724, Aquatic Biology, 4 credit hours

Course Description: To familiarize students with the physical, chemical, biological, and ecological aspects of freshwater aquatic environments. Human impacts and interactions with aquatic systems will also be emphasized. This course includes a lecture and lab component.

Prerequisites: Biology 1153 and Biology 1161; Six hours of chemistry


Student Learning Outcomes: Upon completion of this course, students should have a general understanding of the physical, chemical, biological, and ecological aspects of freshwater aquatic environments.

Statement of Special Policies:

Class Attendance: Attendance will be taken during every lecture. In general, students who attend class regularly make better grades. As a courtesy to the students in the class and the instructor, please be on time.

Classroom Policies: Use of tobacco products is not permitted on UAM grounds.

Cell phones, pagers, and all electronics will be turned off during class

Cheating/Plagiarism: Cheating will not be tolerated. The Academic Dishonesty policy found on page 4 of this syllabus will be applied to students guilty of cheating on exams.
<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topic</th>
<th>Reading from:</th>
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<tbody>
<tr>
<td>W Jan 11</td>
<td>Course Overview</td>
<td>Freshwater Ecology</td>
</tr>
<tr>
<td>F Jan 13</td>
<td>Introduction</td>
<td>Ch 1</td>
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<tr>
<td>M Jan 16</td>
<td>MLK Jr. HOLIDAY-No class</td>
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<tr>
<td>W Jan 18</td>
<td>Properties of Water</td>
<td>Ch 2</td>
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<tr>
<td>F Jan 20</td>
<td>Properties of Water / Movement of Light, Heat and Chemicals in Water</td>
<td>Ch 2/Ch 3</td>
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<tr>
<td>M Jan 23</td>
<td>Movement of Light, Heat and Chemicals in Water</td>
<td>Ch 3</td>
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<tr>
<td>W Jan 25</td>
<td>Hydrologic Cycle and Physiography of Groundwater</td>
<td>Ch 4</td>
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<tr>
<td>F Jan 27</td>
<td>Hydrologic Cycle and Physiography of Groundwater</td>
<td>Ch 4</td>
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<tr>
<td>M Jan 30</td>
<td>Hydrology and Physiography of Wetland Habitats</td>
<td>Ch 5</td>
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<tr>
<td>W Feb 1</td>
<td>Hydrology and Physiography of Wetland Habitats</td>
<td>Ch 5</td>
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<tr>
<td>F Feb 3</td>
<td>Lakes and Reservoirs: Physiography</td>
<td>Ch 7</td>
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<tr>
<td>M Feb 6</td>
<td>Lakes and Reservoirs: Physiography</td>
<td>Ch 7</td>
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<tr>
<td>W Feb 8</td>
<td>Physiography of Flowing Water</td>
<td>Ch 6</td>
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<td>F Feb 10</td>
<td>Physiography of Flowing Water</td>
<td>Ch 6</td>
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<tr>
<td>M Feb 13</td>
<td>EXAM I (during lab time)</td>
<td>Ch 1-7</td>
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<tr>
<td>W Feb 15</td>
<td>Types of Aquatic Organisms</td>
<td>Ch 8</td>
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<tr>
<td>F Feb 17</td>
<td>Types of Aquatic Organisms</td>
<td>Ch 8</td>
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<tr>
<td>M Feb 20</td>
<td>Microbes and Plants</td>
<td>Ch 9</td>
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<tr>
<td>W Feb 22</td>
<td>Microbes and Plants</td>
<td>Ch 9</td>
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<tr>
<td>F Feb 24</td>
<td>Microbes and Plants</td>
<td>Ch 9</td>
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<tr>
<td>M Feb 27</td>
<td>Microbes and Plants</td>
<td>Ch 9</td>
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<tr>
<td>W Feb 29</td>
<td>Multicellular Animals</td>
<td>Ch 10</td>
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<td>F Mar 2</td>
<td>Multicellular Animals</td>
<td>Ch 10</td>
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<tr>
<td>M Mar 5</td>
<td>Multicellular Animals</td>
<td>Ch 10</td>
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<tr>
<td>W Mar 7</td>
<td>Evolution and Biodiversity of Freshwaters</td>
<td>Ch 11</td>
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<tr>
<td>F Mar 9</td>
<td>Evolution and Biodiversity of Freshwaters</td>
<td>Ch 11</td>
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<tr>
<td>M Mar 12</td>
<td>EXAM II (during lab time)</td>
<td>Ch 8-11</td>
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<tr>
<td>W Mar 14</td>
<td>Aquatic Chemistry/Nutrient Cycling</td>
<td>Ch 12</td>
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<tr>
<td>F Mar 16</td>
<td>Class cancelled by instructor</td>
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<tr>
<td>M-F Mar 19-23</td>
<td>SPRING BREAK</td>
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<td>M Mar 26</td>
<td>Carbon</td>
<td>Ch 13</td>
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<tr>
<td>W Mar 28</td>
<td>Nitrogen, Sulfur, Phosphorus and Other Nutrients</td>
<td>Ch 14</td>
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<tr>
<td>F Mar 30</td>
<td>Nitrogen, Sulfur, Phosphorus and Other Nutrients</td>
<td>Ch 14</td>
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<tr>
<td>M Apr 2</td>
<td>Unusual or Extreme Habitats</td>
<td>Ch 15</td>
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<tr>
<td>W Apr 4</td>
<td>Responses to Toxic Chemicals</td>
<td>Ch 16</td>
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<tr>
<td>F Apr 6</td>
<td>Nutrient Use and Remineralization</td>
<td>Ch 17</td>
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<tr>
<td>M Apr 9</td>
<td>Nutrient Use and Remineralization</td>
<td>Ch 17</td>
</tr>
<tr>
<td>W Apr 11</td>
<td>Trophic State and Eutrophication</td>
<td>Ch 18</td>
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<tr>
<td>F Apr 13</td>
<td>Trophic State and Eutrophication</td>
<td>Ch 18</td>
</tr>
<tr>
<td>M Apr 16</td>
<td>EXAM III (during lab time)</td>
<td>Ch 12-18</td>
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<tr>
<td>W Apr 18</td>
<td>Behavior and Interactions Among Microorganisms</td>
<td>Ch 19</td>
</tr>
<tr>
<td>F Apr 20</td>
<td>Predation and Food Webs</td>
<td>Ch 20</td>
</tr>
<tr>
<td>M Apr 23</td>
<td>Predation and Food Webs</td>
<td>Ch 20</td>
</tr>
</tbody>
</table>
Course Content Outline/Calendar:

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>M Jan 23</td>
<td>Lab 1. Introduction/Sampling Equipment</td>
<td></td>
</tr>
<tr>
<td>M Jan 30</td>
<td>Lab 2. Hydrology and Physiography of Wetland Habitats</td>
<td></td>
</tr>
<tr>
<td>M Feb 6</td>
<td>Lab 3. Lake Morphometry</td>
<td></td>
</tr>
<tr>
<td>M Feb 13</td>
<td>EXAM I</td>
<td></td>
</tr>
<tr>
<td>M Feb 20</td>
<td>Lab 4. Aquatic Organism Lab, Part I</td>
<td></td>
</tr>
<tr>
<td>M Feb 27</td>
<td>Lab 5. Aquatic Organism Lab, Part II</td>
<td></td>
</tr>
<tr>
<td>M Mar 5</td>
<td>Lab 6. Aquatic Organism Lab, Part III</td>
<td></td>
</tr>
<tr>
<td>M Mar 12</td>
<td>EXAM II</td>
<td></td>
</tr>
<tr>
<td>M-F Mar 19-23</td>
<td>SPRING BREAK</td>
<td></td>
</tr>
<tr>
<td>M Mar 26</td>
<td>Lab 7. Water Chemistry Lab, Part I</td>
<td></td>
</tr>
<tr>
<td>M Apr 2</td>
<td>Lab 8. Water Chemistry Lab, Part II</td>
<td></td>
</tr>
<tr>
<td>M Apr 9</td>
<td>Lab 9. Field Sampling, Part I</td>
<td></td>
</tr>
<tr>
<td>M Apr 16</td>
<td>EXAM III</td>
<td></td>
</tr>
<tr>
<td>M Apr 23</td>
<td>Lab 10. Field Sampling, Part II</td>
<td></td>
</tr>
<tr>
<td>M Apr 30</td>
<td>Lab 11. Field Sampling, Part III</td>
<td></td>
</tr>
</tbody>
</table>

Lab Quiz Schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Quiz- Lab #1</th>
</tr>
</thead>
<tbody>
<tr>
<td>M Jan 30</td>
<td></td>
</tr>
<tr>
<td>M Feb 6</td>
<td></td>
</tr>
<tr>
<td>M Feb 13</td>
<td>EXAM I</td>
</tr>
<tr>
<td>M Feb 27</td>
<td>Quiz- Lab #4</td>
</tr>
<tr>
<td>M Mar 5</td>
<td>Quiz- Lab #5</td>
</tr>
<tr>
<td>M Mar 12</td>
<td>EXAM II</td>
</tr>
<tr>
<td>M-F Mar 19-23</td>
<td>SPRING BREAK</td>
</tr>
<tr>
<td>M Apr 2</td>
<td>Quiz- Lab #7</td>
</tr>
<tr>
<td>M Apr 9</td>
<td>Quiz- Lab #8</td>
</tr>
<tr>
<td>M Apr 16</td>
<td>EXAM III</td>
</tr>
<tr>
<td>M Apr 23</td>
<td>Quiz-Lab #10</td>
</tr>
</tbody>
</table>
Provisions for tests and evaluations:

Scores on exams will be posted on the instructor's web site, http://www.uamont.edu/facultyweb/fawley, by a code number unless a student requests not to have his/her scores posted.

Rescheduling Exams: If you are unable to take an exam at the scheduled time, please notify the instructor well before the day of the exam to reschedule at an earlier time.

Make-up Exams: No make-up exams will be given, but the student can replace one missed exam with the final exam grade. Students can make-up one exam only, if they have a valid medical or personal excuse. The student must get in contact with the professor before or the day of the scheduled exam. Any additional missed exams will be counted as a zero.

Make-up Labs/Quizzes: Due to time constraints, there will be no make-up labs or make-up quizzes. However, students can drop 1 lab and 1 quiz during the semester.

Grading Policy:

<table>
<thead>
<tr>
<th></th>
<th>Grading scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Quizzes</td>
<td>120 pts</td>
</tr>
<tr>
<td>In-Lab Evaluation</td>
<td>200 pts</td>
</tr>
<tr>
<td>Lecture/Lab Exams</td>
<td>400 pts</td>
</tr>
<tr>
<td></td>
<td>720 pts</td>
</tr>
</tbody>
</table>

**Grading scale**

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- Below 60 F

Special dates of concern:

- Wednesday, January 11: First day of classes.
- Tuesday, January 18: Last day to register of add classes.
- Monday, January 16: Martin Luther King, Jr. Day
- Friday, February 24: Deadline to file for Aug and Dec 2012 graduation
- M-F (March 19-23): Spring Break!
- Monday, April 2: Preregistration for Fall and Summer 2012 begins
- Wednesday, April 4: Last day to drop W.
- Friday, April 13: Preregistration for Fall and Summer 2012 ends.
- Thursday, April 26: Last day to withdraw from class.
- Tuesday, May 1: Last day of classes.
- W-T, May 2-8: Final exam period.
- Friday, May 11: Commencement
Students with disabilities:

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Academic dishonesty:

1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.
2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the
student(s) involved will a potential grade reduction to F (zero points) on the specific assignment or exam.
BIOL 4734
Animal Behavior
Fall ______
Lecture: ________
School of Mathematics and Natural Sciences

Instructor: Dr. Christopher G. Sims
Office: B 14
Office Phone: 460-1664
E-mail: simsc@uamont.edu
Office Hours: otherwise by appointment.


Course Prerequisites: BIOL 1063

Objectives: In this course we will study the behavior of animals, focusing specifically on the evolutionary and ecological significance of these behaviors. Topics include genetics of behavior, ethology, adaptation, fitness, reproductive tactics/mating systems, foraging, and social behavior.

Course Grade: Lecture:
3 Lecture Exams: 100 pts. each
Final Exam: 100 pts.

Lab:
lab summaries/article summaries (# to be determined): 10 pts. each
Lab Total 200 pts.

Course total: 600 pts.

*******NO EXTRA CREDIT will be given under any circumstances!!!

Each student will choose a code number/code name prior to the first test and this will be used to post grades. Grades will be posted either by hard copy or on the Internet. If you do not wish to have your grade posted please let the instructor know prior to the first test. Grades will not be provided over the phone or by E-mail.

Attendance, Testing, and Cheating: Attendance in this course is mandatory. Attendance will be recorded regularly and anyone missing 6 class days will be dropped from the course unless appropriate documentation can be provided. Your success in this course is directly dependent on your attendance and participation in lectures.

Exam attendance is required and make-up exams will be given only under extreme circumstances. Make-up exams will be allowed only in cases of illness with a doctor’s excuse, excused university functions, or family emergencies with a written excuse from a family member. If you are forced to miss an exam you must notify me within 24 hours of the exam. Failure to do so will result in a zero on that exam. If you know ahead of time that you will be absent please let me know and prior arrangements for testing can be made.
Cheating in any form will not be tolerated and will automatically result in failure of the course. Cellular phones are included in the cheating policy and any appearance of a cellular phone (or other communication devise) during a test will be considered an attempt to cheat by the student.
Likewise electronic devices such as cellular phones etc. will not be allowed in lecture unless prior approval is given by the instructor.

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**Statement on disruptive behavior**: The following action is prohibited under the Student Conduct Code: Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others.

<table>
<thead>
<tr>
<th>Lecture Schedule:</th>
<th>Chapter #:</th>
<th>Lab:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note that the lab schedule is subject to change!!!!!!!</td>
<td>1</td>
<td>Statistical analysis</td>
</tr>
<tr>
<td>An Evolutionary Approach to Animal Behavior</td>
<td>2</td>
<td>Paper discussion</td>
</tr>
<tr>
<td>Proximate and Ultimate Causes of Behavior: How and Why Birds Sing</td>
<td>3</td>
<td>Taxis in mealworms</td>
</tr>
<tr>
<td>The Development of Behavior: A Focus on Heredity</td>
<td>4</td>
<td>Paper discussion</td>
</tr>
<tr>
<td>The Development of Behavior: A Focus on the Environment</td>
<td>5</td>
<td>Duckling Imprinting</td>
</tr>
<tr>
<td>The Control of Behavior: Neural Mechanisms</td>
<td>6</td>
<td>Paper discussion</td>
</tr>
<tr>
<td>The Organization of Behavior: Neurons and Hormones</td>
<td>7</td>
<td>Predator Avoidance</td>
</tr>
<tr>
<td>Adaptation and Anti-Predator Behavior</td>
<td>8</td>
<td>Foraging</td>
</tr>
<tr>
<td>The Evolution of Feeding Behavior</td>
<td>9</td>
<td>Territoriality</td>
</tr>
<tr>
<td>Choosing Where To Live</td>
<td>10</td>
<td>Paper discussion</td>
</tr>
<tr>
<td>The Evolution of Communication</td>
<td>11</td>
<td>Paper discussion</td>
</tr>
<tr>
<td>The Evolution of Reproductive Behavior</td>
<td>12</td>
<td>Sexual Selection</td>
</tr>
<tr>
<td>The Evolution of Mating Systems</td>
<td>13</td>
<td>Paper discussion</td>
</tr>
<tr>
<td>The Evolution of Parental Care</td>
<td>14</td>
<td>Social Dominance</td>
</tr>
<tr>
<td>The Evolution of Social Behavior</td>
<td>15</td>
<td>Paper discussion</td>
</tr>
<tr>
<td>The Evolution of Human Behavior</td>
<td>16</td>
<td>Paper discussion</td>
</tr>
</tbody>
</table>
Instructor Name: Karen Fawley, Ph.D; Marvin W. Fawley, Ph.D
Instructor Location of Office: Museum of Natural History, Room 101
Instructor Phone: 870-460-1165
Instructor E-mail Address: fawley@uamont.edu; fawleym@uamont.edu
Instructor Website: http://www.uamont.edu/facultyweb/fawley
Office hours: Dr. K. Fawley- MW, 9-11am; Th, 1:30-3pm or by appointment
Dr. M. Fawley- T 9-11 or by appointment.

Course Title and Credit Hours: Biology 4741, Biology Seminar, 1 credit hour

Course Description: A research course covering methods for writing papers and conducting public presentations on topics from the biological sciences.

Prerequisites: Biology Major with Senior standing


Student Learning Outcomes: By the conclusion of the course you should be able to write a review or research paper in scientific format and present your topic to a scientific audience.

Statement of Special Policies:

Class Attendance: Attendance will be taken during every session. As a courtesy to the students in the class and the instructor, please be on time. For those sessions that require only submission of class materials, such as a reference list, submission via e-mail will be considered class attendance. Any student who is habitually late or who misses 2 or more required classes without excuse will lose points. You will be notified if you are about to lose points due to chronic tardiness.

Classroom Policies: Use of tobacco products is not permitted on UAM grounds.

Cell phones and all electronics will be turned off during class.
**Cheating/Plagiarism:** Cheating will not be tolerated. The Academic Dishonesty policy found on page 3 of this syllabus will be applied to all assignments. Cheating includes plagiarism; plagiarism can result in a grade of “F” (zero points) for an assignment.

**Course Content Outline/Calendar:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Assignment (Required sessions in bold)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 5-9</td>
<td>Organizational meeting.</td>
</tr>
<tr>
<td>Jan 12-16</td>
<td>Assignment for mini-presentations.</td>
</tr>
<tr>
<td>Jan 19-23</td>
<td>Topics due; Literature search methods.</td>
</tr>
<tr>
<td>Jan 26-30</td>
<td>Discussion of PowerPoint presentation techniques/ Three references for mini-presentation due to instructor</td>
</tr>
<tr>
<td>Feb 2-6</td>
<td>Mini-presentations.</td>
</tr>
<tr>
<td>Feb 9-13</td>
<td>Mini-presentations.</td>
</tr>
<tr>
<td></td>
<td>Selection of topics for major presentation and paper</td>
</tr>
<tr>
<td>Feb 16-20</td>
<td>Literature search help, if needed. Preliminary Ref. list due.</td>
</tr>
<tr>
<td>Feb 23-27</td>
<td>Reference list due. Discussion of scientific writing style.</td>
</tr>
<tr>
<td>Mar 2-6</td>
<td>Abstract for paper due.</td>
</tr>
<tr>
<td>Mar 9-13</td>
<td>First draft of paper due.</td>
</tr>
<tr>
<td>Mar 16-20</td>
<td>Go through PowerPoint presentation with instructors. (Individual appointments)</td>
</tr>
<tr>
<td>Mar 23-27</td>
<td>Spring Break!</td>
</tr>
<tr>
<td>Mar 30-Apr 3</td>
<td><strong>Trial run of presentations.</strong> (Class may run late)</td>
</tr>
<tr>
<td>Apr 6-10</td>
<td><strong>Trial run of presentations.</strong> (Class may run late)</td>
</tr>
<tr>
<td>Thursday, Apr 16*</td>
<td><strong>Presentations</strong></td>
</tr>
<tr>
<td>Tuesday, Apr 21*</td>
<td><strong>Presentations</strong>; Final paper due</td>
</tr>
<tr>
<td>Thursday, Apr 23*</td>
<td><strong>Presentations</strong>;</td>
</tr>
</tbody>
</table>

*Presentations* are scheduled for Tuesday and Thursday afternoons during activity hour (12:40-1:30pm).
**Grading Policy:** Grades for each project: Mini-presentation (50 pts); Main presentation (100 pts); Paper (100 pts); Discussion (50 pts).

**Grading scale (%)**  
90-100, A; 80-89, B; 70-79, C; 60-69, D; Below 59, F.

**Special dates of concern:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 7</td>
<td>First day of classes.</td>
</tr>
<tr>
<td>January 9</td>
<td>Martin Luther King, Jr. Day</td>
</tr>
<tr>
<td>February 27</td>
<td>Deadline to register of add classes.</td>
</tr>
<tr>
<td>M-F (March 23-27)</td>
<td>Spring Break!</td>
</tr>
<tr>
<td>March 18</td>
<td>Last day to drop W.</td>
</tr>
<tr>
<td>April 6</td>
<td>Preregistration for Fall and Summer 2015 begins</td>
</tr>
<tr>
<td>April 17</td>
<td>Preregistration for Fall and Summer 2015 ends.</td>
</tr>
<tr>
<td>April 28</td>
<td>Last day of classes.</td>
</tr>
<tr>
<td>W-T, Apr 29-May 5</td>
<td>Final exam period.</td>
</tr>
<tr>
<td>May 8</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

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   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
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Instructor:  Dr. Christopher G. Sims  
Office:  B 4  
Office Phone:  460-1664  
E-mail:  simsc@uamont.edu  
Web Site:  http://www.uamont.edu/facultyweb/Sims/  
Office Hours:  MWF 1:30-3:00;  TH 9:00-11:00.  I will be in the office at other times as well.  Changes in this schedule may occur at any time and will be posted outside my door or announced in class.  If you need to see me it is strongly recommended that you e-mail and we can schedule an appointment.  

Course Title and Credits:  Waterfowl Ecology (BIOL 4594); 4 Credit Hours  

Course Description:  In this course we will study the environment and its components including energy flow, population and community structure, ecological succession, how evolution influences ecological structure.  

Prerequisites:  BIOL 3484  

Attendance, Testing, and Cheating:  Attendance in this course is mandatory and will be recorded regularly.  
You will be allowed 3 unexcused absences during the semester.  After the third unexcused absence your grade will be reduced one percentage point for each unexcused absence thereafter.  
Field trip attendance is mandatory in order to develop adequate identification skills.  Failure to attend on field trip days will result in loss of 1 letter grade from your semester grade.  

Exam attendance is required and make-up exams will be given only under extreme circumstances.  Make-up exams will be allowed only in cases of illness with a doctor’s excuse, excused university functions, or family emergencies with a written excuse from a family member.  If you are forced to miss an exam you must notify me within 24 hours of the exam.  Failure to do so will result in a zero on that exam.  If you know ahead of time that you will be absent please let me know and prior arrangements for testing can be made.  

Cheating in any form will not be tolerated and will automatically result in failure of the course.  Cellular phones are included in the cheating policy and any appearance of a cellular phone (or other communication devise) during a test will be considered an attempt to cheat by the student.  
Similarly electronic devices such as cellular phones etc. will not be allowed in lecture unless prior approval is given by the instructor.  Failure to follow this rule will result in the student being asked to leave class.  

Ethics Rule:  Anyone known to be actively engaged in killing protected species of any kind (avian or other) will automatically receive an F in this course and will be reported immediately to the state and federal authorities.  It is illegal to kill any species of animal that is not designated as a game species with a legal season or an introduced species that is not protected.  

Course Grade:  Lecture and Lab:
4 Lecture Exams: 100 pts. each
Lab Exam Waterfowl Identification: 100 pts.
Waterfowl Morphology Test 100 pts.
Taxonomy 100 pts.
Presentation 100 pts.
Journal Article Summaries and Discussion 100 pts
Total: 900 pts.

Point spread (grade based on a percentage of 800 possible points):
A = 100-89.5 pts., B = 89.4-79.5 pts., C = 79.4-69.5 pts., D = 69.4-59.5 pts., F < 59.4

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Each student will choose a code number/code name prior to the first test and this will be used to post grades. Grades will be posted on my website (see above). If you do not wish to have your grade posted please let the instructor know prior to the first test. Grades will not be provided over the phone or E-mail.

Tentative Lecture Schedule (topics are subject to change):

Introduction and Historical Overview
Classification
Courtship Behavior, Mating Systems, and Pair-Bond Formation
Test #1
Reproductive Ecology
Nesting, Brood Rearing and Molt
Feeding Ecology
Test #2
Winter Ecology
Major Habitats
Individual Species Accounts and Ecological Requirements
Test #3
Conservation and Management
Final

Lab Schedule:

*******The Lab schedule is a tentative schedule and will change often with weather etc. Check your UAM e-mail often for announcements and changes.

Waterfowl Morphology
Field observation and ID (all weeks permitted by weather)
Field trips (2) to active waterfowl management area (private and/or government)

Important Dates:
January 7 (Wed) First day of classes for sessions 1 and 8W1. Admission application deadline.
January 9 (Fri) Last day to register or add classes.
January 19 (Mon) Martin Luther King Holiday. Offices and classes closed.
February 27 (Fri) Deadline to apply for August and December graduation.
March 18 (Wed) Last day to drop a session 1 class or withdraw from the term (not applicable to other sessions). Grade(s) will be W.
March 23-27 (Mon-Fri) Spring Break.
April 6 (Mon) Preregistration for Summer and Fall 2015 begins.
April 17 (Fri) Preregistration for Summer and Fall 2015 ends.
April 28 (Tues) Last day of classes for sessions 1 and 8W2.
April 29 –May 5 (Wed-Tues) Final exam period.
May 8 (Fri) Commencement.

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   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.
2. **Collusion:** Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
3. **Duplicity:** Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
4. **Plagiarism:** Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be given a failing grade (F) in the course.
Instructor: Glenn Manning  
Office: B-27  
Office Phone: 460-1166  
E-mail: manning@uamont.edu  
Webpage: http://www.uamont.edu/facultyweb/Manning/  
Office Hours:  

BIOL 3384, Herpetology, 4 credit hours  

Objectives: To acquaint the student with the current taxonomy and phylogenetic relationship of animals within the amphibians, reptiles, crocodilians, and turtles. We will look at this through understanding of morphology, function, and life histories of these very unique animals. Special emphasis will be placed on identification of the regional fauna. We will discuss how to locate and survey for these animals.  

Prerequisites: BIOL 1153, General Zoology and BIOL 1161 General Zoology Lab  


Student Learning Outcomes: By the conclusion of the course you should be able to have an understanding how to identify amphibians, reptiles, crocodilians, and turtles. Also how these animals live and operate in their natural surroundings.  

Attendance, Testing, and Cheating: Attendance in this course is mandatory. Attendance will be recorded regularly and anyone missing the equivalent of two weeks of class will be dropped from the course unless appropriate documentation can be provided.  

Your success in this course is directly dependent on your attendance and participation in lectures.  

Exam attendance is required and make-up exams will be given only under extreme circumstances. Make-up exams will be allowed only in cases of illness with a doctor’s excuse, excused university functions, or family emergencies with a written excuse from a family member. If you are forced to miss an exam you must notify me within 24 hours of the exam. Failure to do so will result in a zero on that exam. If you know ahead of time that you will be absent please let me know and prior arrangements for testing can be made.  

Cheating in any form will not be tolerated and will automatically result in failure of the course. Cellular phones are included in the cheating policy and any appearance of a cellular phone (or other communication devise) during a test will be considered an attempt to cheat by the student.  

Likewise electronic devices such as cellular phones etc. will not be allowed in lecture unless prior approval is given by the instructor.  

You will be given a zero (0) for this course if you free handle a venomous snake or purposely kill an animal without consent from your instructor.  

*******NO EXTRA CREDIT will be given under any circumstances!!!  

<table>
<thead>
<tr>
<th>Course Grade:</th>
<th>GRADE POINTS</th>
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<tbody>
<tr>
<td>90 - 100A</td>
<td>Hour Exam I  100</td>
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<tr>
<td>80 - 89B</td>
<td>Hour Exam II 100</td>
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<td>70 - 79C</td>
<td>Lab Exam I  75</td>
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<td>60 - 69D</td>
<td>Lab Exam II 75</td>
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<td>00 - 59F</td>
<td>Paper 50 (100 for grad level)</td>
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<td>Presentation 50 (grad level only)</td>
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<td></td>
<td>Participation 100</td>
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<td>Total Points 500 (600 for grad level)</td>
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</table>

Exam dates will be set one week prior to each exam. Each test will cover material beginning with the previous exam, and continuing through the last class day before the exam.
The paper and presentation format and due date will be announced at a later date.

Each student will choose a code number/code name prior to the first test and this will be used to post grades. Grades will be posted either by hard copy or on the Internet. If you do not wish to have your grade posted please let the instructor know prior to the first test. Grades will **not** be provided over the phone.

**LECTURE CONTENT: (Subject to change)**

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>CHAPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrapod Relationships and Evolutionary Systematics</td>
<td>1</td>
</tr>
<tr>
<td>Evolution of Ancient and Modern Amphibians and Reptiles</td>
<td>3</td>
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<tr>
<td>Anatomy of Amphibians and Reptiles</td>
<td>2</td>
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<tr>
<td>Classification and Diversity</td>
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<tr>
<td>Caecilians</td>
<td>15</td>
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<td>Salamanders</td>
<td>16</td>
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<td>Frogs</td>
<td>17</td>
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<td>Turtles</td>
<td>18</td>
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<td>Crocodylians</td>
<td>19</td>
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<td>Tuatara and Lizards</td>
<td>20</td>
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<td>Snakes</td>
<td>21</td>
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<tr>
<td>Modes of Reproduction &amp; Parental Care</td>
<td>4</td>
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<tr>
<td>Reproductive Ecology and Life Histories</td>
<td>5</td>
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<tr>
<td>Water Balance and Gas Exchange</td>
<td>6</td>
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<tr>
<td>Thermoregulation, Performance, and Energetics</td>
<td>7</td>
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<td>Communication and Social Behavior</td>
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<td>Foraging Ecology and Diets</td>
<td>10</td>
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<td>Defense and Escape</td>
<td>11</td>
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<td>Population Structure and Dynamics</td>
<td>12</td>
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<tr>
<td>Community and Geographical Ecology</td>
<td>13</td>
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<tr>
<td>Conservation Biology</td>
<td>14</td>
</tr>
</tbody>
</table>

**LAB CONTENT: (Subject to change)**

- Amphibian identification and anatomy
- Amphibian practical
- “Reptile” identification and anatomy
- “Reptile practical
- Perform proper preservation of museum specimens and other such items
- The rest of the labs will be spent in the field, weather permitting

***We will have at least one night time amphibian lab (weather permitting) attendance is strongly encouraged, not mandatory.

***We will have one weekend (Friday-Sunday field trip). Attendance is strongly encouraged, not mandatory.

Tests will be announced at least one week in advance.
DATES TO REMEMBER:

Students with disabilities: It is the policy of the University of AR at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.

Statement on disruptive behavior: The following action is prohibited under the Student Conduct Code: Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others. THIS INCLUDES THE USE OF CELL PHONES (RINGING OR TEXTING DURING CLASS). You will be given a zero (0) for this course if you freely handle a venomous snake or purposely kill an animal without consent from your instructor.

Academic dishonesty:
1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.
2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be given a failing grade (F) in the course.
BIOL 5144/WLF 5144—Graduate Mammalogy  
Fall 2009, B19, Science Center, MWF 12:10-1:00  
Lab—Thursday 1:40, B31, Science Center  
Weekly Literature Discussion—Time and Place TBD

Instructor: Dr. John L. Hunt. E-mail: huntj@uamont.edu. Phone: 870-460-1466. Web page: http://www.uamont.edu/facultyweb/Huntj. Office: B11, Science Center. Office hours: MWF, 9:00-10:00; TTh 9:40-10:30, or by appointment.

Note: Admission to the class is by permission of the instructor and the student’s major professor only. No exceptions to this rule will be made.


Objective: A graduate level course designed to introduce the student to characteristics, origins, ecology, behavior, reproduction, physiology, and diversity of mammals. The Mammalogy Lab will introduce the student to diversity of mammals in Arkansas, and to techniques used to study them. Students will learn taxonomy and classification of Arkansas mammals. Students will also examine current literature in mammalogy and prepare museum specimens.

Tests and grading: Grades will be computed as a percentage of 850 points. Of these, 400 points will come from 4 hourly exams, 100 will come from the final exam, and 50 will come from unannounced quizzes. The lab grade will be worth 200 points, or 25% of the total grade. The weekly literature discussion will be worth 50 points. Grading will be on the standard 10-point scale (90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F). There is no curving of the grade or “extra” credit. Points will be earned from scheduled examinations and from unannounced quizzes.

Exams will consist of a mixture of essay, short answer, and objective-type questions, and may include some drawing. Exam questions may come directly from reading assignments that may never have been discussed in class. In other words, students are responsible for all materials in the reading assignments. Each test will cover material beginning with the previous exam, and continuing through the last class day before the exam. Exams will be on the dates listed below. These dates will not change. The final exam will be Thursday, December 17, at 10:30 p.m. Exams are not comprehensive.

The number of quizzes is approximate. There will be an average of 1 quiz per week at the beginning of one of the lecture periods. There will be at least 10 quizzes during the semester; if there are more, students will be allowed to drop the lowest scores.
to get down to 10 quizzes. These quizzes will be unannounced and will consist of one to five questions from the previous day’s lecture. Quizzes are designed to encourage daily review and study, and regular attendance and promptness, and therefore, MAY NOT be made up.

Lab points will be earned from scheduled examinations, from a major paper, from lab exercises, and from unannounced quizzes. Exams will consist of a mixture of practical, essay, short answer, and objective-type questions, and may include some drawing. The lab grade will comprise 200 points of the student’s final grade.

Students will prepare a series of museum specimens. These specimens must be museum-quality, and will be assessed on a pass/fail basis. Preparation of museum specimens will make up 50 points of the student’s final grade.

Students are required to attend a weekly discussion of current literature in mammalogy at a time and place to be determined. Students must complete the required reading and will be required to lead the discussion group on a rotating basis. This discussion group will be graded on preparedness and participation, and will make up 50 points of the student’s final grade.

**Attendance:** Attendance at all lectures, lab sessions, literature discussions, and exams is mandatory. Attendance will be recorded regularly. Most exam material will come from lectures, so that your success, or lack thereof, in this class is directly related to attendance.

**Missed exams:** Missed exams may be made up only by students with an approved university excuse, by arrangement with the instructor. Approved university excuses do not include “had to work,” “hung over,” “overslept,” or “my car is busted.” Please be aware that any made-up exam may NOT be the same exam given during the normal class period. Students are responsible for all material presented in class, even with an approved university excuse for missing a class. It is the responsibility of the student to obtain missed material from classmates.

**Class web page.** The class web page may be found at: http://www.uamont.edu/facultyweb/Huntj/mammalogy.htm. On this page there are lists of terms to know and lecture outlines for each of the chapters of the text we will cover. These outlines are general in nature, and are not meant to replace detailed notes which you should take in class. Test scores will be posted on the class web page shortly after each exam. Your score will be listed by an anonymous code word selected by you.

**Class policies:** Mammalogy is a demanding class, with a large number of terms and concepts to be mastered. Expect to spend a great deal of out-of-class time studying. The instructor is here to help you; please feel free to ask questions at any time. You are encouraged to seek my help outside of regular class hours if you are so inclined.

Mammalogy lab is designed as a FIELD LAB. You should come prepared to spend the entire lab time outdoors, rain or shine. Some labs will require you to get wet, muddy, or dirty. Labs will often entail moving through heavy brush and thorns, climbing up steep hills, and
providing blood meals for mosquitoes, ticks, chiggers, and flies. If this doesn’t sound like fun to you, you may be in the wrong line of work. Use common sense in deciding what to bring into the field with you. You may want sunglasses, hat, sunscreen, insect repellent, machete, and water. You should always dress appropriately—don’t wear nice clothes. Long pants and heavy shoes are always recommended.

Use of tobacco products in University vehicles is strictly prohibited (this means no “dippin’”). You may bring food or snacks, but you must not leave paper or trash in the van or at any of the field sites we visit.

Disorderly conduct is any behavior which disrupts the regular or normal functions of the University Community, including behavior which breaches the peace or violates the rights of others. This type of conduct is prohibited by the Student Conduct Code. The Code may be found on pages 44-47 of the 2009-2011 UAM Catalog.

Please do not hold conversations with classmates during lecture. **DO NOT BRING CELL PHONES TO CLASS!** If your cell phone rings during my lecture, I will respond in the only manner available to me—by adjusting your grade. You may not text-message or keep your cell phone on your desk during class. No electronic devices other than tape recorders are allowed in class—this includes laptops.

**Students with disabilities:** It is the policy of the University of Arkansas-Monticello to accommodate students with disabilities in accordance with federal law. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall, Room 120, phone 870-460-1026; TDD 870-460-1626; fax 870-460-1926.

**Academic dishonesty:** Cheating will not be tolerated. The Academic Code of the University of Arkansas-Monticello may be found on page 44 of the 2009-2011 UAM Catalog. Please note that the instructor has wide latitude in taking corrective action in response to cheating; expect the harshest possible response in this class. You will not be allowed to have a cell phone of any sort on your desk during exams (or any other time during class).

**Material to be covered:** These topics will be covered in the order listed below. Students are expected to read the indicated chapters as we cover each topic.

- Introduction and review (Chapter 1)
- History of mammalogy (Chapter 2)
- Techniques for study (Chapter 3)
- Evolution of mammals (Chapter 4)
- Skin, skeleton, muscle (Chapter 5)
- Locomotion (Chapter 5)
- Foods and feeding (Chapter 6)
- Nervous systems (Chapter 7)
- Environmental adaptations (Chapter 8)
- Reproduction (Chapter 9)
- Monotremes and marsupials (Chapter 10)
- Insectivora and relatives (Chapter 11)
- Chiroptera (Chapter 12)
- Primates (Chapter 13)
- Xenarthra (Chapter 14)
- Carnivora (Chapter 15)
- Cetacea (Chapter 16)
- Rodentia and Lagomorpha (Chapter 17)
- Proboscidea and relatives (Chapter 18)
- Hoofed
mammals (Chapter 19); Communication (Chapter 20); Reproductive behavior (Chapter 21); Social behavior (Chapter 22); Habitat selection (Chapter 23); Populations and life history (Chapter 24); Community ecology (Chapter 25); Zoogeography (Chapter 26); Parasites and diseases (Chapter 27); Domestication (Chapter 28); Conservation (Chapter 29).

**Important dates:**

- First day of class: August 26
- Labor day (no class): September 7
- Exam I: September 23
- Exam II: October 21
- Exam III: November 16
- Last day to drop: November 11
- Thanksgiving holiday: November 25-27
- Last day of class: December 11
- Final exam: December 17 (10:30 a.m.)

**Tentative lab schedule:** Because of the vagaries of weather, the schedule of the mammalogy lab must be considered to be somewhat fluid. The following schedule is subject to change with or without notice. Be prepared!

- August 27: Introduction
- September 3: Skulls & Bones
- September 10: Mammals of Arkansas
- September 17: Library
- September 24: Basic trapping (will require activity outside regular lab hours)
- October 1: Basic statistics, scientific writing
- October 8: Mammals of Arkansas/Skull & Bones review
- October 15: Exam I
- October 16: Weekend field trip
- October 22: Trapping grid (will require activity outside regular lab hours)
- October 29: TBD
- November 5: First draft of paper due
- November 12: Zoo trip
- November 19: TBD
- November 26: Thanksgiving holiday
- December 3: Final draft of paper due
- December 10: Lab Final
BIOL 5344
Graduate Ornithology
Spring 2010
Lecture/Lab: 8:10-11:00 TH
(Lab will often begin at daylight)

Instructor: Dr. Christopher G. Sims
Office:  B 4
Office Phone:  460-1664
E-mail: simsc@uamont.edu
Office Hours: TBA otherwise by appointment. Changes in this schedule may occur and will be posted outside my door or announced in class.


Objectives: In this course we will study the taxonomy and natural history of birds, emphasizing the local fauna. This will include knowledge of the basic biology of avian taxa as well as the evolutionary history that has resulted in such a diverse and interesting group of vertebrates. Along with this you will develop an ability to identify multiple species by sight as well as by song.

Course Grade: Lecture and Lab:
- 4 Lecture Exams (100 pts each): 400 pts.
- Lab Exam over avian orders and families: 100 pts.
- Weekly paper discussions and summaries (7 at 20pts. Each): 140pts.
- Field Techniques 50pts.
- Class Presentation 50 pts.
- Lab Final (field identification): 100 pts.
Total: 840 pts.

Point spread (based on % of total)
A = 100-89.5, B = 89.4-79.5, C = 79.4-69.5, D = 69.4-59.5, F < 59.5

******NO EXTRA CREDIT will be given under any circumstances!!!

Each student will choose a code number/code name prior to the first test and this will be used to post grades. Grades will be posted either by hard copy or on the Internet. If you do not wish to have your grade posted please let the instructor know prior to the first test. Grades will not be provided over the phone or by E-mail.

Attendance and Testing: Attendance in this course is mandatory. **You will be allowed 3 unexcused absences during the semester. After the third unexcused absence your grade will be reduced one letter grade for each unexcused absence thereafter.** Field trip attendance is mandatory in order to develop adequate identification skills. Failure to attend on field trip days will result in loss of 1 letter grade from your semester grade.

Exam attendance is required and make-up exams will be given only under extreme circumstances. Make-up exams will be allowed only in cases of illness with a doctor’s excuse, excused university functions, or family emergencies with a written excuse from a family member. If you are forced to miss an exam you must notify me within 24 hours of the exam. Failure to do so will result in a zero on that exam. If you know ahead of time that you will be absent please let me know and prior arrangements for testing can be made. I strongly suggest that you make every effort to attend every exam, as make-up tests will be much harder than the original test.

Ethics Rule: Anyone known to be actively engaged in killing protected species of any kind (avian or other) will automatically receive an F in this course and will be reported immediately to the state and federal authorities. It is illegal to kill any species of animal that is not designated as a game species with a legal season or an introduced...
illegal to kill any species of animal that is not designated as a game species with a legal season or an introduced species that is not protected.

**Students with disabilities:** It is the policy of the University of AR at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926. McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105. Crossett: Office of Special Student Services representative on campus; phone 870 364-6414; fax 870 364-5707.

**Statement on disruptive behavior:** The following action is prohibited under the Student Conduct Code: Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others.

**Grade Reports:** UAM will no longer mail grade reports to all students. You may access your grades through Campus Connect on the UAM homepage, [http://www.uamont.edu/](http://www.uamont.edu/). To have your grades mailed to you, complete the grade request form available in the Registrar’s Office in Monticello or the Student Services offices in Crossett and McGehee.

<table>
<thead>
<tr>
<th>Lecture Schedule:</th>
<th>Chapter #:</th>
<th>Lab:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Diversity of Birds</td>
<td>1</td>
<td>Equipment check out</td>
</tr>
<tr>
<td>History</td>
<td>2</td>
<td>Field Trip</td>
</tr>
<tr>
<td>Flight</td>
<td>5</td>
<td>Topography of a bird</td>
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<tr>
<td>Physiology</td>
<td>6</td>
<td>Field Trip</td>
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<tr>
<td>Feeding</td>
<td>7</td>
<td>Feathers and feather tracts</td>
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<tr>
<td>Brains and Senses</td>
<td>8</td>
<td>Field Trip</td>
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<tr>
<td><strong>Exam #1</strong></td>
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<tr>
<td>Visual Communication</td>
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<td>Plumage and coloration</td>
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<td>Vocal Communication</td>
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<td>The Annual Cycles of Birds</td>
<td>11</td>
<td>Skeleton</td>
</tr>
<tr>
<td>Migration</td>
<td>12</td>
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<tr>
<td><strong>Exam #2</strong></td>
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<tr>
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<td>13</td>
<td>External Characters</td>
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<td>Social Behavior</td>
<td>14</td>
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<td>15</td>
<td>Field Identification</td>
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<tr>
<td><strong>Exam #3</strong></td>
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<tr>
<td>Nests and Incubation</td>
<td>16</td>
<td>Field Trip</td>
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<tr>
<td>Mates</td>
<td>17</td>
<td>Field Technique Demonstration</td>
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<td>Growth and Development</td>
<td>18</td>
<td>Field Trip</td>
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<td>Parental Care</td>
<td>19</td>
<td>Campus Birding</td>
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<td>Territoriality</td>
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<td>Field Trip</td>
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</tbody>
</table>

296
Tests will be announced at least one week in advance.

### Important Dates:

**January 13** (Wednesday): First day of classes (regular and first 8-week fast-track classes*).

**January 13-20** (Wednesday through Wednesday): Late registration. A $25 late registration fee will be assessed.

**January 13-20** (Wednesday through Wednesday): Students may make schedule changes.

**January 18** (Monday): Martin Luther King Holiday. Offices and classes closed.

**January 20** (Wednesday): Last day to register or add spring classes.

**February 22** (Monday): Last day to drop with W in first 8-week fast-track* classes.

**March 3** (Wednesday): Deadline to apply for August and December graduation.

**March 3** (Wednesday): Last day to withdraw from first 8-week fast-track* classes.

**March 8** (Monday): Last day of first 8-week fast-track* classes.

**March 9** (Tuesday): First day of second 8-week fast-track* classes.

**March 22-26** (Monday-Friday): Spring break.

**April 5** (Monday): Preregistration for summer and fall begins.

**April 7** (Wednesday): **Last day to drop with W in regular classes; not applicable to fast-track* classes.**

**April 16** (Friday): Preregistration for summer and fall ends.

**April 21** (Wednesday): Last day to drop with W in second 8-week fast-track* classes.

**April 29** (Thursday): Last day to withdraw from class (regular and second 8-week fast-track* classes).

**May 4** (Tuesday): Last day of classes.