Biology 471L Recitation Syllabus
Spring 2017

General Information
TA (primary contact): Elizabeth Moore
Email: melmoore@live.unc.edu
Office: Coker 107
Office Hours: TBD
Recitation Times: Section 1- Wed 1:30-3:30 Genome Sciences Building, room 1377
Section 2- Thu 2-4 Genome Sciences Building, room 1377

Contacting me:
Stopping by my office hours is the best way to have your questions addressed. However, if you can’t catch me, or you have questions that come up throughout the week, then contact me through email. I do my best to respond as promptly as possible to e-mails. I typically respond to emails no later than 24 hours after I’ve received them.

Attendance:
Attendance is required for all undergraduates and will be taken each week. If you know you are going to miss a session, contact me AT LEAST one week ahead of time, and I will give you permission to attend the alternate section. If you cannot make the other section, I will give you a make-up assignment (a 2-3 page paper on a topic related to the missed recitation). You may request this alternate assignment ONCE if necessary. In either case, you will be responsible for turning in any work due that week by the time of your usual recitation.

In addition, you may miss ONE session without penalty during the semester. If you exercise your free absence, you will still be responsible for turning in lab work due that day, and if you miss all or part of a lab, you will still need to turn it in. You will have to email me to ask for any data you require that you were not there to collect. Use this freebie wisely – no other absences will be excused.

Expectations for graded components of the course:
The goal of this lab is to a) facilitate an understanding of concepts brought up in lecture, and b) examine some of these concepts in greater detail. We will do this each week either by doing a laboratory exercise or discussion section. Attaining both of these goals requires that students come to recitation prepared for the assignment that week.

Student-led Discussions
Discussion sessions will compose about ½ of our meetings. On these weeks, we’ll discuss 2-3 papers we’ve read. Readings will be posted to the Sakai recitation site under “Course Documents” in the “Recitation Materials” folder 1 week ahead of time. These discussions will be student led. Your participation in these discussions is mandatory, meaning that a significant portion of your final course grade will be determined by your performance during these discussions (see GRADING below). Each of you will be asked to participate with a partner and lead one discussion during the semester. Your responsibilities will vary, depending on whether or not you are a discussion participant or discussion leader.
Responsibilities of discussion participants:
For the days when you are not leading a discussion, you should come to class prepared to participate actively in the discussion. It’s important that you read the material carefully and be prepared to discuss it in class, as 45% of your laboratory course grade will be based on your class participation and discussion assignments. Therefore, everyone should speak up in every discussion. To help you prepare, and to assist the discussion leaders in their presentation, you will be asked to post at least two questions based on each week’s reading assignment on the Sakai “Forum” no later than 5pm the day before the discussion (please post your questions on the appropriate discussion forum, which are listed by the week # and day of the discussion). You will also need to write a summary paragraph concerning what you read (see GRADING). Your summary will be due by the start of the discussion section. Bring copies of the papers for discussion either printed out or on your laptops/iPads.

Summary: what you need to do for each discussion section that you DON’T lead
- Read the assigned papers (and bring them to the discussion section)
- Post at least 2 questions on the appropriate Sakai forum before 5pm the day BEFORE the discussion section
- Write a summary paragraph of the papers, due in HARD COPY at the beginning of the discussion section.

Responsibilities of discussion leaders:
On days when you are leading a discussion, you and your partner will be in control of class for that particular day. Your group will be engaged in two types of activities:

First, your group should spend no more than 20 minutes (you will be timed) at the outset of the class period presenting an overview of the reading material. During this time, you should tell the class why the material is important, and what the central messages of the reading were. In doing so, you may wish to use a Powerpoint presentation, handouts, and/or the chalkboard. A good way of conducting these overviews is to have each member of the team present a different aspect of the paper(s) being discussed that day (in other words, everyone should take a turn presenting before the class).

Second, after the overview, the remainder of the class period will be devoted to the discussion leaders reading their classmates’ questions and leading a discussion on each of their questions. Here are some tips on how to lead a successful discussion:

1) Use your classmates’ submitted questions to get the discussion rolling and to keep it rolling. It is a good idea to put these questions into your powerpoint or handouts, so that everyone can see the questions while thinking about them. It can also help to put basic questions first, to get everyone onto the same page, and the most interesting questions just after them, leaving other extraneous questions to the end if time allows.

2) Once the discussion gets started, ease up and let your classmates talk. You do not need to respond to everything that others say; in the best discussions, everyone is
speaking to each other rather than solely to the discussion leaders. Be prepared to redirect the conversation if we become bogged down on meaningless argumentation, but don’t be too eager to shift topics if the class is confused.

3) Be fair to the author’s arguments. Present the author’s position first before voicing your personal beliefs.

4) Avoid jargon. If it’s necessary to use special terms, make sure you define them.

5) Be prepared to support your arguments. The best way to do so is to read the material carefully. It also helps to consult additional, outside readings for opposing views or to clarify points made in the assigned reading. If you find useful outside readings, provide these additional references in your synopsis (see below).

Written synopsis of the discussion
After the class period during which your discussion takes place, your group of should prepare a written 1-2 page synopsis of the reading assignment, in which you summarize (1) the week’s reading and (2) the major issues that we discussed and how we resolved these issues. The group should also prepare (3) a bibliography of 2-3 additional references for those who want to read more on the topic. After you have prepared this material, email it to me by the deadline, which is the following Monday at noon. I will post your synopsis on the Sakai Discussion Board (in the same folder as the discussion questions for that week).

Summary: What you need to do for the discussion section that you lead:
• Read the assigned papers
• Collaborate with your partners to create a presentation to give to the class on the assigned papers (can be a power point, hand out, or talk using the chalkboard)
  o Be sure to include classmate questions from Sakai!
• Give a >20 min presentation to the class, making sure each partner talks equally
• Lead discussion, addressing classmate questions
• Write a synopsis (due following Monday at 12 pm) that includes:
  o Summary of the week’s reading
  o The major topics/issues discussed, and how any problems were resolved
  o Bibliography with 2-3 additional, outside sources from similar papers

Laboratory Exercises
Labs will comprise the remainder of the sessions. To prepare for lab weeks you should read the lab handouts (uploaded to Sakai) BEFORE coming to class. You will get the most out of lab sessions if you already understand the background and aims of the lab, and are able to concentrate on the mechanical aspects of the lab in the assigned time when I am there to supervise and assist you. Two of the labs will be one-week computer lab using the program EvoBeaker. For the other lab exercises, lab reports or a paper (see GRADING) will be due
one week after the second session of the lab. This excludes the Hominin Fossils lab which will be the submission of a worksheet upon the completion of the lab.

Turning in Assignments:
All assignments (except the discussion questions) must be typed and turned in to me before the beginning of class on the day that it is due. Summaries are due the same day that we are discussing the readings and lab reports are due exactly one week after the second lab day. It is not my responsibility to remind you when assignments are due, if you have a question about when something is due ask me, but you forgetting or not knowing when something is due is not an excuse for late work!

Recitation Schedule

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<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Date</th>
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<tbody>
<tr>
<td>1</td>
<td>Natural Selection Lab</td>
<td>Jan 18, 19</td>
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<tr>
<td>2</td>
<td>History of Life</td>
<td>Jan 25, 26</td>
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<tr>
<td>3</td>
<td>Biodiversity</td>
<td>Feb 1, 2</td>
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<td>4</td>
<td>Goldenrod Lab (I)</td>
<td>Feb 8, 9</td>
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<tr>
<td>5</td>
<td>Goldenrod Lab (II)</td>
<td>Feb 15, 16</td>
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<td>6</td>
<td>TBD</td>
<td>Feb 22, 23</td>
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<td>7</td>
<td>Coevolution and Mutualism</td>
<td>Mar 1, 2</td>
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<td>8</td>
<td>Speciation</td>
<td>Mar 8, 9</td>
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<tr>
<td>9</td>
<td>SPRING BREAK (No class)</td>
<td>Mar 15, 16</td>
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<td>10</td>
<td>Evobreaker-Dog Domestication Simulation</td>
<td>Mar 22, 23</td>
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<td>11</td>
<td>Mutations and Genetic Variation</td>
<td>Mar 29, 30</td>
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<td>12</td>
<td>Evolution and Development</td>
<td>Apr 5, 6</td>
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<td>13</td>
<td>BLAST Lab</td>
<td>Apr 12, 13</td>
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<td>14</td>
<td>Hominin Fossils Lab</td>
<td>Apr 19, 20</td>
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<tr>
<td>15</td>
<td>Evolution and Environmental Change</td>
<td>Apr 26, 27</td>
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Grading:
For labs, you will often be working in groups. Each individual will need to write and turn in his/her own lab report/paper. Late lab reports/papers will be penalized 10% per day late. SUMMARY PARAGRAPHS AND DISCUSSION QUESTIONS ON SAKAI WILL NOT BE ACCEPTED LATE. Below is the point distribution for your assignments and the grading rubric I will use.

Grade Distribution: 137 points total

7 Paper Discussions @ 9 points each = 63 pts
   Discussion Questions, Attendance, and Participation (5 pts)
   It is important for all students to participate, but comprehension of the material, comfort in public speaking, and other factors will influence how much individuals do participate. Therefore, students need to demonstrate
that they have made an effort to contribute to each discussion to receive credit for their participation. Points each week are awarded as follows:

- Submitting 2 discussions on time to Sakai (1 pt)
- Quality of discussion questions (1 pt)
- Arriving to discussion class on time (1 pt)
- Speaking in class (1 pt)
- Making an insightful comment (1 pt)

Summary paragraphs (4 pts)
These summaries should be short paragraph descriptions of the papers that show me you’ve read the paper. For research articles, the summary should explain why the researchers did this study, what questions they wished to address, the methods used, what they found, and how their results support or refute their initial ideas. For review articles, the summary should explain the key points and the “take home message”. Summaries will be graded on clarity and content.

In-class presentation/Discussion leading (9 points)
When it is your turn to lead the in class discussion, you will not be required to submit a summary paragraph to class or discussion questions to Sakai the night before. Instead your grade that week will be determined by your ability/preparedness to lead the discussion and the submission of the written synopsis of the discussion section (see above). This work will be done as part of a group.

1 Evobreaker packet @ 15 pts = 15 pts
- For the Darwin's Finches exercise only. See standards regarding filling out the packet in the BIOL 471 lecture policies. The HIV Molecular Clock will be collected during the lecture and points awarded as part of the lecture.

2 Lab reports @ 15 pts each = 30 pts
- For the Natural Selection Lab you will turn in your lab worksheet with attached graphs and answer all the questions
- For the Goldenrod Labs, you will turn in a full lab write-up. Lab reports should be in the format of a scientific paper. Please see the laboratory report format guidelines and rubric. References should be cited in the style of the journal Evolution. Author guidelines can be found here:

1 Paper @ 14 pts = 14 pts
- For the BLAST Lab you will be given a choice of a genetic disease to write about. More information will be given out during the lab.

1 worksheet @ = 15 pts
• For the Hominin Fossils lab to be completed during the lab exercise.

Plagiarism:
As this is an upper level course, I expect all students to be familiar with what constitutes plagiarism, and here is UNC’s official policy on plagiarism (http://honor.unc.edu/students/plagiarism.html). I take plagiarism and cheating very seriously, and will refer ANY instances to the Honor court. If you have any questions as to whether or not you are plagiarizing material, or the appropriate way to cite material, then please contact me. It’s better to be safe than be sorry in this regard.

Keeping Your Work:
For all assignments, whether a discussion summary or major paper, always make sure you keep your assignment until the end of the semester. All assignments will be returned a week after it was handed in. It is your assurance that you have received credit for assignments that you've completed and turned in on time. It is not my responsibility to make you aware of assignments you have missed.