



**Biology 490, Section 2
M 1:00-2:40 TNR 300**

Coordinator

Dr. Terese Barta

Office: 465 TNR

Phone: (715) 346-4241

Email: tbarta@uwsp.edu

(Put Bio 490 in subject line)

Office Hours:

3:00-4:00 M

1:00-2:00 W

Other times by appointment

Plagues & Human History

Spring Semester 2016

Course Description:

Prerequisites: Biology or Biochemistry major, Biol 130 & Biol 160, Senior Standing.

May not be repeated.

This seminar is a capstone experience that focuses on microorganisms that have had an impact on human history and society by causing epidemics of disease. This course emphasizes written and oral communication and fulfills part of the Communication in the Major requirement. In this class, you will critically review and discuss scientific literature, write a review paper on the biology of a plague agent, and present a oral presentation on that agent and the disease it causes.

Written and oral assignments will include peer and instructor evaluations.

Textbook resource: *Writing in the Biological Sciences*. Available: DUC Text rental.

*Satisfactory completion of this 490 course requires the completion of the Biology Department's comprehensive exam. **Test scores are used to compare class averages among various populations of biology majors to assess general student learning. Scores will not be made available to you nor your instructor and will have no bearing on grades. However, your 490 grade will be withheld until the exam is taken. The exam will take approximately 60 minutes and will be offered Wednesday 2 May and Thursday 3 May from 6-7 PM in TNR 120.***

**Course Components
& Grading**

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Course Objectives


- To expand your knowledge of microbiology & history
- To develop the ability and confidence to speak in front of other people about biology.
- Acquire experience in researching and reading the primary literature.
- Demonstrate your critical and independent thought through writing.

Course Components/ Point breakdown

Pecha Kucha Presentation	10 pts
Scientific Paper	
Annotated bibliography	20 pts
Outline	15 pts
First draft of paper	15 pts
Second draft	25 pts
Final paper	50 pts
Peer Paper evaluations	25 pts
Lead paper discussion	25 pts
Oral presentation	50 pts
<u>Attendance & Participation*</u>	<u>150 pts</u>
TOTAL	385 points

*Participation is based on preparation and class discussion. Attendance is required, and students are expected to turn all assignments in on time. Each student is expected to post on D2L a comment or question on articles before class. Students with unexcused absences will not be able to make up missed work.

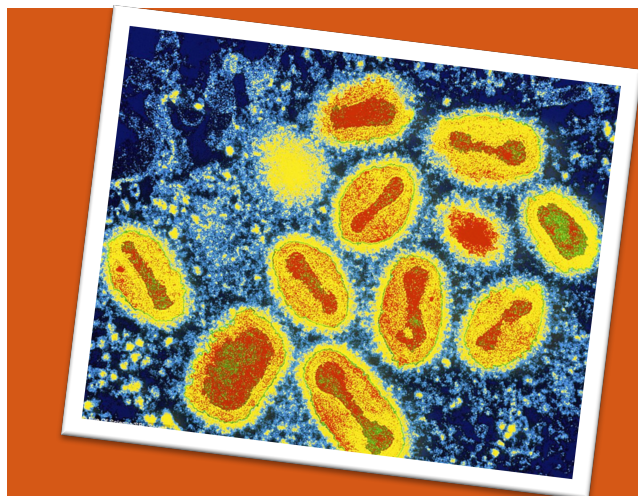
In class, you are expected to be on time, stay alert, and provide comments and questions to presenters. Finally, nothing short of complete mutual respect and courtesy will be expected. Out of courtesy to you fellow classmates, please remember to turn off your cell phone and do not display it during class.



Evaluation and Grading

Student presentations and papers will be critiqued by both the class and by me. Speakers will be provided with the summary of comments from me and the class. However, I will make the actual grade determination. A copy of the evaluation instrument will be provided in advance.

Grades are calculated by percentage of the total possible points, rounded to the nearest 0.1%. There are no opportunities for extra points beyond what is outlined in this syllabus. The scale is shown below.



Grading Scale

92 % = A	77.5-79.9% = C+
90-91.9% = A-	72.5-77.4% = C
87.5-89.9% = B+	70-72.4% = C-
82.5-87.4% = B	67-69.9% = D+
80.0-82.4% = B-	60-66.9% = D
	<60.0% = F

Grades are not based on a curve. That means everyone has an equal opportunity to earn a grade based on their own performance, not relative to their peers.

Access for all Students

The Americans with Disabilities Act (ADA) is a federal law requiring educational institutions to provide reasonable accommodations for students with disabilities. For more information about UWSP's policies, visit: <http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/ADA/rightsADAPolicyInfo.pdf>

UWSP is committed to providing reasonable and appropriate accommodations to students with disabilities and temporary impairments. If you have a disability or acquire a condition during the semester where you need assistance, please contact the Disability and Assistive Technology Center on the 6th floor of Albertson Hall (library) as soon as possible. DATC can be reached at 715-346-3365 or DATC@uwsp.edu. If you are already registered with the Disability and Assistive Technology Center, please inform me as soon as possible.

Possible Topics:

- Leprosy
- Typhoid fever
- Black death
- Legionnaires' Disease
- Cholera
- Tuberculosis
- Syphilis
- Typhus
- Measles
- Smallpox
- HIV
- Dengue Fever
- Poliomyelitis
- Yellow Fever
- Influenza
- Ebola
- Leishmaniasis
- Malaria
- (others possible but must be approved)



It may be necessary to use online index searches and inter-library loan to get the sources you need, so plan ahead. If you are unfamiliar with the use of online indices, consult a librarian at the LRC. The Writing Lab at the Tutoring Learning Center is also available to help you in writing your paper.

Discussion Leading and Class Participation: Most classes will take the form of discussions of papers. Everyone is expected to read all papers and comment or pose a question on *each paper*. Discussion leaders are expected to do a brief oral presentation to introduce their topic and make sure each paper is fully discussed.

Although you will not be expected to master every detail of the primary research articles, everyone should be able to answer the following questions about each:

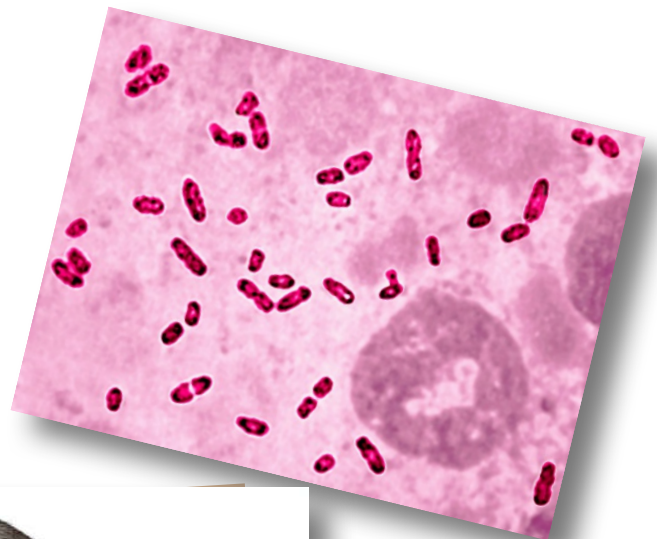
- 1) What was the hypothesis? Briefly, what was the rationale for the hypothesis?
- 2) Briefly, what were the methods? Were they appropriate to address the hypothesis?
- 3) What were the major results and how did they relate to the hypothesis?
- 4) What was the conclusion? Do you believe the conclusion? Is there an alternative interpretation of the data the authors did not address? What further evidence would you like to see?
- 5) What were the major strengths and weaknesses of the paper?
- 6) How does this paper relate to other papers we've read? How does it relate to other work?

Discussion leaders should additionally be prepared to discuss/explain the following:

7) Explain the rationale *in detail*.

8) How does each technique used in the study generally work?

Note: This preparation may involve the use of outside sources and you are encouraged to prepare for discussion leading with your discussion-leading group.



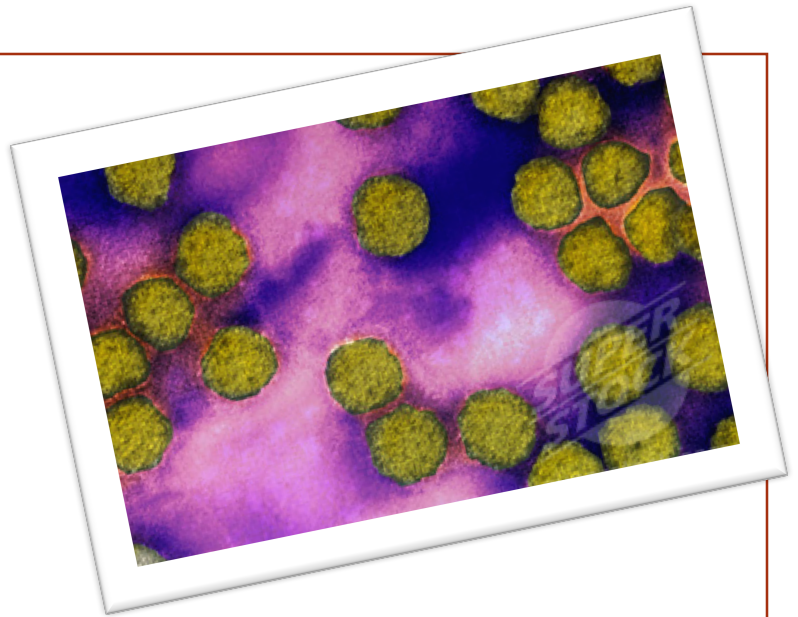
Academic Integrity

Academic misconduct. You are expected to work independently on papers and talks. Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

Plagiarism or other forms of academic misconduct will not be tolerated. If a student is found committing academic misconduct or aiding another student in doing so, I will initiate disciplinary action in accordance with section 14.04 of the UW System Administrative Code. Penalties may range from a zero on that assignment to a failing grade in the course.

Standards and Disciplinary Procedures for UWSP can be found at:
<http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap14.pdf>

Resources on plagiarism can be found at: <http://library.uwsp.edu/Guides/VRD/plagiarism.htm>.



Preparedness & Attendance

LATE ASSIGNMENTS WILL NOT BE ACCEPTED. Outlines not turned in by the deadline will not be given *any* credit. There will NOT be any postponement of talks allowed because your presentation is not ready. In case of illness or other emergency, I must be notified (preferably by phone) before class time in order for you to be able to reschedule your seminar. If you are not able to call, *have someone else call* (voice mail records the time of message). All excused absences must be verified with appropriate documentation.

Each unexcused absence will result in a point loss. For an absence to be considered excused, it must be an unavoidable emergency (such as, serious illness, family emergency, death in the family, mandatory court appearance), and I must be notified in advance. The only exception would be severe injury resulting in immediate hospitalization. Absences related to a student's religious beliefs will be accommodated according to UWS 22.03 (see link below) providing the student notifies the instructor within the first three class periods regarding the specific date(s) he or she will be absent. (URL:

<http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap22.pdf>)