Current Issues in Biology (BIOL 881) Course Syllabus – Spring 2020

Instructor: Keith Koupal Email: koupalkd@unk.edu Phone: 308 865-5326 (often not in office due to field sampling schedule) Office Hours: Monday 9-10:30AM Friday 9-10:30 AM

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, presentation software (e.g. Microsoft PowerPoint). Video presentations will require a webcam.

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	
Weekly Discussions (10pts each)	90
Plagiarism and Peer Reviewed Sources (15pts each)	
Critical Evaluation – (20pts each)	
Presentation (60pts)	60
Total	220

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

Assignments will be posted on Monday of each week and you will have until the following Saturday to participate. You must then comment on one other student post by the following

Tuesday. To receive full credit, you must have a minimum of **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(s). 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 discussion week may include methodology, statistics, experimental design, the quality of figures, clarity of presentation, data interpretation, and conclusions. You should also discuss peer-reviewed articles that are relevant to the topic. Discuss major findings of the article and explain whether you refute or support the speaker's hypothesis. I want to know what your thoughts are on the research, don't simply summarize the article. Make sure to cite within the text and provide a full reference list at the end of your posts. Posts should be kept to ³/₄ to 1 page in length.

Presentation

Presentations are due by April 14. We will discuss the first four presentations (Alphabetically by last name) beginning on April 14. The first 4 people alphabetically in your group will go the first week. Comment on their presentations by April 18. If you are going the first week please respond to comments throughout the week and wrap up discussion by April 21. The rest of the group members will go the second week. Comment on their presentations by April 25. If you are going the second week, wrap up discussion by April 28. These should be 10 - 15 minutes long, over 15 minutes will be docked unless the presentation is over you 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 critically evaluate a peer-reviewed primary research article from within the last 3 years. 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 must 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 critical 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 usefully 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 <u>heidenreichs@unk.edu</u>.

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. The deadline to withdraw from courses is March 13th.

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<u>unkdso@unk.edu</u>

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 Cindy Ference in Student Health, 308-865-8219. The following link provides information for students and faculty regarding pregnancy rights. <u>http://www.nwlc.org/resource/pregnant-and-parenting-students-rights-faqs-college-and-graduate-students</u>

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.

Course Schedule

Week	Schedule	Due
1	Introductions (10pts)	Jan 21, Jan 25
2	Plagiarism, Citations (30pts)	Jan 28
3	Critical Evaluation (20pts)	Feb 4
4	Supercharged Plants(10pts)	Feb 8, Feb 11
5	Eating Invasive Species (10pts)	Feb 15, Feb 18
6	Gut Microbiota (10pts)	Feb 22, Feb 25
7	Video Games and the Brain (10pts)	Feb 29, Mar 3
8	Peanut Responsive T-cells (10pts)	Mar 7, Mar 10
9	Critical Evaluation (20pts)	Mar 14, Mar 17
10	Presentation Preferences (10pts)	Mar 21, Mar 31
11	Spring Break	No Assignment
12	Presentations prep	No Assignment
13	Post Presentations on Canvas (60pts)	Apr 14
14	View Student Presentations (10pts)	Apr 18, Apr 21
15	View Student Presentations (10pts)	Apr 25, Apr 28
16	Finals Week	No Assignment