# BIOLOGY 490 – SENIOR SEMINAR VIRAL PATHOGENESIS

# Section 06, Spring 2018 Course Syllabus

# Instructor:

Dr. Thomas Lentz

# **Course Information:**

Room 461, Trainer Natural Resources Building (TNR) Thursday; 9:00am – 10:50am

Email: <u>tlentz@uwsp.edu</u> Phone: (715) 346-2626 Office: TNR 443

Office hours: 11:00am - 12:00pm Thursday and by appointment Course website – see D2L

# Course Overview:

This seminar will introduce students to different mechanisms of virus pathogenesis through guided writing and presentation assignments. We will learn about virus biology - What viruses are and how they work. We will also develop our skills as science communicators. Students will choose a virus pathology they find interesting, and research how that virus causes disease in its host. We will learn the tools to find primary literature sources. We will develop our skills at critical evaluation of science articles and apply that toward improving our own writing. We will also work through developing a powerpoint presentation on the topic and presenting to an audience of our peers. Through the course, students will come to have a greater understanding of virus pathogenesis and more refined skills as a science communicator.

# Learning Outcomes:

- Locate, critically read, synthesize, and discuss primary literature articles related to the pathological properties of different viruses
- Demonstrate the ability to communicate biological information through written and orally presentation in a manner that is grammatically correct, articulate, and with appropriately organized for the intended audience
- Evaluate your own and others' written and oral communication skills by providing and applying useful feedback

# **Required Materials:**

Lecture notes, reading assignments, and other materials will be provided through D2L.

# **Course Communication:**

Information about this course will be communicated through D2L and/or sent to University email accounts. Students are responsible for/expected to check their University email regularly. If you use an email account other than your University account to contact the instructor, be sure your full name is included in the message!

#### Grading:

Grade Items	% of Course Grade	
Final Paper	30 %	
<b>Final Presentation</b>	25 %	
Draft Submissions	5 %	
Assignments	5 %	
Peer Review	10 %	
Discussion Leadership	15 %	
<b>Discussion Participation</b>	10 %	
Total	100 %	

#### Grade Scale:

A ≥ 93%	B+ ≥ 87%	C+ ≥ 77%	D+ ≥ 67%	
	B ≥ 83%	C ≥ 73%	D ≥ 63%	F ≤ 59%
A- ≥ 90%	B- ≥ 80%	C- ≥ 70%	D- ≥ 60%	

#### Grades will be posted on D2L

#### Grade Items:

**Final paper** – Students will prepare and submit a paper as the capstone assignment of this course. Structure will be modeled after a scientific review article. Formatting, length, and reference specifications are described in the assignment description documents.

**Final presentation** – In addition to a paper, students will also present their project as a powerpoint presentation to the class. The content of the presentation will be derived from the paper project, and thus complementary.

**Draft submissions** – Drafts of the projects will be due periodically and will be graded based on demonstration of satisfactory effort toward the final product.

**Assignments** - Writing and reading assignments will be due periodically. These assignments will be graded on a completion basis, though effort will reflect on the class participation grade.

**Peer review** – Students will be required to review the work of their peers as a component of this course. This will assess critical evaluation skills, but also allow students to reflect on ways to improve their own writing.

**Discussion leadership** - Students will have to prepare materials and lead a discussion period over a science article relating to their project. It is expected that students demonstrate a clear effort at understanding the presented work and providing a constructive framework for discussion of the presented work.

**Discussion participation** - Students will be asked to participate in discussions led by the instructor and other students. Many forms of science discourse take the form of peer discussion groups. Students will be assessed on how well they communicate in this setting.

#### **Attendance Policy:**

- Attendance at all class meeting times is required. Any missed assignments cannot be made up without approved documentation for an excusable of absence.
- Excusable absences include illness, accident, family emergency, professional development activity, religious activity (see UWSP University Handbook Chapter 22), or university sanctioned event. Acceptable documentation is the instructor's discretion, but may be written or electronic documentation for the reason of absence. In the case you have an expected or unexpected absence, please contact the instructor **AS SOON AS POSSIBLE** to notify about the nature of the absence and determine if it can be excused.
- Late arrival to class will not be excused and any assignment, quiz, or exam due during that class will not be granted a time extension.

#### Academic Conduct:

# Do not copy the work of other students; Do not represent the work of other students as your own; Do not share your work with other students

You are responsible for the honest completion and representation of your work and for the respect of others' academic endeavors. Any action of cheating, plagiarism, or academic misconduct is subject to the penalties outlined in UWS University Community Rights and Responsibilities, Chapter 14. Please refer to the University Community Rights and Responsibilities rules and regulations for more information: <a href="https://www.uwsp.edu/dos/Documents/CommunityRights.pdf#page=11">https://www.uwsp.edu/dos/Documents/CommunityRights.pdf#page=11</a>

Student assignments determined to be in violation of these policies will result in a grade of zero (0). Depending on the circumstance, students may receive further penalty in accordance with these policies.

#### Electronic Devices:

Cell phones should be turned **OFF** and **NOT BE USED** during class times. No other communication or musical devices are allowed. Students needing an electronic language dictionary during exams may use one with permission from the instructor (see below). No video or audio recording of lectures is permitted without the prior permission from the instructor (see below).

#### Students Seeking Assistance & Students Disabilities:

# As the instructor, it is **my goal to meet the educational needs of ALL STUDENTS and to provide the best learning environment possible.**

Any students seeking/considering use of assistive technology, materials, or accommodations are encouraged to talk with the instructor at the beginning of the course. It is my goal to find the most effective way to teach all students. Students with a disability seeking accommodations should also register with the Disability and Assistive Technology Center (<u>https://www.uwsp.edu/disability/Pages/default.aspx</u>) in the Learning Resource Center (the Library).

# <u>Title IX:</u>

Under federal and state law, and university guidelines, I am required to report acts of a criminal or offensive nature. This includes acts of sexual harassment and assault, bias and hate crimes, illicit drug use, and acts of violence. Any disclosure or description of these incidents – both current and in the past – may be reported to the Dean of Students office (http://www.uwsp.edu/dos/) or the local authorities.

		BIOL49	0 COURSE SCHEDULE – Senior Seminar: Viral Pat	hogenesis, Lentz Spring 2018						
Wk		Date	Торіс	Assignments Due						
1	Jan	25	<b>Roundtable Discussion</b> Introduction to Viruses; Viral pathogenesis							
2		1	<b>Computer Workday</b> Research tools and techniques; Identifying quality resources	Find 1 resource and write 1 paragraph summary on 2 viruses of interest						
3	q	8	Roundtable Discussion Cellular basis of viral pathogenesis; Format and Structure	Find 3 research articles on your virus; Revise your summary paragraph; Read assigned research paper						
4	Fe	15	Writing Workshop Effective scientific communication; Evaluate thesis statements	SAT scoring assignment; Write out thesis statement; Read assigned journal paper						
5		22	Writing Workshop The peer review process; Role of reviewers in scientific publications	Outline of paper; review and feedback on peer summary; identify discussion paper						
6		1	Student Discussion Day Student led evaluation of journal paper	Students prepare discussion materials; Read discussion papers						
7	ar	8	Student Discussion Day Student led evaluation of journal paper	Students prepare discussion materials; Read discussion papers						
8	Ra	Ma	Ma	Ma	Ma	Ма	Ма	15	<b>Student Discussion Day</b> Student led evaluation of journal paper	Students prepare discussion materials; Read discussion papers
9	22 <b>Computer Workday</b> Visual forms of science communication; Preparing a scientific talk		<b>Computer Workday</b> Visual forms of science communication; Preparing a scientific talk	Draft of paper						
10	Apr	5	Roundtable Discussion Molecular basis of viral pathogenesis; Refining your work for publication	Read handouts and assigned journal paper						
11		Apr	12	<b>Computer Workday</b> Using powerpoint for visual presentations	Peer review					
12			19	Roundtable Discussion Molecular basis of viral pathogenesis; Refining your work for publication	Draft of presentation slides					
13		26	<b>Computer Workday</b> Using powerpoint for visual presentations							
14	٨	3	<b>Student Presentations</b> Students present projects to class	Final presentation due						
15	Aa	10	Student Presentations Students present projects to class	Final paper due						
		Biology	Comprehensive Exam: Wednesday, May 2 or Thursda	y, May 3, 6 – 7pm in TNR 120						