BIOL3650 - Comparative Vertebrate Anatomy

Course Syllabus - Fall 2013

Last update: 10 August 2013

Course description

Number and Title:
BIOL3650 (CRN 87094)
Comparative Vertebrate Anatomy

Credit Hours:
3.0 semester credit hours

Catalog Description:
An experiment-based comparative study of selected vertebrate phyla with emphasis on gross anatomy, evolutionary history, and taxonomy.

Course Prerequisites and Co-requisites:
Prerequisite: BIOL1107, BIOL1107L, BIOL1108, BIOL1108L, all with a minimum US grade of C. BIOL3650L, Comparative Vertebrate Anatomy Laboratory with a D or higher (can be taken concurrently). If you have not taken 3650L before, then withdrawal from BIOL3650 requires withdrawal from BIOL3650L.

Instructor Information

Dr. Stephen Burnett
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Fax: (678) 466-4797
e-mail: StephenBurnett@clayton.edu
Internet: http://faculty.clayton.edu/sburnett/

Course Objectives

Following the completion of this course, each student should have:

- an understanding of science as a process of inquiry.
- the ability to describe the different levels of organization in the anatomy of vertebrates
- the ability to describe both the similarities and differences among the major groups of vertebrates
- the ability to apply evolutionary theory to the relationships between vertebrates and demonstrate an understanding of the evolutionary history of vertebrates
- the ability to apply the four course themes to explain the patterns that are present in vertebrate anatomy and evolution

Biology Learning Outcomes:
BIOL3650 supports outcomes 1, 4, 5, and 6 of the biology major. Students who complete this course will:

- Display knowledge of the basic principles of major fields of biology. This class will provide the student with a knowledge base in vertebrate anatomy.
- Communicate scientific information in a clear and concise manner both orally and in writing.
- Demonstrate the ability to collect, evaluate and interpret scientific data, and employ critical thinking to solve problems in biological science and supporting fields
- Collaborate effectively on team-oriented projects.
Office hours: 11:05-12:30 and 2:00-3:30 Tuesdays and Thursdays, some lab times, and by appointment. During office hours, I will generally be in one of two locations: Faculty Hall 128A (my office) or one of the biology teaching or research labs (in NBS or LAB buildings). If I am not in my office, I will leave a note on my office door indicating where I can be found.

### CRN Days Time Room Instructor

<table>
<thead>
<tr>
<th>CRN</th>
<th>Days</th>
<th>Time</th>
<th>Room</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>87094</td>
<td>TR</td>
<td>12:45 PM - 2:00 PM</td>
<td>A&amp;S G101</td>
<td>Burnett</td>
</tr>
</tbody>
</table>

### Teacher Education Learning Outcomes:

### Teacher Education Policy:

The content of this course syllabus correlates to education standards established by national and state education governing agencies, accrediting agencies and learned society/ professional education associations. Please refer to the course correlation matrices located at the following web site:

http://www.clayton.edu/arts-sciences/teachered/standardsoutcomes

### Conceptual Framework:

The mission of the Teacher Education Unit is to prepare professional educators who engage in reflective practice and who are competent, caring, committed, collaborative, culturally responsive, and prepared to teach diverse learners in an ever-changing society. For the complete CSU Teacher Education Unit Conceptual Framework, follow this link:

http://www.clayton.edu/portals/5/departments/teachered/docs/Conceptual-Framework.doc

### Textbook Information

#### Required Texts:


#### Text Coverage:

Kardong: Chapters 1-5, 7-12, 16-17

McMillan: This text will be used as a reference for writing various assignments. This is a reference that is used by a variety of biology courses. The specific sections you need to read will be indicated by your instructor for the appropriate assignments.

YOU ARE REQUIRED TO PROVIDE YOUR OWN SCANTRONS FOR EXAMS - Scantrons can be purchased at the bookstore. Students who fail to bring a scantron on the day of the exam will receive a zero for any sections of the test that required the scantron.

### Course Schedule

The course schedule is provided on a separate page (see "Courses" tab above or links on main course page). You should keep up with this schedule for specific dates or check with your instructor. Due dates for assignments may be changed at the instructor’s discretion. You are responsible for keeping track of due dates and turning in your work when it is required.

Please note that the schedule is tentative and the dates of the exams and the chapters that each exam will cover are
tentative and subject to change. Exam dates are not set until they are announced by your instructor (either in class or
one online) so check with him if you are uncertain of the date of an upcoming exam or assignment.

Grading

Each student's grade will be calculated based on
the following points:

<table>
<thead>
<tr>
<th>Item</th>
<th>Point Value</th>
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</thead>
<tbody>
<tr>
<td>Two course exams</td>
<td>150 points</td>
</tr>
<tr>
<td>Class assignments*</td>
<td>150 points</td>
</tr>
<tr>
<td>Class project**</td>
<td>75 points</td>
</tr>
<tr>
<td>Final exam (comprehensive)</td>
<td>125 points</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>500 points</strong></td>
</tr>
</tbody>
</table>

*Some class assignments will be completed in class. Absence from class on those days will result in the loss of the points
for those assignments. You cannot make up an in class assignment, but if you have an excused absence from that class
period, those points will not count in your total. Some of these points will be for "appropriate behavior" during class.
Appropriate behavior applies primarily to the use of unauthorized electronic devices during class time. Specifically, any
student using such devices during class (e.g., texting during lecture) will lose 5 points. If any such device plays its ringtone
or makes any other noise during class, the student loses 2 points. If such a device goes off during an exam, the
responsible student loses 10% of the exam points. Students who routinely violate this policy may have additional points
removed from their individual scores. For other types of disruptive behavior (e.g., talking during class, repeatedly entering
and leaving the classroom, habitually arriving late, etc.), the instructor reserves the right to remove points from offending
students as well. See the course syllabus for a more complete discussion of disruptive behaviors.

**The class project will be a group assignment. Your grade for the final project will be affected by your ability to work with
your group members successfully as judged by material turned in during the semester and ratings provided by your group
members. Students who are not actively participating in group activity will not receive points for group assignments. If
there are difficulties working with group members, it is your responsibility to notify me of those early so that they can be
addressed. Individuals who are not working well with their group mates may be removed from the group and required to
complete the group project on their own. This will result in a substantial loss of points, so it is in your best interest to work
well with your group mates!

Letter grades will be assigned as follows:

<table>
<thead>
<tr>
<th>Percentage of points earned</th>
<th>Grade earned</th>
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</thead>
<tbody>
<tr>
<td>89.5-100%</td>
<td>A</td>
</tr>
<tr>
<td>79.5-89.4%</td>
<td>B</td>
</tr>
<tr>
<td>69.5-79.4%</td>
<td>C</td>
</tr>
<tr>
<td>59.5-69%</td>
<td>D</td>
</tr>
<tr>
<td>&lt;59.5%</td>
<td>F</td>
</tr>
</tbody>
</table>

Mid-term Progress Report

The mid-term grade in this course reflects approximately 20% of the entire course grade. This grade will be posted by October 2nd. Based
on this grade, students may choose to withdraw from the course and receive a grade of "W." Students pursuing this option must complete
the withdrawal process by the mid-term drop deadline, which occurs on October 4th, 2012.

General Course Policies

Changes or additions to this syllabus, including readings, exam dates, grading, and course policies can be made at the discretion of the instructor at any time. If such changes are made, they will be posted by the instructor in the announcements section of his/her webpage or in GeorgiaView.

General data from this course may be used by the instructor for research on improved methods of teaching, leading to presentation or publication. Data that would be used for this purpose would consist of anonymous data, with no identifying information from particular students (e.g., the overall average for the course, NOT grades from particular students). If you do not wish for your instructor to include your data in such studies, fill out the withdrawal of consent form and bring it to your instructor.

Students must abide by policies in the Clayton State University Student Handbook. Students are also expected to abide by the guidelines in the "Basic Student Responsibilities" document produced by the College of Arts & Sciences. Of particular concern is disruptive behavior, where a student is not showing proper respect to the instructor or other students in the class. Such behavior will not be tolerated and a student engaged in such behavior will be required to leave the class, forfeiting the attendance points for that day as well as any other points that are associated with that day's activity. The ability of the student to return to class is determined by the instructor, based on the severity of the disruption, and can range from missing the current class period up to administrative withdrawal from the course. In addition, charges may be filed with the Office of Student Conduct.

Grades will not be communicated by phone or email - graded material can only be picked up by the individual to whom it belongs.

Visitors, including children, are not allowed in the classroom.

No smoking, other use of tobacco, eating, or drinking is permitted at any time in the classroom.

Issues associated with grades on assignments (disputes over points for a question, questions about grading keys, etc.) must be brought to the instructor's attention in a timely manner. This means that such concerns must be brought to your instructor within one week of the graded assignment being returned to the class. Items that are not brought to the instructor in this time period will NOT be addressed.

Academic Integrity

Cheating in any form will not be tolerated; all work that you turn in must be in your own words and must be your own work. Unless otherwise stated, all assignments are individual, which means that you are responsible for completing the assignment on your own. If your brainpower did not generate what you turn in, it is considered cheating. Examples of cheating include, but are not limited to: falsifying data from an experiment, copying the work of another person, allowing another person to do your assignment, allowing another student to copy your work, working in a group on a graded item that is not specifically intended for group work, copying or closely paraphrasing other sources (your textbook, the Internet, etc.) with or without providing citations, using anything but your brainpower on an exam, etc. Misconduct in any form will result in a zero on the assignment for all involved students and academic misconduct forms may be filed with the Office of Student Conduct for any violation. Judicial procedures are described on the webpage of the Office of Student Conduct.

Using the Internet to find answers to assignments

The use of the Internet to find answers to assignments should be avoided unless you are told to do so by your instructor. While many websites claim to provide "solutions" to homework questions that might include some of the assignments we complete, copying these answers can qualify as academic misconduct. In addition, MANY of these sites provide answers that are blatantly wrong. In such a case you will lose the points for answering the question and may lose points for copying the answer. If the copying is significant you can also be submitted for academic misconduct. It is in your best interest to make sure that you use only your own brain power to answer questions and not go to homework "help" sites for answers. Under no circumstances will incorrect information taken from the Internet receive credit, regardless of the site from which it was taken.

Disruptive Behavior
Disruption of the Learning Environment

Behavior that disrupts the teaching–learning process during class activities will not be tolerated. This includes belligerent, abusive, profane, and/or threatening behavior. A student who fails to respond to reasonable faculty direction regarding classroom behavior and/or behavior while participating in classroom activities may be dismissed from class.

Common examples of behaviors that may be disruptive include, but are not limited to:

- Refusal to comply with faculty direction
- Monopolizing classroom discussions
- Talking when the instructor or others are speaking
- Failing to respect the rights of other students to express their viewpoints
- Constant questions or interruptions that interfere with the instructor’s presentation
- Creating excessive noise
- Use of electronic devices (e.g., computers, iPods, MP3 players, or cell phones) in the classroom without the instructor’s approval
- Overt inattentiveness (e.g., sleeping or reading the paper in class)
- Inordinate or inappropriate demands for time or attention
- Routinely entering the class late or leaving early without instructor permission.
- Leaving and re-entering the class during lecture.
- Verbally abusing an instructor or student (i.e. cursing or extremely loud talking directed at a particular person)
- Threatening to physically harm an instructor or student through body gestures.
- Intimidating through body gestures and/or posture.

Students exhibiting these types of behaviors can expect a warning from the instructor or dismissal for the class period in which the behavior occurred. Failure to correct such behaviors can result in dismissal from the course.

More extreme examples of disruptive behavior include, but are not limited to:

- Use of profanity or pejorative language
- Intoxication
- Verbal abuse (e.g., taunting, badgering, intimidation)
- Harassment
- Threats to harm oneself
- Verbally threatening to physically harm an instructor or another student
- Physical violence

Students engaging in such behaviors can expect to be dismissed from the course immediately, and will receive a grade of F or WF for the course. In the case of such extreme behaviors, a student may be dismissed even if the event took place outside of the classroom, and will definitely result in a referral for violating the student code of conduct.

A student who is dismissed from a course for unacceptable and/or disruptive behavior is entitled to due process and will be afforded such rights within 3 class days following dismissal. If found in violation after the review process, the student’s dismissal will be upheld and a grade of WF may be issued for the course.

Conditions attributed to physical or psychological disabilities are not considered as a legitimate excuse for disruptive behavior.

Policies for Late Work

Unless otherwise stated by your instructor, assignments that are to be completed outside of class are due in class on the assigned days. Assignments that are not turned in by the assigned time immediately lose 20% of their points. They lose an additional 20% per day. For assignments that must be handed in to your instructor, only Monday-Friday are counted for determining how many days the assignment is late.

The additional 20% is taken off based on the time the assignment was due. For assignments due in class, the time will be based on the end of the class period. For example, for a class that ends at 10 am on Monday, if you turn in an assignment at 11 am on Wednesday, it loses 60%. 20% for being after 10 am on Monday, 20% for being after 10 am on Tuesday, and 20% for being after 10 am on Wednesday. Late work that is turned in to me will be penalized based on the time
that I received it. If you are unable to turn an assignment in to your instructor personally, you must have a faculty or staff member from the Department of Natural Sciences sign the assignment and mark the date and time on it before you place the item in my mailbox or under my door. Items that lack any of these three items will be penalized based on the time that your instructor pick up the assignment.

For assignments that are submitted electronically, every day counts, including weekends and school holidays. Electronic submission of assignments is only allowed if the instructor specifically permits it. If it was not permitted, electronic submissions will not be accepted and your work will be considered late, losing points until I receive a printed copy of the assignment.

Printing problems or other general computer issues are not an acceptable excuse for submitting work late and will result in a loss of points as indicated above.

Under NO circumstances will assignments be accepted more than one week after they are due or after I have returned the graded work to the class (or posted an answer key), whichever is sooner. For assignments that are completed electronically (e.g., GAView), late submission may not be available because often grades and answers are provided as soon as the assignment deadline passes. For such assignments, missing the deadline results in a zero for the assignment. For assignments that are not graded immediately, the normal process for determining loss of points for late work will apply.

Turn in all parts of your assignment together. No supplemental materials may be added once you have turned in the assignment.

Computer policies

**Notebook Computer Requirement:**

Each CSU student is required to have ready access throughout the semester to a notebook computer that meets faculty-approved hardware and software requirements for the student’s academic program. Students will sign a statement attesting to such access. For further information on CSU’s Official Notebook Computer Policy, please go to the [ITP page at the HUB’s website](http://faculty.clayton.edu/sburnett/courses/fall2013/biol3650/syllabus).

**Electronic Document Format**

For any assignment submitted by uploading documents, it must be provided in a format required by your instructor. For the majority of such assignments, this will be in the format of Microsoft Word (.doc or .docx formats are both acceptable as long as they are produced by recent versions of the software), although specific assignments may require other formats as needed. Any assignment that is submitted in a format that does not match the required one will not be accepted, and will be counted as late, losing points until a file in the proper format is submitted. As part of your technology fee, you have the ability to have a complete copy of Microsoft Office installed on your laptop. You should contact the HUB for software installation information.

**Computer Skill Prerequisites:**

Students enrolled in this course must possess and have proficiency with the following computer skills and be able to:

- Use the computer’s operating system
- Access and send email
- Use a web browser and search engine
- Access [GeorgiaView](http://faculty.clayton.edu/sburnett/courses/fall2013/biol3650/syllabus) and other online systems for course assignments
- Use a word processing program for assignments as needed
- Install software as required for accessing course materials, including browser plug ins such as Adobe Flash player, Adobe PDF reader, etc.

Students who do not have the required skills should go to the HUB and/or Student Software Support Services for training and help. Your instructor is not able to provide this training. Assignments may require use of your computer and an inability to complete an assignment due to a lack of the above (or other general computer issues) will not be an acceptable excuse.

**In-class Use of Student Notebook Computers:**
Student notebook computers may be used in the classroom in this course for class assignments. Computers will be required to access course materials, work on assignments outside of class, and to communicate with your instructor. Students may be permitted to use computers in class for general use at the instructor's discretion. The instructor may deny permission to use a computer during class time. In addition, the instructor reserves the right to forbid computer use to particular students if those students are found using them for purposes not related to the course (e.g., web surfing, email, instant messaging, etc.). This same limitations apply to the use of other electronic devices in class (including, but not limited to cell phones, tablets, MP3 players, etc.). Violation of these rules may result in loss of points, so check with your instructor to determine what is acceptable.

In-class Use of Other Electronic Devices:

Use of electronic devices other than computers is also restricted to use for purposes related to the course (including, but not limited to cell phones, tablets, MP3 players etc.). Any student using such a device for other purposes (e.g., texting during class time) will lose 5 points from his/her grade for each violation and may have the device confiscated. In addition, students will no longer be able to use that device in class for any purpose in the future. Any device that makes noise during class time by ringing/chiming/alarming will result in the student losing 2 points.

Attendance

University Attendance Policy

Students are expected to attend and participate in every class meeting. Instructors establish specific policies relating to absences in their courses and communicate these policies to the students through the course syllabi. Individual instructors, based upon the nature of the course, determine what effect excused and unexcused absences have in determining grades and upon students’ ability to remain enrolled in their courses. The university reserves the right to determine that excessive absences, whether justified or not, are sufficient cause for institutional withdrawals or failing grades.

Course Attendance Policy

Attendance is expected at all class meetings and will be checked at each class meeting with the student's signature on the class roll. Quizzes and tests will be given at the beginning of the class; if you arrive late, you may be permitted to take the quiz/exam as long as the materials have not been collected from the class. However, you will be required to turn in the assignment at the same time as the rest of the class - NO extra time will be given. Exceptions to this policy can be made only under extenuating circumstances and with a WRITTEN excuse or explanation for tardiness or absence. Some class assignments may be given during class time and absence from that class period will result in a zero for that class assignment. If you have an acceptable excuse (see below), those points will not count in your grade.

For any excuse to be "acceptable", you must provide me with an original (no photocopies) of a document from a competent authority (doctor or other healthcare provider, a subpoena, jury summons, etc.). For this purpose, a note from your parents is NOT acceptable. The excuse must specifically indicate the dates that are to be excused, must be presented upon the first class day that the student returns to school, and makeup arrangements must be made at that time. The decision on whether or not to allow a makeup exam is at the discretion of the instructor and without an acceptable written excuse, no makeups will be given. Makeups will not be permitted after the graded exams have been returned to the class. If you are unable to make up an exam from an excused absence, the missed examination will not count in your final course grade (which means that the remaining graded work will be responsible for a greater weight in determining your final grade). For non-emergency situations (e.g., unexpected work schedule changes) it may be possible to take exam earlier, but you cannot take it later. The ability to take an exam early is at the instructor's discretion, and must be able to be accommodated within the instructor's schedule. If an early exam cannot be provided then the student will be required to take the exam at the regular time or receive a zero on the exam.

You are only permitted one excused absence from class exams, regardless of your excuse. If you miss more than one exam with an excuse, the second exam will automatically receive a grade of zero. At such a time it will probably be best to consider the option to take a hardship withdrawal, as the exams are the majority of the points in the course. In addition, excuses will not be accepted for routine procedures (checkups, teeth cleanings, eye exams, etc). Students should not schedule such appointments for class times.

You cannot have an excused absence from the final exam - if you are unable to take the final exam at the scheduled time, and you have a valid excuse, it is up to the instructor what option will be available to you. This will be based on the
instructor's schedule as well as the time when you are able to return to school after your absence. There are only two options:

1. You may be permitted to take a makeup version of the final exam
2. You will need to take an incomplete and take the final exam during the next semester you are enrolled at CSU. An incomplete exam must be scheduled at the beginning of that semester.

It is a general policy of the College of Arts & Sciences to allow a student to move a final exam in situations where he/she has three or more exams scheduled on the same day. If this situation applies, you are required to inform your instructor at least two weeks prior to the date (and by filling out the required paperwork) of the final exam so that arrangements can be made. Failure to provide sufficient advance warning may result in your request to move the final exam being denied. If you are able to have the exam date moved, this will count as a "makeup" exam (see warning below).

**Warning: Makeup exams (both regular and final exams) may not follow the same format as the exam that was missed.**

**NOTE: Excuses for graded assignments can only be applied if you were NOT present to take the assignment.** If you take the assignment, you cannot ask not to count that assignment in your grade after the fact. In such situations, you will receive the score you earned on the assignment. If you know of an extenuating circumstance, it is in your best interest to discuss it with your instructor ASAP.

If you miss a class period where there is no graded assignment, there are no points that you will lose. However, you are responsible for all the material that was covered during that class period. You will need to work with a classmate to get any notes that you missed. Then you can come to me to get help understanding that material, but you cannot simply ask me to repeat all the material that you missed from lecture.

**Other Policies**

**Exam/quiz policies**

Specific policies on exams and quizzes will be provided on the day of the exam/quiz itself, but several rules apply to all testing situations

1. All electronic devices including cell phones, tablets, MP3 players, etc. are not allowed during exams or quizzes, unless specifically permitted by the instructor. During such activities, these devices are not permitted to be in your possession at all (which means they cannot be clipped to your belt, in your pocket, etc.). Possession and/or use of these items during an exam or quiz will result in an automatic zero on the graded activity, and may result in a charge for academic misconduct.

   *If you are dealing with a family emergency that requires you to be available for contact on the date of an exam or quiz, you must set your phone on vibrate and provide your phone to your instructor. If the phone goes off during the exam, you will be notified - at this point you will have to turn in your exam - you cannot leave to take a phone call and return. If your phone goes off and you have not notified your instructor and provided him/her with the phone, you will be treated as having violated this policy and will lose points as indicated in #2 below, even if you have a family emergency. If you have such serious situations, it is in your best interest to discuss this with your instructor ahead of time to determine the best way to address your particular situation.*

2. If a cell phone or other electronic device makes noise (by ringing, buzzing, etc.) and disrupts the testing environment, even if it is not on your person, the instructor will penalize the responsible student(s) by taking points from their score.

3. On any portion that is graded using a scantron sheet, your grade will be based on what you marked on the scantron sheet, with no reference to what you have written on the exam pages. I will return the exam to you, but I will keep all scantrons in case there are problems in scoring, errors on the answer key, etc. If you wish to see your actual scantron sheet, you will need to come to my office.

**E-mail**

Each student must activate his/her e-mail account at Clayton State University. The class listserv will be the only method for communicating with the class by e-mail. You should also check GeorgiaView regularly for new announcements. Handouts given in class and other important items will usually be posted in GeorgiaView as well.
Communication from personal email accounts (e.g., Yahoo, gmail, etc.) is acceptable, as long as the following requirements are met:

1. You clearly identify yourself in the body of the email
2. You clearly identify which class you are writing to me about
3. The subject line of your email is suitably descriptive that I can tell it isn't Spam or a virus (e.g., do not send emails with a subject of "Hello", etc.)
4. The email does not ask me to provide information that is already available through the course website or GAView.
5. The email is not profane, insulting, threatening, etc. You are expected to follow similar guidelines in any electronic communication with other members of the class. Students who send such inappropriate electronic communication (including email, texts, messages through social media services etc.) to the professor or a classmate may receive a referral for violating the student code of conduct.
6. You do not ask me specific questions concerning grades, as they cannot be discussed by email.

Emails that do not meet these requirements will not receive a response.

GeorgiaView

Each student must activate his/her GeorgiaView account at Clayton State University. This account will be used for completing various assignments in and out of class. These assignments will generally have very specific time limits, and if they are not completed on time, they will often not be possible to complete as late assignments. More information on these assignments will be provided as the semester progresses.

Operation Study

At Clayton State University, we expect and support high motivation and academic achievement. Look for Operation Study activities and programs this semester that are designed to enhance your academic success such as study sessions, study breaks, workshops, and opportunities to earn Study Bucks (for use in the University Bookstore) and other items.