

**Current Issues in Biology: Biol. 881**  
**Course Syllabus – Spring 2019**

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**Office hours:** MWF 12:30-1:30. For off-campus students, please arrange office hour appointments by email

Course Description:

Students will discuss weekly student and faculty speakers, primary literature, and Ted Talks. This course is designed to introduce students to a number of biological research areas. In this course, students learn about current issues in biology, critically evaluate primary literature and scientific presentations, and present research to their peers.

Course Objectives: Following completion of this course, students should be able to:

1. Discuss scientific findings critically with their peers
2. Have a broad understanding of different fields within biology
3. Effectively communicate to their peers the major findings, limitations, and logical next steps of a research article

Textbook:

None. All resources for this class can be found online and in Canvas.

Computer and Software:

Access to a computer with internet access, Microsoft PowerPoint. Software can be purchased through UNK bookstore at a discount. We will have video presentations that require the use of a webcam. These can be found through Walmart or Amazon starting around \$10.

Communication

The best way to reach me is through email. I will respond to email fairly quickly and if you need to talk to me please email me and we can set up a time to talk further. You should frequently check your UNK email and Canvas for course assignments or announcements. Seminars and other pertinent information will be posted on Canvas.

Grading

Discussion (10pts/each)	120
Ted Talk/Podcast (30pts)	30
Presentation (60pts)	60
Total	210

Grades will be assigned using the Department of Biology standard grading scale: follows: A (93-100%), A- (90-92%), B+ (88-89%), B (83-87%), B- (80-82%), C+ (78-79%), C (73-77%), C- (70-72%), D+ (68-69%), D (63-67%), D- (60-62%), and F (below 60%).

Discussion

I will post assignments on Monday of each week and you will have until the following Saturday to participate. Then students must comment on one other student post by the following Tuesday. To receive full credit, students must have **2 significant contributions weekly**. Your responses must contribute something new to the discussion and not simply agree or disagree to the previous response. **References** will be required to support your statement. Please be considerate of your classmates' responses; abusive comments or attacking other student's comments will not receive credit as comments should be constructive even if you strongly disagree with another student.

Possible topics of discussion for each presenter may include methodology, statistics, experimental design, the quality of figures, clarity of presentation, data interpretation, and conclusions. Students should also discuss peer-reviewed articles that are relevant to the topic. Discuss major findings of the article and whether they refute or support the speaker's hypothesis. I want to know what your thoughts are on the research, don't simply summarize the article. The reference should be included in the text as well as at the end of your post. Posts should be kept to  $\frac{3}{4}$  to 1 page in length.

### TED Talks

Find a TED Talk or podcast (Radiolab, Nature podcast, etc.) on a topic of your choice and write a small summary and lead discussion on that topic for the week. The summary and discussion should include relevant peer-reviewed articles and critical review of the talk. Guidelines are as follows: You can pick any TED talk/podcast you would like (as long as it is related to biological sciences), if it is a short TED talk (some are 5 minutes long) you may need to supplement more of your summary with outside literature. But you should write a short summary, provide a link to the talk or podcast for your group, make sure you support your summary with references and I am looking more for content rather than length but they should be around 1 page in length. Post your TED talk post by **February 12th**. Comment on 3 of your group member's presentations by **February 16th**. Respond to all comments on your TED talk by **February 19th**.

Did you provide a link to the TED talk or podcast?

Did you provide enough background information so those not familiar with the area were able to understand?

Did you adequately summarize the talk/podcast?

Did you find a primary peer reviewed article related to the talk and discuss the relevant findings of that paper and the implications of those results? (Don't simply summarize what the authors found)

Did you facilitate discussion among your group members and fully answer any questions posed by other group members?

Simply agreeing or disagreeing will not receive full credit. You should be expanding the discussion on the topic. This is not a critique of the students post on the TED talk. I expect posts to focus on the science of the talk.

### Presentation

Presentations are due by **April 14th**. We will discuss the first four presentations (Alphabetically by last name) beginning on April 15th. The first 4 people alphabetically in your group will go the first week. Comment on their presentations by **April 20th**. If you are going the first week please respond to comments throughout the week and wrap up discussion by **April 23rd**. The rest of the group members will go the second week. Comment on their presentations by **April 27th**. If you are going the second week, wrap up discussion by **April 30th**. These should be 10 - 15 minutes long, over 15 minutes will be docked unless the presentation is over your 831 project. Students have the option to present on any topic within the biological sciences or if you have completed Biol. 831E you can present your research project. I highly encourage students to present their research findings when appropriate. For students presenting on a topic rather than their research, you must include a peer-reviewed primary research article. Please provide background information relevant to your topic and explain the significance of the research in this area. Presentations should contain original figures from these studies with the proper citations. Students should compare and criticize different studies. Please do not simply restate the findings the authors provide. These presentations should contain video of yourself and should be recorded using VidGrid.

In addition to the one peer-reviewed article you are presenting on or your own research, there must be a minimum of 5 supporting peer-reviewed articles. All references must be cited in a literature cited section. Figures must also be cited and must be from a peer-reviewed article to contribute to your 5 minimum references.

Presentations should include title page, introduction to the topic, results, conclusions, and citations. Additionally, students must have organized presentations that are easy to follow and should be under 15 minutes long. It is important that you are able to critically evaluate your peer-reviewed articles. Do not just summarize the research.

Students are required to present on a different topic each time they take this class and mention on the title slide what semester of 881 this is for you and your previous topics.

### UNK Library

The library is a good resource when looking for articles that may not be available online. The following links are especially useful to distance students.

<http://library.unk.edu/services/distance.php>

<http://library.unk.edu/services/illdd.php>

If you have specific questions about Interlibrary loan contact Sheryl Heidenreich at [heidenreichs@unk.edu](mailto:heidenreichs@unk.edu).

### Academic Dishonesty

Plagiarism will not be tolerated, please refer to the student handbook or ask me for more clarification on the subject if unsure what constitutes plagiarism. It is expected students work independently on assignments unless otherwise stated by the instructor. Group work where not specified will be considered cheating and students will receive a zero for that assignment. Multiple offenses will result in the student(s) receiving a failing grade for the course and possible removal from the program.

### Withdraw (W) and Incomplete (I)

In unusual circumstances beyond the student's control, an incomplete (I) may be issued. The (I) is issued as a final grade with the student having 12 months to complete the necessary work. If

the coursework is not completed in this time the (I) will be converted to a failing grade (F) on the student's transcript. Students may withdraw from the course before 9 weeks have been completed and a (W) will appear on the transcript. Students are responsible for filling out the necessary paperwork to complete this process. Instructors are not able to withdraw students. If the student drops the class the (W) will not contribute to the student's overall GPA.

### Student Accommodations

#### **Students with Disabilities**

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities. To receive accommodation services for a disability, students must be registered with UNK Disabilities Services Coordinator, David Brandt, in the Disability Services for Students office, 175 Memorial Student Affairs Building, 308-865-8214 or by email [unkdso@unk.edu](mailto:unkdso@unk.edu)

#### **Students Who are Pregnant**

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students who are pregnant. To receive accommodation services due to pregnancy, students must contact Sue Pedersen in Student Health, 308-865-8218. The following link provides information for students and faculty regarding pregnancy rights. <http://www.nwlc.org/resource/pregnant-and-parenting-students-rights-faqs-college-and-graduate-students>

#### **Reporting Student Sexual Harassment, Sexual Violence or Sexual Assault**

Reporting allegations of rape, domestic violence, dating violence, sexual assault, sexual harassment, and stalking enables the University to promptly provide support to the impacted student(s), and to take appropriate action to prevent a recurrence of such sexual misconduct and protect the campus community. Confidentiality will be respected to the greatest degree possible. Any student who believes she or he may be the victim of sexual misconduct is encouraged to report to one or more of the following resources:

**Local Domestic Violence, Sexual Assault Advocacy Agency** 308-237-2599

**Campus Police (or Security)** 308-865-8911

**Title IX Coordinator** 308-865-8655

Retaliation against the student making the report, whether by students or University employees, will not be tolerated.

<b>Week</b>	<b>Schedule</b>	<b>Due</b>
1	Introductions (10pts)	Jan 12, 15
2	Plagiarism, Peer Reviewed Ref., Critical Eval. (10pts)	Jan 22
3	Dr. Dolence (10pts)	Jan 26, 29
4	The Shrimp with a Kick - TED Talk (10pts)	Feb 2, 5
5	TED Talks (30pts)	Feb 12
6	TED Talks Discussion (10pts)	Feb 16, 19
7	Dr. Wong (10pts)	Feb 23, 26
8	Brian Mason (10pts)	March 2, 5
9	Paper Summary (10pts)	March 9, 12

10	Critical Evaluation (10 pts)	March 16, 19
11	Spring Break	No Assignment
12	Zombie roaches – TED Talk (10pts)	March 30, April 2
13	Presentation Prep	No Assignment
14	Post Presentations to Canvas (60pts)	April 14
15	View Student Presentations (10pts)	April 20, 23
16	View Student Presentations (10pts)	April 27, 30