EPPS17– Dinosaurs and Their Relatives (Winter 2018)

Instructor: Caitlin Brown, Ph.D.
Office: 5667 Geology
Office Hours: On CCLE homepage and by appointment M-R
I am happy to accommodate other times, but email for appointments >24h in advance. Make a note in your email if you require a private appointment.
Email: savethevertebrates@gmail.com
Lecture: TR 2-3:15 Young Hall CS50

COURSE DESCRIPTION: This course will introduce students the concepts in paleontology, including geological and biological topics, using dinosaurs as a model group. Geological topics will include deep time, radiometric dating and plate tectonics. Biological concepts will include comparative anatomy, evolution, classification, physiology, and ecological community structure. Dinosaurs make an excellent basis for studying these concepts, as they have been investigated in all these areas, by geologists and biologists alike.

Class web site: Go through your my.ucla.edu page. Use the class web site to stay abreast of assignments, readings, and notices, as well as answers to exam and lab questions. Also, students are encouraged to use the course bulletin board linked to this site in order to post and questions. This is a form of course participation.

Teaching Assistants: Andrew Parisi, Jeff Osterhout, Deep Upadhyay and Erik Weidner
Office hour listed in the lab and by appointment

Textbooks: Available online, new and used, and in the UCLA libraries

Grading
Midterm exam ..................... 30%
Lab assignments ............... 25%
Participation/Quizzes ..........10%
Final Exam ...................... ......35%
Total ................................ 100%

The exams will consist of a combination of multiple choice and short-answer questions. One or two online quizzes will be given each week and will cover the readings, as well as other course material. They will be due before the lectures. You can miss one quiz during the quarter. You will be notified what will be covered on the quizzes the week before.

Policy on make-up exams: make-up exams are possible only in dire and documented circumstances, and only if the instructor is notified in advance.
Policy on late assignments: 50% grade reduction if turned in within 1 week of due date.
Participation includes attendance in both lectures and labs, vocal participation in discussions, asking questions in
lectures, attendance at office hours and review sessions, and appropriate use of the discussion forum. Not all of these activities are mandatory, but they all contribute to the participation grade.

**Academic Dishonesty:**
If you are caught cheating on individual assignments (e.g., giving answers to or receiving answers from someone else) or plagiarizing, you will be reported immediately to the Dean of Students – NO EXCEPTIONS – for further action. You will also receive a zero for that assignment/exam.

**Students Requiring Accommodation:**
To receive academic and classroom disability accommodations, students must first consult with the Center for Accessible Education (CAE). A CAE counselor will work with the student and academic department to provide reasonable academic accommodations. This should be completed at the beginning of the quarter to guarantee accommodations. Requests made during the quarter may not be approved by the CAE in time for examinations- contact them as soon as possible. CAE counselors are located at A255 Murphy Hall and can also be reached at (310) 825-1501.

**Labs:**
Each student is assigned to a Lab/Discussion section that meets for 2 hours per week, and attendance is mandatory. Labs meet in Geology 5644. There will be weekly activities and assignments associated with the lab and unless otherwise stated, labs must be turned in by the start of the next lab period. Lab exercises and examination will be completed in groups. Late labs, unless previously discussed and excused by the TA, will only be worth 50% of the points. If a medical issue, sporting event or other reasonable cause leads to a missed lab session, contact your TA immediately. With prior written approval, students may attend a different lab session to make up a missed lab or revisit material.

**Schedule:**

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Wk.</th>
<th>Date</th>
<th>Topic</th>
<th>Laboratory</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>4/2</td>
<td>A History of Discovery</td>
<td>No labs</td>
<td>4/2 D.O. Prologue and Ch. 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/4 Rise Prologue and Ch. 1, D.O. Ch. 3</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>4/4</td>
<td>What is a Dinosaur?</td>
<td>Overview of Fossils and Fossilization</td>
<td>4/9 Chapter 2, both books</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>4/9</td>
<td>Deep Time and Evolution</td>
<td>Saurischians</td>
<td>4/11 Finish Rise Ch.2, DO Ch. 4</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>4/11</td>
<td>Life on Pangea</td>
<td>Saurischians</td>
<td>4/16 Rise Ch. 3, DO Ch. 5</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>4/16</td>
<td>The Jurassic World of Sauropods</td>
<td>Saurischians</td>
<td>4/18 Finish Rise Ch.3, DO Ch. 7</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>4/23,</td>
<td>Carnivores and Bone Wars</td>
<td>Saurischians</td>
<td>4/23 Rise Ch. 4 DO Ch. 8</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>4/25</td>
<td>Theropods</td>
<td>Saurischians</td>
<td>4/25 Rise Ch. 5</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>4/30</td>
<td>Guest Lecture by Dr. Andy Farke (included on the midterm)</td>
<td>No labs</td>
<td>4/30 Reading for guest lecture on CCLE</td>
</tr>
<tr>
<td>5</td>
<td>5/2</td>
<td>MIDTERM EXAM Lecture 1-9</td>
<td>No labs</td>
<td>4/30 Reading for guest lecture on CCLE</td>
<td></td>
</tr>
<tr>
<td>Week</td>
<td>Date</td>
<td>Topic</td>
<td>Reading</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>5/7</td>
<td>Evolution and Dinosaur Sex</td>
<td>Ornithischians</td>
<td>5/7 Rise Ch. 6, DO Ch. 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5/9 Finish Rise Ch.6, DO Ch. 9</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>5/9</td>
<td>The Ecology of Dinosaurs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>5/14</td>
<td>Dinosaur Physiology</td>
<td>Jurassic Lark</td>
<td>5/14 Rise Ch. 7 DO Ch. 11</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5/16 Finish Rise Ch.7, DO Ch. 12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>5/16</td>
<td>Fleshing out Dinosaurs: Biomechanics and Modeling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>5/21</td>
<td>Mesozoic Communities</td>
<td>Mesozoic Seas</td>
<td>5/21 Reading on CCLE, DO Ch. 13</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5/23 Reading on CCLE, DO Ch. 14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>5/23</td>
<td>Mesozoic Seas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>5/28</td>
<td>Guest lecture by Dr. Mike Habib (included on the final)</td>
<td>Flight!</td>
<td>5/28 Reading on CCLE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5/30 Rise Ch.8</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>5/30</td>
<td>Birds: the Second Rise of Dinosaurs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>6/4</td>
<td>The End of an Era</td>
<td>No labs</td>
<td>6/4 Rise Ch. 9, DO Ch. 15</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>6/6</td>
<td>Taphonomy and Mammals</td>
<td></td>
<td>6/6 Finish Rise Ch.9</td>
<td></td>
</tr>
</tbody>
</table>

Final exam date and time on MyUCLA. Covers lectures 10-19, may recycle limited terminology and concepts from earlier lectures (e.g. herbivores reappear in lecture 11).