

Special Notes to Students (continued from preceding page):

8. Students are expected to read and adhere to the following: (i) the VSU Student Code of Conduct as described in the VSU Student Handbook (<https://www.valdosta.edu/administration/student-affairs/student-conduct-office/student-handbook.php>) and (ii) the Biology Department policy on plagiarism (available online through the departmental Web site at <http://www.valdosta.edu/colleges/arts-sciences/biology/documents/resources/PlagiarismPolicy.pdf>). The instructor may use a variety of m assignment . In addition, the instructor may complete a Report of Academic Dishonesty and submit it to the VSU Student Conduct Office.

9. At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available through SmartEvals. Students will receive an email notification through their VSU email address when the SOI is available (generally at least one week before the end of the term). SOI responses are anonymous to instructors/administrators, and they will be able to access results only after they have submitted final grades. Before final grade submission, instructors will not be able to see any responses, but they can see the percentage of students who have or have not completed their SOIs. While instructors will not be able to see student names, an automated system will send a reminder email to those who have yet to complete their SOIs. Students who withdraw or drop a course will also be sent invitations to complete the Dropped Course Survey. Complete information about the SOIs, including how to access the survey, is available on the [SOI Procedures webpage](#).

Course Objectives

During successful completion of this course, you will:

- (1) Research the formal, peer-reviewed, scientific literature to obtain information (both review articles and primary sources) about a specific topic in biology. Based on your research, select a much more specific subtopic on which to focus your work.
- (2) Read and organize the information collected. Select 2 (or possibly 3) review articles that you will use in writing the background section of your paper plus 2 (or possibly 3, depending on the length) primary sources that you will thoroughly analyze and discuss in the remainder of the paper. Submit your review articles and primary sources to the instructor.
- (3) Demonstrate an understanding of the information collected by preparing an original, well-organized, and carefully-written paper on the topic.
- (4) Demonstrate an understanding of the information collected by giving a well-organized, detailed, oral presentation based on **one** of the primary scientific sources used in writing the paper. PowerPoint software must be used during the oral presentation, and the presentation should be 12 to 14 minutes long (with 3 additional minutes for questions).
- (5) Attend and prepare a brief summary of each presentation given as part of the Biology Department seminar series. Seminars take place on Tuesdays and are generally about 50 minutes in length.)
- (6) Take the ETS Major Field test in biology and score at least 140.
- (7) Complete the departmental Senior Exit Questionnaire.

Alignment of Course Objectives with Educational Outcomes:

The **VSU General Education Outcomes** are available online at <https://www.valdosta.edu/academics/academic-affairs/vsu-core-curriculum.php> ; in this syllabus they are referred to as VSUA1, VSUA2, VSUB, VSUC, VSUD, and VSUE. The **Biology Undergraduate Educational Outcomes** (numbered 1-5) are available in the VSU Undergraduate Catalog, which is available online at <http://catalog.valdosta.edu/> .

Course Theme: *Bacteria That Cause Disease in Humans*

Pathogenic bacteria are interesting and the instructor hopes you will enjoy learning about them!

Possible pathogenic bacteria (topics) will include the following: *Staphylococcus aureus*, *Streptococcus pyogenes*, *Streptococcus pneumoniae*, *Streptococcus agalactiae*, *Streptococcus mutans*, *Clostridium botulinum*, *Clostridium tetani*, *Clostridium perfringens*, *Bacillus anthracis*, *Listeria monocytogenes*, *Mycobacterium leprae*, *Mycobacterium avium-intracellulare*, *Mycoplasma pneumoniae*, *Neisseria meningitidis*, *Treponema pallidum*, *Leptospira interrogans*, *Salmonella*, *Shigella*, *Vibrio cholerae*, *Bartonella henselae*, *Bordetella pertussis*, *Burkholderia pseudomallei*, *Haemophilus influenzae*, *Legionella pneumophila*, *Campylobacter jejuni*, *Vibrio vulnificus*, *Borrelia burgdorferi*, *Anaplasma phagocytophilum*, *Pseudomonas aeruginosa*, *Bacteroides fragilis*, *Chlamydia pneumoniae* (*Chlamydia pneumoniae*), *Aeromonas hydrophila*, *Acinetobacter baumannii*, *Klebsiella pneumoniae*, *Enterococcus faecium*, *Nocardia brasiliensis*, *Proteus mirabilis*, *Yersinia pestis*, enterohemorrhagic (Shiga-toxin producing) *Escherichia coli*

Please keep in mind that some bacteria may be opportunistic pathogens.

Please note that if you are currently taking BIOL 3100, you must select a different topic for your oral presentation in that class.

Specific Course Requirements/Assignments:

1. Students are expected to attend all scheduled class meetings. Any student who cannot attend one or more sessions should discuss this matter with the instructor prior to the absence. It is expected that all members of the class will participate in a brief discussion after each student oral presentation is given. Therefore, please be prepared to ask meaningful questions, critique the quality of the material presented, and raise meaningful issues related to the topic discussed.
2. Students will read

4. Each student will select a general topic from the list and a specific focus for the research to be conducted. These must be submitted to the instructor on the indicated dates. Once a topic has been chosen it may not be changed.

5. Each student will hand in complete, readable, paper and electronic copies of the **references** to be used for the paper (including all tables and figures). These are due on Sept. 11.

The references must include 2 (or possibly 3, depending on the length) peer-reviewed, formal scientific articles that are

(xiv) A primary source is cited for the contributions of the authors. It should not be cited for background information that the authors mentioned in their introduction.

(xv) When you are using a review article that cites the work and contributions of many other authors/researchers, it is important to clarify this point in your writing.

Tues. Oct. 1

Wed. Oct. 2

To be announced

Discussion, questions, peer review, etc.

You must bring two copies of a complete draft of your paper to class today. The complete draft must include all sections (including the Literature Cited section) as well as all citations for the references within the text. You will submit one copy of the draft to the instructor, who will check it for completeness. Another member of the class will read the other copy of your paper and provide feedback. It is suggested that the provided list of questions (see Sept. 25) be used as part of this peer-review process.

This assignment is due on Oct. 2, except in the event of a documented, serious emergency.

Tues. Oct. 8

Wed. Oct. 9

Fall Break

Papers are due (both printed & electronic versions must be submitted)

You will not have an opportunity to revise your paper for any reason, so please do your best writing!!

Tues. Oct. 15

Wed. Oct. 16

To be announced

Oral Presentations

Senior Exit Questionnaire

Tues. Oct. 22

Wed. Oct. 23

To be announced

Oral Presentations

Tues. Oct. 29

Wed. Oct. 30

To be announced

Oral Presentations

Tues. Nov. 5

Wed. Nov. 6

To be announced

Oral Presentations

Tues. Nov. 12

Wed. Nov. 13

To be announced

Oral Presentations

Tues. Nov. 19

Wed. Nov. 20

To be announced

Oral Presentations

Return assignments, etc.

