BIOL 2000-002 – Biology in the News 3(3,0)
Spring 17 – MW 3:35 - 4:50pm – 224 Long

Instructor: V. Christine Minor
330C Long Hall
864-650-1301
mminor@clemson.edu
Office Hours: MW 2:30-3:30pm and anytime by appointment
I am interested in your success. Please feel free to contact me. I do not bite
and prefer for you to seek assistance early while we can fix the problem!

Course Resources: All lecture materials and handouts may be found on Blackboard

Course Text: There is no text for this course. You are expected to check Canvas for readings and assignments.

Google: Google is your friend. If you have questions, Google. If you think you have answers, Google. Google check me. Google check your classmates. What an incredible thing to have a wealth of knowledge at your fingertips! Use it, but use it critically!

Course Description: For Non-science majors. Students examine current topics of biology appearing in newspapers and other current media. Uses a problem-based learning approach, with students working as teams and individually on areas of interest identified by the class. Preq: ENGL 103, General Education Natural Science Requirement.

Course Objectives: BIOL 2000 will provide students with an opportunity to see the direct application of science to everyday life as reported in the popular press. We will focus our analysis on several major topics and case studies that are currently being covered in the media. Small groups of students will learn sufficient background information about a specific issue to make a knowledgeable presentation to the entire class for discussion. Those discussions will explore not only the underlying biology and technology associated with the topic, but will also consider the political, legal, economic, and social implications of the issue. In the process students will become more critical consumers of scientific information by learning to evaluate the potential for, and causes of, bias in press reports about biology.
**Clemson Thinks**²: This section of BIOL 2000 is designated at a Clemson Thinks² Critical Thinking Seminar. The emphasis on critical thinking will be part of every class meeting. The following learning outcomes related to Clemson Thinks² will be a part of the daily operations of the course:

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<thead>
<tr>
<th><strong>Clemson Thinks2 Objectives</strong></th>
<th><strong>Demonstrated through…</strong></th>
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<tbody>
<tr>
<td>Students will be able to explore complex challenges.</td>
<td>Selection and narrowing of topics for presentation. Selection and review of appropriate literature. The ability to link social, economic, ethical and historical perspectives with drivers of current biological research and expectations of “news worthiness”</td>
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<td>Students will be able to analyze multi-dimensional problems.</td>
<td>The ability to read an article then determine assumptions, questions, and hypotheses established to reach the conclusions presented.</td>
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<td>Students will be able to extrapolate from one conceptual context to others.</td>
<td>The ability to select diverse articles representative of broad topics.</td>
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<td>Students will be able to synthesize alternative solutions to multi-dimensional challenges</td>
<td>Students’ abilities to explore competing hypotheses. The ability to link social, economic, ethical and historical perspectives with drivers of current biological research and expectations of “news worthiness”</td>
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<td>Students will be able to communicate complex ideas effectively</td>
<td>Oral, written, and electronic communications.</td>
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As you can see, the Clemson Thinks² learning outcomes closely mirror our stated Course Objectives. Above all, when you leave this course, I want you to be able to critically analyze complex, modern, real life issues surrounding biological sciences and be able to have educated, intelligent discussions with anyone regarding those issues. In order to assess Critical Thinking competencies you will take the CAT assessment of Critical Thinking at the beginning and end of course. You will also be expected to maintain artifacts of assignments that demonstrate your critical thinking development.

**General Education Competencies:**

This course meets both the STS and the Natural Science (non-lab) competencies. The competencies, as found on p. 37 of the Undergraduate Announcements are as follows:
### C. Natural Sciences
Demonstrate the process of scientific reasoning by performing an experiment and thoroughly discussing the results with reference to the scientific literature, or by studying a question through critical analysis of the evidence in the scientific literature.

### F. Science and Technology in Society
Demonstrate an understanding of issues created by the complex interactions among science, technology, and society.

#### Outline of Topics:

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<tr>
<th>Week</th>
<th>Topics and Activities</th>
<th>Readings/Assignment</th>
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<tr>
<td>1/11</td>
<td><strong>Wednesday:</strong> Introduction to Course, Meet and Greet</td>
<td><strong>Wednesday:</strong> Reading: Syllabus, Article of Choice</td>
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<td>1/16</td>
<td><strong>Monday:</strong> <em>MLK Holiday – No Class</em></td>
<td><strong>Monday:</strong> Due: Student Information Sheet</td>
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<td><em>Wednesday:</em> What are we hearing, reading, watching?</td>
<td><strong>Wednesday:</strong> CT2 Test (in-class, no prep needed)</td>
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<td>CA Assessment of Critical Thinking Pre-Test</td>
<td>Article of choice report</td>
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<td>1/23</td>
<td><strong>Monday:</strong> What questions are being posed currently in biology? How do current questions we see in the news relate to the big questions of biology as a science?</td>
<td><strong>Monday:</strong> Due: Top 10 Discover Stories</td>
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<td><em>Wednesday:</em> Debrief on Top 10</td>
<td><strong>Wednesday:</strong> Due: Top 10 Discover Stories</td>
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<td>Many are answering questions. How do we know if they are doing a good job?</td>
<td>Assignment: Read Good Science/Bad Science materials</td>
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<td>1/30</td>
<td><strong>Monday:</strong> Share article analysis</td>
<td><strong>Monday:</strong> Due: Article Analysis from Good Science/Bad Science</td>
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<td>How do we keep up with Biology in the news?</td>
<td>Assignment: Read Watch Dog Assignment requirements.</td>
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<td><em>Wednesday:</em> Effective searching for sources. How do we cite and avoid plagiarizing?</td>
<td><strong>Wednesday:</strong> Due end of class: Scavenger Hunt</td>
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<td>2/6</td>
<td><strong>Monday:</strong> Watch Dog Reports</td>
<td><strong>Monday:</strong> Due: Watch Dog Report 1</td>
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<td>Now what? Which questions are we going to play with?</td>
<td>Assignment: Read Group Topic Requirements.</td>
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<td>Date</td>
<td>Monday:</td>
<td>Wednesday:</td>
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| 2/13  | Watch Dog Reports  
Group 1 Topic Report I  
Group 2 Topic Report I | Prof. Minor does a topic presentation (article presentation)  
Article Presentation Work Day | Have Prof. Minor approve topic and begin article selections |
|       | Group 3 Topic Report I  
Group 4 Topic Report I | Assignment: Read group assigned articles |    |
| 2/20  | Watch Dog Reports  
Group 5 Topic Report I  
Group 6 Topic Report I | Assignment: Read group assigned articles |    |
|       | Group 7 Topic Report I  
Group 8 Topic Report I | Watch Dog Report 2  
Assignment: Read group assigned articles |    |
| 2/20  | Watch Dog Reports  
Group 9 Topic Report I  
Group 10 Topic Report I | Watch Dog Report 3  
Assignment: Read group assigned articles |    |
|       | Topic Report Mini-Reflection  
Assignment of Second Topic Report Topic | Assignment: Read group assigned articles |    |
| 3/6   | Watch Dog Reports  
Topic Report Work Day | Watch Dog Report 4  
Assignment: Read group assigned articles |    |
|       | Group 1 Topic Report II  
Group 2 Topic Report II | Watch Dog Report 5  
Assignment: Have Prof. Minor approve article selections |    |
| 3/13  | Watch Dog Reports  
Group 3 Topic Report II  
Group 4 Topic Report II | Assignment: Read group assigned articles |    |
|       | Group 5 Topic Report II  
Group 6 Topic Report II | Watch Dog Report 6  
Assignment: Read group assigned articles |    |
|       | Group 7 Topic Report II  
Group 8 Topic Report II | Assignment: Read group assigned articles |    |
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<tr>
<th>Date</th>
<th><strong>Spring Break – No Class</strong></th>
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<td>3/20</td>
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| 3/27   | **Monday:** Watch Dog Reports  
Group 7 Topic Report II  
Group 8 Topic Report II  

**Wednesday:**  
Group 9 Topic Report II  
Group 10 Topic Report II  

**Monday:**  
Due: Watch Dog Report 7  
Assignment: Read group assigned articles  

**Wednesday:**  
Assignment: Read group assigned articles  
Bring your favorite Biology Documentary title to class Monday. |
| 4/3    | **Monday:** Film selection Work Day  
Assign groups for STS Film Awards  
Begin search for films  

**Wednesday:**  
Presentations to STS Film Selection Committee  

**Monday:**  
Short list of films your group is considering.  

**Wednesday:**  
Full marketing package and Presentation Pitch to Film Selection Committee |
| 4/10   | **Monday:** Red Carpet STS Film Awards Screening  

**Wednesday:**  
Film Screening if needed/Discussion of Film  

**Monday:**  

**Wednesday:**  
Assignment: Film Review (due next class) |
| 4/17   | **Monday:** Assignment of Final STS/CT Assignment  
Final STS/CT Assignment Work Day  

**Wednesday:**  
CA Critical Thinking Assessment Post-Test  
Final STS/CT Assignment Work Day  

**Monday:**  
Final STS/CT Assignment Topic Due  

**Wednesday:**  
CA Critical Thinking Assessment Post-Test |
| 4/24   | **Monday:** Peer Review of STS/CT Assignment  

**Wednesday:**  
Course Clean-up  

**Monday:**  
3 printed copies of rough draft of STS/CT Assignment  

**Wednesday:** |
| 5/2    | **Final STS/CT Assignment due on Blackboard at 9:30pm Tuesday** |
Grading:
- Watch-dog Reports 15%
- Group Topic Presentations and Reports 30%
- Individual Film Review 10%
- Misc. In and out of class activities 20%
- Final STS/CT Artifact 15%
- Participation 10%

Grading Scale (in %):
- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- <60 F

Attendance:
This class is based on discussion, participation and class projects. In order to encourage you to be in class, but give some latitude for illness/travel etc., **you are allowed 2 absences during the semester without negotiation. If you miss more than two classes without negotiation, you will receive 0 points for class participation regardless of how much you participate when you are present. Absences in excess of 4 will receive an additional 10% deduction on the final grade.** Absences will be reflected in all of your grades.

**What is participation?** Do not expect 100% for this grade. This is a challenging part of your grade to earn. Just showing up is not enough. Participation is being actively and critically engaged in the course. It involves taking part in discussion, paying attention, giving respect to your course mates, attitude toward the class and people in it, being on time with assignments, evidence that you are reading materials, and a willingness to step outside your comfort zone while speaking, thinking, and engaging. It does not imply that you can’t make mistakes, say something you later think is silly, and laugh at yourself (and my jokes). Active participants are occasionally going to blurt out something they want to take back, change their mind mid-sentence, and have off days.

Please attempt to be on-time to class. Entering the classroom after we have begun is disruptive to your fellow students. Please enter quietly and take a seat. Habitual tardiness will not be tolerated and you can expect a meeting with me should this become a pattern.

I’m usually in the classroom early but, if I happen to be late to class, you must wait 15 minutes before leaving the room.
I may be attending conferences during the semester that interfere with our class schedule. I have made every attempt to arrange instruction,assignments for you on those days. I expect that you will show any colleague taking my place the same courtesy you extend to me.

**General:** I ask that all cell phones, laptops, and other electronic devices be turned off unless I give you specific permission to use them in class. You are now in a university. You are expected to behave like a scholar.

**Drop/Add & Withdrawal:**
You may add, drop, or withdraw from this course without my assistance through the on-line computer registration system. However, please note that there are deadlines for these options.

**Academic Integrity**
The policy on academic dishonesty at Clemson University is stated in the Undergraduate Announcements and reads as follows:

“As members of the Clemson University community, we have inherited Thomas Green Clemson’s vision of this institution as a ‘high seminary of learning.’ Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.

When, in the opinion of a course instructor, there is evidence that a student has committed an act of academic dishonesty, that person must make a formal written charge of academic dishonesty, including a description of the misconduct, to the Associate Dean of Undergraduate Studies. The reporting person may, at his/her discretion, inform each involved student privately of the nature of the alleged charge. In cases of plagiarism (I.B.2.) instructors may use, as an option, the Plagiarism Resolution Form available from the Office of Undergraduate Studies.”

A Biol 2000 student guilty of academic dishonesty will receive a failing grade in Biol 2000. Please see your undergraduate announcements for procedures that will be followed should a student be suspected of academic dishonesty.

**Students Needing Accommodations**
Students with disabilities who need accommodations should make an appointment with the Director of Disability Services, to discuss specific needs within the first month of classes. Students should present a Faculty Accommodation Letter from Student Disability Services when they meet with instructors. Student Disability Services is located in Suite 239 Academic Success Building (656-6848; sds-
Please be aware that accommodations are not retroactive and new Faculty Accommodation Letters must be presented each semester.

**Title IX Information:**
Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran’s status, genetic information or protected activity (e.g., opposition to prohibited discrimination or participation in any complaint process, etc.) in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. This policy is located at [http://www.clemson.edu/campus-life/campus-services/access/title-ix/](http://www.clemson.edu/campus-life/campus-services/access/title-ix/). Mr. Jerry Knighton is the Clemson University Title IX Coordinator. He also is the Director of Access and Equity. His office is located at 111 Holtzendorff Hall, 864.656.3181 (voice) or 864.565.0899 (TDD).