COURSE DESCRIPTION:
Semester course 1 credits. Prerequisites: BIOL 300, BIOL 310 and BIOL 317 with minimum grades of C; and senior standing. Enrollment restricted to biology majors. Students read assigned topical papers before class, prepare critical analyses, discuss and debate selected positions.

COURSE OBJECTIVES
1. Read and actively discuss as a class the book *Life Ascending: The Ten Great Inventions of Evolution* by Nick Lane.
2. Bring in previous knowledge from the student’s previous education as it relates to the content and evaluate your understanding and the value of the book.
3. Write journal entries reflecting on the material read in class, using knowledge from your previous courses.

COURSE REQUIREMENTS:

Class Discussion:
Students are expected to be engaged in each class. This requires not only thoughtful listening to the discussion but the contribution to the discussion in the form of voicing opinions, clarifying points, asking appropriate questions of a senior level course, making comparisons, drawing conclusions, disagreeing with appropriately scientifically defended points, and the like. This component will be a large portion of your grade.

Journal Entries:
There will be three types of journal entries expected:
- **Pre-discussion** – Students will turn in a journal entry on the chapter assigned for that day. These entries should be about the reading content and each student's thoughts or perceptions about the content. Summaries of the chapters are not expected for these entries. There are 10 chapters meaning there will be 10 journal entries due at the beginning of that class.
- **Post-discussion** – Student will turn in a journal entry after the discussion of two chapters. The purpose of these entries is to reflect on how our class discussion may have changed what each student thought before. There will be five of these journal entries that are due the following class.
- **Non-book related journal entries** – each student will journal on specified topics at the beginning and end of the semester. There will be two of these entries. The first will introduce you to me while the last will be an overview of the class and book.
BIOL 475

**Point Breakdown**

- Class discussions - 200 points (20 points each)
- Journal Entries - 170 points (10 points each)

Total - 370 points

**GRADING:**

- A 90-100
- B 80-89
- C 70-79
- D 60-69
- F 59 and below

**CLASS POLICIES:**

1. **Attendance:** Attendance is mandatory for this class. Missing more than two days will result in an automatic failing grade for the course.

2. **Due dates:** Journal entries are due at the beginning of the class period listed below.

3. **Communication:** My preferred method of communication with students (other than in person) is via email. Having said this, I will respond to emails as quickly as my schedule allows. Therefore, you should not delay in writing an email to me that may be time-sensitive. Further, each student should identify himself or herself in the email and in which class they are enrolled. Failure to so this may delay your response or result in an unanswered email. If you choose to call, I am only guaranteed (unless otherwise specified) to be in my office during the posted office hours, however if I am in my office, feel free to stop in.

**COURSE OUTLINE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Assignment</th>
<th>Due at the beginning of the class period</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Removed]</td>
<td>Chapter 1 – The Origin of Life</td>
<td>Nonbook Journal entry 1; Journal entry – Chapter 1</td>
</tr>
<tr>
<td>[Removed]</td>
<td>Chapter 2 - DNA</td>
<td>Journal entry – Chapter 2</td>
</tr>
<tr>
<td>[Removed]</td>
<td>Chapter 3 - Photosynthesis</td>
<td>Journal entry – Chapter 3 &amp; Post-discussion Journal 1 (Chapters 1 &amp; 2)</td>
</tr>
<tr>
<td>[Removed]</td>
<td>Chapter 4 – The Complex Cell</td>
<td>Journal entry – Chapter 4</td>
</tr>
<tr>
<td>[Removed]</td>
<td>Chapter 5 - Sex</td>
<td>Journal entry – Chapter 5 &amp; Post-discussion Journal 2 (Chapters 3 &amp; 4)</td>
</tr>
<tr>
<td>[Removed]</td>
<td>Chapter 6 - Movement</td>
<td>Journal entry – Chapter 6</td>
</tr>
<tr>
<td>[Removed]</td>
<td>Chapter 7 - Sight</td>
<td>Journal entry – Chapter 7 &amp; Post-discussion Journal 3 (Chapters 5 &amp; 6)</td>
</tr>
<tr>
<td>[Removed]</td>
<td>Chapter 8 – Hot Blood</td>
<td>Journal entry – Chapter 8</td>
</tr>
<tr>
<td>[Removed]</td>
<td>Chapter 9 – Consciousness</td>
<td>Journal entry – Chapter 9 &amp; Post-discussion Journal 4 (Chapters 7 &amp; 8)</td>
</tr>
<tr>
<td>[Removed]</td>
<td>Chapter 10 – Death</td>
<td>Journal entry – Chapter 10 Nonbook journal entry 2 &amp; Post-discussion Journal 5 (Chapter 9 &amp; 10)</td>
</tr>
</tbody>
</table>

**STATEMENTS FOR SYLLABI AND BLACKBOARD PAGES**

Students should visit [http://go.vcu.edu/syllabus](http://go.vcu.edu/syllabus) and review all syllabus statement information. The full university syllabus statement includes information on safety, registration, the VCU Honor Code, student conduct, withdrawal and more.