

BIO 498 BIOLOGY SEMINAR: BIOLOGY OF SLEEP

DR. KEITH W. PECOR

T/F 8:00AM – 9:20AM

BIOLOGY 208

INSTRUCTOR ACCESSIBILITY

My office is Biology Building 130, and I will hold office hours 9:30AM – 12:20PM on Tuesdays. You may also schedule an appointment to meet with me outside of office hours, in person or via Zoom. My office telephone number is 609-771-2460, and my email address is pecor@tcnj.edu. Email is my preferred method of communication about course matters, and I normally respond to messages received during the school week within 24 hours of receipt. Messages received by 5PM on the day before an exam will be answered the same day. Messages received during a weekend or break will be answered by the end of the first school day after the weekend or break. I do not check Canvas messages; use the campus email system.

CATALOG DESCRIPTION

Students develop and deliver oral presentations and write a comprehensive and current literature review on a research topic oriented around a unifying theme in biology or within a broad area of biological research. Topics vary each semester and with different instructors.

Course units: 1.0

Prerequisites: BIO 201, 211, 221, and 231

COURSE SYNOPSIS & LEARNING GOALS

Biology Seminar is considered the “capstone” experience in the Biology major. During the semester you will be challenged to utilize the knowledge, skills, and intellectual maturation that you have developed over the past three years to undertake an in-depth and independent examination of a specific topic in biology.

The major course objectives are:

- to enhance your ability to access and assimilate the scientific literature by locating current and appropriate articles on a specific topic and reading them for understanding;
- to improve your ability to analyze and interpret data critically and to assess whether the interpretations and conclusions drawn by the authors of the papers you read are justified;
- to enhance your ability to communicate scientific information through oral presentations;
- to enhance your ability to communicate scientific information through a written review article;
- to improve your writing skills by editorial assessment of writing produced by your peers, and
- to provide an opportunity to fully explore a particular topic in biology that is the focus of current and active research. In doing so, you will be required to critically assess and synthesize information from multiple related papers and demonstrate your knowledge through the oral presentations and written review.

By examining the biological questions related to your selected topic on both the broad societal level and the in-depth experimental level, you will develop the skills needed to successfully approach any topic in biology research in the future.

EXPECTATIONS, ASSIGNMENTS, & GRADING

I expect that you will attend each class meeting ready to respectfully observe, evaluate, and discuss the presentations of your peers. A lack of respect for presenters will not be tolerated. Your grade will be based on 600 points.

Presentations (250 pts)

You will give three presentations during the semester- an introduction to your topic (50 pts), an in-depth consideration of a paper that is central to your topic (100 pts), and a final review of your topic (100 pts). More information about the expectations for the presentations will be provided as each is undertaken.

Research Paper (250 pts)

You will also produce four written documents related to your topic- an annotated bibliography of five sources (50 pts) followed by a review draft (0 points, but required and subject to peer review), a revised draft (100 pts), and a final draft (100 pts) of a research paper. More information about the expectations and grading for the elements of the research paper will be provided as each is undertaken. Failure to submit the review draft will result in a grade of zero on the revised draft and penalties in terms of peer review.

Peer Reviews (50 pts)

For each presentation, you will be asked to complete a brief evaluation that gives feedback to the presenter. For the review drafts of the research paper, individuals in randomly assigned groups will read and provide feedback on each group member's draft.

Attendance and Participation (50 pts)

A seminar only works if its members are present and engaged. This includes being present for presentations and asking questions of the presenters.

Letter grades will be determined using the following scheme:

Percentages	Letter Grade		Percentages	Letter Grade
100 – 93%	A		79 – 77%	C+
92 – 90%	A-		76 – 73%	C
89 – 87%	B+		72 – 70%	C-
86 – 83%	B		69 – 67%	D+
82 – 80%	B-		66 – 60%	D
			< 60%	F

Peer reviews are due by the end of the day following a given presentation. Late submissions will not be accepted. The Review Draft must be submitted on time to facilitate peer review. Late submissions will not be accepted and will result in a grade of zero for the Revised Draft. Late submissions of the Annotated Bibliography, Revised Draft, or Final Draft will be penalized 15% per day up to three days. Work submitted more than three days late will be scored as a zero.

COURSE POLICIES

In the space below, I highlight a few of the most relevant policies for this course. A full listing of course-related policies can be found here:

<https://academicaffairs.tcnj.edu/tcnj-syllabus-resources/>

Inclusion

“The campus community of The College of New Jersey is composed of people with diverse backgrounds, perspectives, and experiences. Given the increasing diversity of the population of the United States and the cultural effects of globalization, we must continually build upon our efforts to ensure that all perspectives can be expressed.” The full Campus Diversity Statement can be viewed here: <https://diversity.tcnj.edu/campus-diversity-statement/>

Attendance

TCNJ’s Attendance Policy (<https://policies.tcnj.edu/?p=77>) states that, “Students are expected to participate in each of their courses through regular attendance at lecture and laboratory sessions. It is further expected that every student will be present, on time, and prepared to participate when scheduled class sessions begin.” One unexcused absence will reduce your course grade one letter. Two unexcused absences will reduce your course grade two letters. Three unexcused absences will result in course failure.

Academic Integrity

All activities in this course are governed by TCNJ’s Academic Integrity Policy (<https://policies.tcnj.edu/?p=130>). Any actions that are determined to be violations of the Policy will result in a penalty in keeping with the severity of the violation. If you have any questions about matters of academic integrity, please discuss them with me. Also, visit <http://academicintegrity.pages.tcnj.edu> for more information about academic integrity at TCNJ. As the saying goes, an ounce of prevention is worth a pound of cure.

Americans with Disabilities Act

TCNJ’s policy with respect to students and employees with disabilities can be found at the following URL: <http://policies.tcnj.edu/policies/digest/digest.php?docId=9206> Every effort will be made to provide reasonable accommodation for any student with a condition covered by the Americans with Disabilities Act (ADA). If you are entitled to accommodations under the ADA, please let me know by 30 Jan. 2024, and I will work with the Accessibility Resource Center (<https://arc.tcnj.edu>) to make the necessary accommodations.

Electronic Devices

You may take notes with a laptop computer or other electronic device, but this should be done in a way that does not distract other students (*e.g.*, no internet browsing). Also, do not multitask. If you are not taking notes on a presentation, please put your device(s) away.

You may make audio recordings of my lectures, in accordance with the Class Recording Policy (<http://policies.tcnj.edu/policies/digest.php?docId=9236>), but you may not make recordings of student presentations.

SCHEDULE*

DATE	TOPIC	READING / ASSIGNMENT
23 Jan	Introduction 1	None
26 Jan	Introduction 2	Topic Due (Thursday night)
30 Jan	Research Day	None
2 Feb	Research Day	None
6 Feb	Topic 1	None
9 Feb	Topic 2	None
13 Feb	Topic 3	None
16 Feb	Topic 4 / Annotated Bibliography	Biology Style Manual
20 Feb	Topic 5 / 1° Literature Presentation	None
23 Feb	Research Day	None
27 Feb	Research Day	Annotated Bibliography Due
1 Mar	1° Literature 1	None
5 Mar	1° Literature 2	None
8 Mar	1° Literature 3	None
12 Mar	Spring Break	None
15 Mar	Spring Break	None
19 Mar	1° Literature 4 / Final Presentation	None
22 Mar	1° Literature 5	None
26 Mar	Research Day	None
29 Mar	Final 1	None
2 Apr	Final 2	None
5 Apr	Final 3	None
9 Apr	Final 4	None
12 Apr	Final 5	None
16 Apr	Research Day	Review Draft Due
19 Apr	Review Draft Workshop - ZOOM	Review Drafts
23 Apr	None	Revised Drafts Due
26 Apr	Conferences (as needed)	None
30 Apr	Conferences (as needed); CoSA	None
3 May	Conferences (as needed)	None
? May	None	Final Drafts Due

* Schedule is subject to change as needed (*e.g.*, inclement weather)