Office and office hours

! MGB 302-A, 683-5680, e-mail kkilburn@odu.edu
! Home page: http://www.odu.edu/~ksk/home.htm
! Office hours: TR 10:30 - 12:00 and by appointment

Course description and objectives

This course will provide you with an introduction to the vertebrate animals, including overviews of their evolution, systematics, anatomy, physiology, ecology and behavior. In addition to the “facts” about vertebrates, you will be introduced to important ideas in the areas of evolutionary biology, systematics, morphology, and ecology that form the basis of our conceptual understanding of this group of animals. We will also discuss a number of important hypotheses about the biology of various vertebrates and explore the ways in which these hypotheses are conceived, tested, and modified. The general approach will be hylogenetic, tracing each group of vertebrates from its origins, discussing the major changes associated with its evolution, and reviewing selected elements of its current diversity and biology.

In addition to the conceptual material, you will be expected to master an extensive body of factual information, including taxonomy and patterns of evolutionary relationship. Lecture quizzes and exams will assess your understanding of both factual and conceptual material.

Text (required)

! Outside readings will be required occasionally and will be provided either in class or for downloading from the course website.

Other resources

! The course web site (http://www.odu.edu/~ksk/vzhome.htm) includes a variety of resources relevant to this course, including (but not limited to) information on vertebrate paleontology, evolution, natural history, and conservation. Links are also included to academic resources that you may find helpful.
! Lecture outlines are available as Adobe Acrobat files from the course website. Because many of the files contain illustrations, some files are larger than will fit on a floppy disk – if you want to save them, you’ll have to download to a zip, CD-ROM, or hard drive. The lecture notes are not a substitute for attending class; you are responsible for all material covered in lecture, even if that material is not included in the printed notes.
The course study guide, available both for browsing online and for download in Adobe Acrobat format, is an important resource for your regular study routine and test preparation.

The course Blackboard site includes some of the information included on the main course website as well as an on-line grade book where you can check scores on exams, quizzes, and assignments. Most announcements made in class will also be posted to the Blackboard site for easy reference. You should monitor the site regularly. To use the site, go to the University Home Page (http://www.odu.edu) > Current Students > Blackboard > Student help. From that page, you can get the technical requirements info, email account requirement info, login instructions, and a number of other helpful items such as a computer compatibility check and various tutorials.

**Evaluation**

Your grade in this course will be determined by your performance on a series of lecture examinations, weekly quizzes and other assignments, and a partially cumulative final examination.

**Lecture exams** will be taken at the Learning Assessment Lab (a.k.a. “Testing Center”, 683-3170) in the Gornto Technology building (between the library and BAL) on the dates indicated on the course schedule. You are responsible for scheduling your own tests; that includes knowing when the exams will be available, when the lab is open, etc. You are also responsible for knowing and adhering to all of the lab’s policies. You must also provide your own (blue) scantron forms and pencils. Three exams, worth 100 points each, will be given; the low score will be dropped, and no make-up exams will be given.

**Quizzes** covering portions of that week’s material will be given during the last 10 minutes of class on Friday and will be worth 5 points each. Occasional assignments involving outside reading or other activities will be assigned and included as quiz scores. The highest 10 scores will be included in your grade, and no makeup quizzes will be given. I generally announce the topics for each week’s quiz on Wednesday and will not post that information on the Blackboard site.

**The final exam** will be given on Wed., 5/7 at 8:30 a.m. It will be worth 100 points and may not be used as your low score to be dropped. Its format will be the same as that of the lecture exams and it will include a combination of new material and material from previous exams. You will need a blue scantron and number 2 pencil; I will not have these available.
Grading

Point distribution:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (3 @ 100 pts, low score dropped)</td>
<td>200 pts.</td>
</tr>
<tr>
<td>Quizzes (top 10 scores @ 5 pts each)</td>
<td>50</td>
</tr>
<tr>
<td>Final exam (1 @ 100 pts)</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>350 pts.</td>
</tr>
</tbody>
</table>

Your grade will be based on the following scale:

- 90 - 100% = A
- 80 - 89.9% = B
- 70 - 79.9% = C
- 60 - 69.9% = D
- below 60% = F

"I do not grade on a curve, nor do I provide extra-credit assignments. If I feel it is necessary to ensure that exams are fair and reasonable, I may elect to make adjustments to scores on some exams.

"If a student receives an anomalously low score on a single exam, I reserve the right to weight that exam less heavily than I do other exams.

"If, at the end of the semester, your grade falls on a “borderline”, I reserve the right (but do not guarantee) to take improvement, effort, and class participation into account.

"I may, at my discretion, use plus/minus grading, but only for students on grade borderlines and only if awarding a “plus” or “minus” results in a higher score than the student would otherwise receive based on the scale above (i.e., an 89% may earn an A- or B+, but a 90% will always earn an A).

"In keeping with University regulations, grades of Incomplete (I) will be given only in exceptional circumstances beyond the student’s control (such as illness or injury), and only after the student has completed 80% or more of the course requirements.

"Scores on exams, quizzes, and assignments will be posted regularly to the Blackboard site. You are responsible for checking the site and reporting any errors to me promptly. Because of privacy concerns, I will not provide course grades or exam scores over the phone or via e-mail.

Missed exams

No makeup lecture exams, quizzes, or assignments will be given. The final exam may be made up only in the event of a legitimate absence (illness, family emergency, unresolvable work conflict, or inability to travel due to weather), and only if you notify me within 24 hours of the scheduled exam date and time. You may be allowed to take the final exam early for any of the above reasons or if you have two other finals scheduled for the same day, but only if you notify me at least two weeks in advance of the final exam date and only if we can arrange a mutually satisfactory time for the exam.
Attendance
Your attendance in this course will not be monitored. For most students, regular attendance is critical for academic success. I expect you to arrive in class on time and ready to learn. Late arrivals will be tolerated unless and until they become disruptive, at which time I may disallow them. You are responsible for all information, including announcements, presented in lecture. If you miss class you should attempt to obtain any missed information from other students before contacting me.

Classroom policies
Pagers, cell phones, and beepers should be turned off while you are in class. You are welcome to tape lectures.

Honor code
By taking this course, you agree to adhere to Old Dominion University’s honor code. Infractions, including plagiarizing written assignments, cheating on exams and/or providing information about exam contents to other students, will not be tolerated and will be dealt with according to University policy. Any assignments requiring library research must be completed by the student or by the student working with appropriate library personnel. Any use of commercial research services will constitute a violation of course regulations and will result in a score of 0 for the assignment in question.

Expectations
This is a rigorous, challenging, information-rich course. To do well, you will need to master a wealth of information ranging from specific vocabulary to key hypotheses and theories. Exams and quizzes will assess not only your factual recall, but your understanding of major concepts and your ability to apply concepts to novel situations.

You should plan on spending a minimum of 6-9 hours per week preparing for this class. That time includes skimming each section of the text before it’s covered in class; studying lecture material; re-reading text material in depth; and preparing questions over any material with which you need additional help. Note, however, that your grade is based on performance, not on how many hours you spend studying.

You are responsible for keeping your own record of your performance in the class and for contacting me promptly if you need help improving it. Waiting until the week before the final to ask “how can I pass the class” is NOT a formula for success.

You will be held responsible for all material covered in lecture and in the portions of the text that correspond to that lecture material. In addition to chapter numbers, I will generally indicate which pages in each chapter you should concentrate on.
Helpful hints

! For most students, the best way to maximize academic performance is to develop a consistent, regular program of preparation, review, and study and to stick with it. That means setting aside specific times each week to “preview” upcoming material from the text and to review previous material from the text and lecture. With a regular, consistent study program, test preparation becomes much more effective and much less traumatic.

! A common problem for many students is the idea that memorizing the lecture notes is the same as learning and understanding the material presented in the course. Nothing could be further from the truth. Monitor your study methods to be sure you’re not falling into this habit.

! Although none of the strategies included here will guarantee your success in the course, they have proven helpful to many of my students in a variety of classes. You might consider trying several of the following until you work out the study style that works best for you.

- **Take your own lecture notes** even though prepared notes are available. Use the prepared notes to “fill in” your notes each week and as a way to preview upcoming material.
- **Tape the lectures** and listen to them in the car, at home, etc. for review.
- **Ask questions in class**. Don’t be shy; I can’t help if you don’t ask for it!
- **Rewrite your lecture notes**, filling in details and concepts from the text and prepared notes.
- **Ask questions in class**. The only “dumb” question is the one that isn’t asked.
- **Test yourself** by making up questions and answering them aloud or in writing.
- **Ask questions in class**. Your classmates will thank you for it!
- **Use flash cards** to study vocabulary whenever you’ve got a few minutes.
- **Study in a group**; take turns explaining material to each other.
- **Come to office hours** any time you have a question or want help reviewing.
- **Don’t wait until the last minute to ask for help**.

If you are experiencing difficulty

If you are having any difficulty -- whether it’s with specific course content or with anything else -- please don’t hesitate to let me know. And do so as soon as the problem arises -- telling me the week before the final that “I need help studying”, or asking me after the last midterm “what do I need to do to pass the class” is NOT a recipe for success! Remember also that you have access to a variety of student services on campus; I’m more than willing to help you locate those as necessary.

If you have special needs

Please inform me as soon as possible of any special needs you might have, especially concerning testing.
Changes
I reserve the right to make reasonable changes to the syllabus following timely notification of the students.

Conflicts
If you feel you are having a conflict with me, you should let me know so that we may resolve it promptly. If you are not satisfied that I have resolved the problem appropriately, you may request that the issue be presented to the Department Chair for further arbitration. You are responsible for notifying me and/or requesting the Chair’s assistance in a timely fashion.

Tentative schedule

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>TOPICS</th>
<th>Chapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/13</td>
<td>Introduction, microevolution, macroevolution</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1/20</td>
<td>MLK holiday; systematics; vertebrate origins</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1/27</td>
<td>Vertebrate relationships; basic structure and function</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>2/3</td>
<td>Early vertebrates; origin of gnathostomes **Exam 1 F 2/7</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>2/10</td>
<td>Chondrichthyes</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>2/17</td>
<td>Osteichthyes; life in water</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>2/24</td>
<td>life in water</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>3/3</td>
<td>Origin and early radiation of tetrapods; **Exam #2 F 3/7</td>
<td>7, 8</td>
</tr>
<tr>
<td>9</td>
<td>3/10</td>
<td>!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!SPRING BREAK!!!!!!!!!!!!!!!!!!!!!!!!!!!!</td>
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<tr>
<td>10</td>
<td>3/17</td>
<td>Lissamphibia: modern amphibians</td>
<td>9</td>
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<tr>
<td>11</td>
<td>3/24</td>
<td>Origins and early radiations of amniotes; turtles</td>
<td>8, 10</td>
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<tr>
<td>12</td>
<td>3/31</td>
<td>Dinosaurs; biology of modern reptiles</td>
<td>11, 14</td>
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<tr>
<td>13</td>
<td>4/7**</td>
<td>Thermoregulation **Exam #3 F 4/11</td>
<td>11, 12, 15, 22</td>
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<tr>
<td>14</td>
<td>4/14</td>
<td>Evolution and biology of birds</td>
<td>15, 16</td>
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<tr>
<td>15</td>
<td>4/28</td>
<td>Evolution and biology of mammals</td>
<td>17, 19, 20</td>
</tr>
<tr>
<td>16</td>
<td>5/7</td>
<td><strong>FINAL EXAM, WED. 5/7 AT 8:30 A.M.</strong></td>
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