
Biology Department, College of Arts & Sciences, Valdosta State University
SPRING 2023---COURSE SYLLABUS*

BIOL 4900, Section C. Senior Seminar (CRN 25099) - 1 credit hour

Times: Thursday 5:00-6:50 pm, 1202 Bailey Science Center

Tuesday 12:40-1:40 pm, 1023 Bailey Science Center

The days for the Tuesday seminars/presentations will be announced in class and/or BlazeView as soon as they are available.

Instructor: Dr. Jenifer Turco

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Telephone: 229-249-4845

Office: 2091 Bailey Science Center

Office Hours: Mon., 12:30 – 2:30 pm; Tues., 4:15 – 5:15 pm; Thurs., 4:15 – 4:45 pm; or by appointment.

Important Exception: Due to other professional responsibilities, the instructor may not be available for scheduled office hours during the week of March 27 through March 31. She will be available by appointment during this week.

BIOL 4900. Senior Seminar. 1 Hour.

Pre- or Corequisite: Completion of all required courses in the senior curriculum for the biology major. Graded “Satisfactory” or “Unsatisfactory”. The capstone course in biology. Students are required to attend outside lectures chosen by the instructor. This course assesses students’ ability to research independently topics in biology, assimilate the information, and disseminate the information in an organized and understandable fashion in both written and oral forms. Besides demonstrating comprehension of their topic and competence in communication skills, students take the ETS Major Field test in biology and complete the departmental Senior Exit Questionnaire for successful course completion. (From VSU Undergraduate Catalog)

Items or abilities that are (or may be) required: (i) ability to access BlazeView and print out the syllabus, assignments, handouts, etc.; (ii) ability to participate in discussions via BlazeView and during class; (ii) ability to use VSU Email, Microsoft Word, PowerPoint, and Excel, as well as the ability to save files from these applications in regular and PDF format; (iii) ability to complete assignments (typewritten) and assessments and submit them on paper during class and/or online via BlazeView; (iv) a stapler, paper clips, and two thin, light-weight folder(s) for handing in assignments during class; and (v) ability to give an oral presentation. Current plans are for the oral presentations to be given in the classroom. However, if problems are encountered as the semester progresses, it is possible that presentations might need to be given remotely using BlazeView and Collaborate Ultra. If presentations are given in this way, you will need Internet access as well as access to a computer with a microphone.

***This is a tentative syllabus. Changes to this syllabus will be announced during class or posted on BlazeView.**

Special notes to students:

1. **Please do not come to the classroom or my office if you are sick.** Also, please note that, if you must be absent due to a quarantine or isolation requirement for COVID-19, you should report this situation via the COVID-19 Self Reporting Link in MyVSU and through the Dean of Students Office. If you must be absent due to another illness or a family emergency, please report your absence through the Dean of Students Office as well.
2. **For more detailed information on campus operations related to COVID-19 and monkeypox (mpox), please see the updated guidance at the following links:** <https://www.valdosta.edu/campus-operations/>
<https://www.valdosta.edu/administration/student-affairs/student-health/covid-19-health.php>
3. **Food and drink may not be consumed in the classroom.** If you carry a bottle of water or other beverage with you, please be sure that it is sealed and put away **before** you enter the classroom.
4. No disruptive behavior will be tolerated during class. A student who engages in disruptive behavior will be asked to leave.

5. In order to respect the privacy of each student, grades will not be posted or given out by telephone or email. Grades and feedback will be given to students in person or in BlazeView.

6. Students should consult the VSU Student Handbook, Catalog, Semester Calendar, Schedule of Classes, & Registration Guide (all available online) for information about VSU policies and procedures regarding registration, drop/add, and withdrawal. **March 2** is midterm, and the last day to withdraw is **March 9**. Students are not permitted to withdraw after midterm except in cases of hardship.

7. **Accommodations Statement:** Students with disabilities who are experiencing barriers in this course may contact the Access Office (<https://www.valdosta.edu/student/disability/>) for assistance in determining and implementing reasonable accommodations. The Access Office is located in University Center Room 4136 Entrance 5. The phone numbers are 229-245-2498 (V), 229-375-5871. For more information, please visit VSU's Access Office or email: access@valdosta.edu. To request reasonable accommodations for pregnancy and childbirth, contact Christina Kidd, Student Conduct Coordinator at chkidd@valdosta.edu. Please note, you will be required to provide documentation from an appropriately licensed medical professional indicating the requested accommodations are medically necessary.

8. **Non-Discrimination and Title IX Statement:** Valdosta State University (VSU) upholds all applicable laws and policies regarding discrimination on the basis of race, color, sex (including sexual harassment and pregnancy), sexual orientation, gender identity or expression, national origin, religion, age, veteran status, political affiliation, or disability. The University prohibits specific forms of behavior that violate Title IX of the Education Amendments of 1972. Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex in education programs and activities that receive federal funding. VSU considers sex discrimination in any form to be a serious offense. Title IX refers to all forms of sex discrimination committed against others, including but not limited to: sexual harassment, sexual assault, sexual misconduct, and sexual violence by other employees, students or third parties and gender inequity or unfair treatment based on an individual's sex/gender. The designated Title IX Coordinator for VSU is Mr. Darius Thomas. To view the full policy or to report an incident visit: <https://www.valdosta.edu/administration/student-affairs/title-ix/>

9. **Academic Integrity.** 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 methods for detecting cheating and plagiarism. One method will be **Turnitin**. Cheating or plagiarism will result in a grade of "0" for the assignment and a grade of unsatisfactory ("U") for the course. In addition, the instructor may complete a Report of Academic Dishonesty and submit it to the VSU Student Conduct Office.

10. **SOI Statement:** 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](#).

11. Cell phones, laptop computers, tablets, and other electronic devices may not be used for non-course-related activity at any time in class. Students who wish to use a laptop computer, tablet, or cell phone during class as an aid to following the material being covered must take care not to distract others.

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 the required number (see below) of review articles that you will use in writing the background section of your paper plus the appropriate number (see below) of 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, well-written, carefully typewritten, and properly formatted 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. The length of the presentation will probably be about 20 minutes; the exact length will be determined once the class enrollment is finalized. About 3 to 5 additional minutes will be allowed 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 at 12:40 pm (Room 1023) and are generally about 50 minutes in length. A question-and-answer period will usually follow each seminar.)

(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/> . In this syllabus the Biology Undergraduate Educational Outcomes are designated as B1-B5, and they are available at <http://catalog.valdosta.edu/undergraduate/academic-programs/sciences-mathematics/biology/>

This course addresses the following educational outcomes:
VSU General Education Outcomes VSUA1, VSUC, and VSUD
Biology Undergraduate Educational Outcome B1

Course Theme: *Beneficial Microbes and Microbes That Cause Disease in Humans*

Possible topics related to beneficial microbes that play roles in food/beverage production will include the following: *Lactobacillus* species (yogurt and cheese), *Bifidobacterium* species (yogurt and cheese), *Streptococcus thermophilus* (yogurt and cheese), *Lactococcus lactis* (various dairy products), *Propionibacterium* (Swiss cheese), *Saccharomyces* species (yeast breads, alcoholic beverages, ethanol), *Zymomonas* (alcoholic beverages, ethanol), and *Acetobacter* (vinegar).

Possible pathogenic microbes (topics) will include the following: *Candida auris*, *Candida* species (other than *Candida auris*), *Cryptococcus (Filobasidiella) neoformans*, *Cryptococcus gattii*, *Acinetobacter baumannii*, *Actinomyces* species, *Aeromonas hydrophila*, *Bacillus cereus*, *Bartonella quintana*, *Brucella* species, *Burkholderia pseudomallei*, *Clostridioides (Clostridium) difficile*, *Clostridium perfringens*, *Ehrlichia* species, *Enterococcus* species such as *E. faecium*, *Francisella tularensis*, *Helicobacter pylori*, *Haemophilus ducreyi*, *Leptospira interrogans*, *Listeria monocytogenes*, *Mycobacterium abscessus*, *Mycoplasma genitalium*, *Neisseria gonorrhoeae*, *Nocardia* species, *Proteus mirabilis*, *Rickettsia parkeri*, *Rickettsia typhi*, *Streptococcus agalactiae*, *Streptococcus mutans*, *Treponema pallidum* subspecies *pallidum*, *Vibrio parahaemolyticus*, and *Yersinia enterocolitica*.

Please keep in mind that some microbes 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. In addition, if you took BIOL 3100 last semester, you must select a different topic than you used for your oral presentation in that class.

Specific Course Requirements/Assignments and Other Important Information:

1. **Academic Integrity.** Students will read the information on academic integrity (see item #9 in Special Notes to Students on page 3 of this syllabus). A copy of the Preamble and Appendix A of the VSU Student Code of Conduct and a copy of the Biology Department Policy on Plagiarism will be provided in class. These resources are also available through the links in this syllabus (see item #9 on page 3 for links). In addition, plagiarism will be discussed briefly during class. Students will sign an acknowledgement form in class indicating that they have read and understood these policies.

2. **Hardships & Difficulties.** If you encounter hardships/difficulties during the semester that affect your ability to attend the class and complete assignments, please be sure that you notify the Office of Student Affairs (229-333-5941) so they can send a report to the instructor. I realize these are challenging times, and I will do my best to work with each of you so you can complete the course successfully. However, please realize that I will expect you to do your best as well. Please be aware that, if hardships or other factors interfere significantly with your ability to attend class and complete assignments, you might need to retake this course during a future semester. Also, please be sure you read the information about class attendance and late assignments (see items 3 & 4 below).

3. **Attendance.** Students are expected to attend all scheduled class meetings unless they are sick or have some serious hardship that prevents them from attending. In accordance with VSU policy, attendance and participation will be checked in class. The VSU Undergraduate Catalog states, “A student who misses more than 20% of the scheduled classes of a course will be subject to receiving a failing grade in the course.”

4. **Assignment Format and Late Assignments.** Assignments will be submitted during class and/or via BlazeView. Some assignments will be submitted BOTH in class and in BlazeView. **Unless otherwise noted, all assignments must be typed, readable, and well-organized.** If an assignment has multiple pages, they must be stapled or clipped together. Placing your assignment in a folder will be helpful. For assignment submission in BlazeView, please remember that, **if the typewritten assignment has multiple pages, it must be submitted as a single electronic file, unless otherwise specified.** Assignments must be readable. Please check your submitted file in BlazeView to be sure it is complete. **Also, it is essential that you PROMPTLY review any feedback the instructor provides in BlazeView.** This will let you know if there might have been a problem with your assignment and/or its submission.

Additional, special guidelines are provided below for submission of PDF files of the references and a list of the references with working links to the full texts of the articles.

If you would like to earn a “Satisfactory” evaluation on an assignment, you should complete it carefully and thoroughly and submit it on time. **Depending on the circumstances, a late assignment may be evaluated as “Unsatisfactory”.** An assignment that is more than one week late is likely to be evaluated as **unsatisfactory.** **Please note that satisfactory completion of all requirements & assignments on time is required in order to receive a “Satisfactory” grade in the course.**

5. **Tuesday Seminars.** Each student will attend and summarize the presentations given as part of the Biology Department seminar series. The schedule for these presentations (as well as any updates) will be announced in class and/or in BlazeView as soon as it is available. The Biology Department seminar generally takes place on Tuesdays from 12:40-1:40 pm in Room 1023, Bailey Science Center. You are expected to attend all of these

seminars, and to be on time. In each instance, you must complete a presentation summary on the form provided and submit it to the instructor. The summary must include the following: your complete name; the date, time, and location of the presentation; the full name of the speaker; the title of the presentation; a few sentences about the material that was presented, and at least 1 question about the content of the presentation. If time permits, students are encouraged to ask questions after the presentations. The instructor (or her representative) will give you a copy of the presentation summary form as you enter the seminar room. You must complete this form during the seminar and give it to the instructor (or her representative) immediately after the seminar. Please note that these forms may not be distributed once the seminar has started. **Students who do not attend the Tuesday seminars will receive an Unsatisfactory grade in this category, and therefore an unsatisfactory grade in the course.**

6. Topic Selection. Each student will select a **general topic** from the list and a narrower **focus topic** 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 generally not be changed. If you are having difficulty locating references on your topic, please consult the instructor.

If you chose a microbe used in food/beverage production, examples of more specific aspects of your topic (**focus topics**) might be: factors influencing how the microbe behaves during production of the food or beverage, various chemicals or fermentation products generated by the microbe, beneficial effects of the microbe on humans, possible association of the microbe with human infection. If you chose a pathogen, examples of more specific aspects of your topic might include: antimicrobial drug resistance in the particular pathogen; use of phage therapy in treatment of disease caused by the pathogen; properties/research on a particular virulence factor of the pathogen; progress in development of a vaccine for prevention of diseases due to the pathogen; progress in developing better treatments for a specific disease(s) caused by the pathogen; or recent outbreaks of disease due to the pathogen. There are, of course, many other possibilities.

7. Submission of References. Each student must submit complete, readable, printed PDF files of the **references** to be used for the paper (including all tables and figures). Each reference must be labeled on the first page as a “review article” or a “primary source”. If you know which primary source article you want to use in your oral presentation, please mark that on the first page of the article. In addition to the PDF files, both a printed list and an electronic list of the references plus working links to the full-text references must also be submitted. In the list of references with links, you must indicate which references are review articles and which ones are primary sources. **You must also indicate which reference you want to use in your oral presentation.** **Please remember that links to sources that you obtain via GALILEO databases will not allow the instructor or others to access your references.** Therefore, links obtained through GALILEO will generally not be acceptable. A very useful resource for locating references is **PubMed**, located at <https://pubmed.ncbi.nlm.nih.gov/> . The advanced search function of this database is very helpful.

The references must include **3** (or possibly 4, depending on the length) peer-reviewed, formal scientific journal articles that are **primary sources**. These primary sources must deal with the specific focus that you chose for your research. They must list references at the end and the references must be cited within the text of the articles. Each primary source must be 4 or more pages in length. In addition, each primary source must contain 3 or more tables and/or figures. Primary sources must have been published between 2012 and 2023. PLEASE RECALL THAT, IN A PRIMARY SOURCE, THE AUTHORS REPORT THE RESULTS OF THEIR OWN EXPERIMENTS, FIELD WORK, OR CASE STUDIES. PRIMARY SOURCES WILL OFTEN HAVE A “MATERIALS AND METHODS” SECTION. **For this assignment, the following types of articles will NOT be acceptable as primary sources: (i) articles that are meta-analyses or systematic reviews and (ii) lengthy reports published by the Centers for Disease Control and Prevention, the World Health Organization, or other agencies.** Such sources may be used as supplemental resources, along with your review articles (see below).

In addition to the primary sources, the submitted references must also include at least **3** (but up to 5), peer-reviewed, formal scientific journal articles that are **review articles**. In some instances, authoritative books

and book chapters by experts on the topic may be used in addition to (or instead of) the review articles, but they are not required. These sources must list references at the end and the references must be cited within the text of the article, book, or chapter. Undergraduate textbooks may not be used as sources. It is strongly suggested that the student make his/her best effort to locate **recently** published review articles/book chapters. For a microbe that is used in food/beverage production, at least two of the review articles must focus on the particular microorganism, its properties, and how it is used in food/beverage production. If the living microbe is found in the food/beverage, then the background should include possible beneficial effects of the microbe on humans. For a pathogenic microorganism, the major focus of at least two of the review articles must be the particular pathogen itself, its properties and transmission, the diseases it causes in humans, major signs and symptoms of these diseases; major virulence factors of the pathogen; treatment of and prevention of these diseases; and whether or not a vaccine is available. These review articles will help you write the background portion of your paper.

You may use interlibrary loan; however, this process may take additional time and is therefore not recommended. Please note that textbooks, Web sites, informal Internet articles or fact sheets, newspaper articles, magazine articles, book reviews, and letters to the editor are generally **not** acceptable sources. **You must use your submitted references in your paper, so please choose them carefully.**

8. Selection of Primary Source for Oral Presentation. In consultation with the instructor, each student will select the primary source that will be the focus of his/her oral presentation. When you submit your PDF files of your references, as well as your printed and electronic list of references with working links to the full text articles, you will mark one of your primary sources as the one you would like to use in your oral presentation. When feedback is given, the instructor will indicate whether the chosen primary source is acceptable. Once the primary source to be used for the oral presentation has been chosen, it cannot be changed.

9. Paper, Format, Citing References in the Paper, and Preparing the “Literature Cited” Section. Each student will hand in an original, well-organized, carefully written, and carefully typewritten paper on the topic. A physical copy of the paper will be submitted in class, and an electronic copy will be submitted in BlazeView. The paper must be in review format, and it must include the following: (i-ii) the **Title, Author, and a Summary** of about 300 words (1 page); (iii) the **main body** of the paper (6 to 8 pages); and (iv) the **Literature Cited** section (1 to 2 pages). Be sure to proof-read your paper and make corrections before your final submission.

The paper must be typed in 12-point font, double-spaced, with margins set at 1 inch on all sides of the pages. Please carefully check your word processing program to be sure that additional space is not inserted below each line. All pages must be numbered at the bottom of the page. A printed copy of the paper, as well as an electronic copy, must be submitted. The electronic copy will be submitted in BlazeView.

About one-third (1-1/2 to 2-1/2 pages) of the main body of your paper must be devoted to general background on the microbe. For a microbe that is used in food/beverage production, you must describe the properties of the microorganism and give specific information about how it is used in food/beverage production. If the living microorganism is found in the food/beverage, you must also give some information about possible beneficial effects of the microbe on humans. For a pathogen, you must provide information about the pathogen’s properties and transmission, the diseases it causes in humans, major signs and symptoms of these diseases; major virulence factors of the pathogen; treatment of and prevention of these diseases; and whether or not a vaccine is available. If you found a review article on the specific focus of your own writing, you may discuss that article briefly in the initial background pages of your paper to “transition” to your discussion of the specific primary sources you chose. **The remaining two-thirds (4-1/2 to 5-1/2 pages) of the main body of the paper must be devoted to your primary sources that deal with your more specific (focus) topic.**

Papers may not include any direct quotations or any figures or tables from the references. A paper may also not repeat substantial amounts of data from the primary sources. A paper that is constructed from direct quotations does not convey an understanding of the material. Please take care to avoid

plagiarism. You must write your paper in your own words to demonstrate your understanding of the information you discuss.

For citing sources in the body of the paper, and for preparing the Literature Cited section, students should follow the Council of Science Editors (CSE) Name-Year Documentation guidelines, which are available online at

<https://writing.wisc.edu/handbook/documentation/doccse/>

<https://writing.wisc.edu/handbook/documentation/doccse/nameyear/>

This resource is part of the University of Wisconsin-Madison Writer's Handbook, which is located on the Web site of The Writing Center @ The University of Wisconsin – Madison <https://writing.wisc.edu/>

Please add the digital object identifier (DOI; <https://www.doi.org/>) at the end of each reference whenever possible.

10. Oral Presentation. Your oral presentation must be focused on a single primary source selected by you and your instructor from the references in your paper. The presentation must use PowerPoint software, and it must include: (i) brief, general background on the microbe; (ii) background specific to the primary source; (iii) the questions that the authors of the primary source addressed (purpose of the study); (iv) brief consideration of the materials and methods that the authors used; (v) the results of the experiments/research; and (vi) interpretation, discussion, and significance of the results.

To obtain a satisfactory grade on the presentation, you must generally (i) look at all of the data and walk the audience through the data; do not merely accept the authors' interpretations without critical analysis; (ii) include appropriate figures and/or tables (note information in next paragraph); (iii) use appropriate text fonts on the PowerPoint slides; (iv) explain your presentation in a way that is understandable to your classmates; and (v) submit a copy of the PowerPoint slides and any notes used in BlazeView the same day your presentation is given. ***Please remember that the data in large tables or figures may be difficult for the audience to see. Therefore, you should enlarge parts of a table or figure, highlight data in a particular part of a large table, or possibly consider giving each student their own copy of a table to view during your presentation. In addition, you must not read your presentation,*** although you may use index cards as aids during your talk. Reading your presentation does not demonstrate understanding.

In addition, under no circumstances may a student use a cell phone, laptop computer, or tablet during their presentation. In the past, some students who have done so have simply read their presentation directly from the primary source that they had on their tablet. Notes used during the presentation, as well as the PowerPoint slides, must be submitted in BlazeView on the same day the presentation is given. **There will be no make-ups for the oral presentations except in the event of a documented, serious emergency.**

As noted previously, in most cases, you should aim to guide your listeners through all of the study data. In a few cases, please be aware that you might not be able to present all of the figures and tables from a lengthy primary source due to the time limit for the presentation. In this case, you should present the most important ones and be prepared to answer questions about the others. Please remember that you want to convey your understanding of the research, the data, and the methods used during your presentation. In the case of a lengthy primary source, you may summarize the results shown in the figures and tables that you do not have time to present. Be sure that you allow enough time in your talk to clearly present each figure or table that you use and be prepared to answer questions on the figures/tables not presented.

The time for each oral presentation will be determined once the course enrollment is finalized.

11. Questions & Discussion after Oral Presentation. It is expected that all members of the class will participate in a brief discussion after each student's oral presentation is given. Therefore, please be prepared to ask relevant questions, critique the quality of the material presented, and raise meaningful issues related to the topic discussed.

12. Biology Major Field Test. You must contact the VSU Testing Office, which is now located in the University Center Room 4167 (accessible through entrance #5) to schedule a day and time to take the Major Field test. Arrangements can be made online at www.valdosta.edu/testing. A score of at least 140 is required to achieve a grade of Satisfactory. **You are required to take the Major Field test by no later than mid-term (Thursday, March 2, 2023).** If you score less than 140, you must continue to re-take the test until you reach 140. The Biology Department will pay for your initial test; you are responsible for all fees associated with retaking the test. **No scores on the Major Field test will be accepted after NOON on Monday, May 1, 2023.** If the instructor has not received a score of 140 or more for you by that time, you will receive an Unsatisfactory grade (U) for the course.

Tentative Class Schedule (Subject to Change)

Please remember that you must take the Major Field Test by midterm (March 2)
Schedule your time to take the test early, as the schedule fills up quickly!!!

- Tues. Jan. 10** Syllabus, course information, possible research topics
- Thurs. Jan. 12** Syllabus, course Information; possible research topics; **academic integrity policies**
Selection of topics (Once a topic is selected, it cannot generally be changed.)
Determining a specific aspect of your topic on which to focus your research
- Thurs. Jan. 19** **The specific aspect of your topic on which you will focus is due in class and in BlazeView.**
Signed academic integrity documents must be given to instructor in class.
References: Primary sources and review articles—how to tell the difference
Class will then meet for a session in the computer lab.
Search for your references and make copies.
- Thurs. Jan. 26** **Complete, printed copies of PDF files of review articles and primary sources are due in class. Mark each article as a review article or primary source and indicate which article you would like to use in your oral presentation.**
You must use the references that you submit, so please choose them carefully!
Class will then meet for a session in the computer lab.
Instructor will provide feedback on your references in BlazeView. You must review this feedback promptly so you can turn in additional references on Feb. 2, if necessary. If you have questions, please make an appointment to meet with me.
- Thurs. Feb. 2** **Re-submit additional complete PDFs of review articles and primary sources in class, if necessary. Be sure they are correctly marked and indicate which article you want to use in your oral presentation.**
You must use the references that you submit, so please choose them carefully!
- List of references with working links to the full-text references is due in class and in BlazeView.** On this list of references, you must mark whether each article is a review article or a primary source, and you must indicate which primary source you would like to use in your oral presentation. (In choosing the reference to use in your oral presentation, please consider the figures and other data in the study and whether they will be easy to present to the class.)
Please remember: Do not use links from GALILEO!!
Session in computer lab in case it is needed

Thurs. Feb. 9

List of references with working links to references is due in class and in BlazeView (for students who had problems with their chosen references; for more details see Feb. 2)
Feedback on lists of references with working links will be provided via BlazeView.
The instructor will indicate whether or not the primary source you selected for your oral presentation is acceptable. Once the primary source to be used for the oral presentation has been approved, it cannot be changed.
Please read your feedback in BlazeView promptly.

Thurs. Feb. 16

Literature Cited section of your paper is due in BlazeView. Be sure to format the list of citations according to the provided guidelines.

Discussion, questions, etc.

Please work on a complete draft of your paper that includes all sections (including the Literature Cited) and all citations for the references within the text. Check your draft according to the list of questions below, and the paper evaluation criteria (see BlazeView), and make revisions as needed.

- (i) Is the paper organized, clear, and logical?
- (ii) Does the paper demonstrate your knowledge and understanding of the topic?
- (iii) Does the paper cover the required content? (Does it cover the required background information on the microbe? Does the paper properly emphasize the primary sources?)
- (iv) Are there any signs of plagiarism in the paper?
- (v) Do the format and length of the paper correspond to the guidelines provided?
- (vi) Are there any direct quotations in the paper? Does it contain figures, tables, or large amounts of original data from the primary sources?
- (vii) Does the paper have errors in spelling and grammar?
- (viii) Are the references cited in the correct format?
- (ix) Does the paper cite the correct reference in each instance?
- (x) Does the format of the "Literature Cited" section follow the guidelines?
- (xi) Compare the "Literature Cited" section with the references actually cited in the body of paper. Are there any references in the paper that are not listed in the "Literature Cited" section?
- (xii) Are there any references listed in the "Literature Cited" section that were not actually used and cited in the paper?
- (xiii) You must cite only those references that you actually read and used. Copies of all of these references should have been submitted in class and should have been included on your list of references with working links.
- (xiv) Please note that a primary source is cited for the contributions of the authors. It should generally not be cited for background information that the authors mentioned in their introduction or in their discussion. Does the paper adhere to this guidance?
- (xv) When you are using a review article that cites the work and contributions of many other authors/researchers, it is a good idea to clarify this point in your writing. Is this done in the paper?

Thurs. Feb. 23

Discussion, questions, common problems.

Remember to take the Major Field Test by March 2

Please work on a complete draft of your paper that includes all sections (including the Literature Cited) and all citations for the references within the text. Check your draft as specified in the information noted for Feb. 16 and make revisions as needed.

Thurs. Mar. 2 Discussion, questions, peer review, etc.
Peer review (required): Please bring two printed copies of a complete draft of your paper to class today. The complete draft should include **all sections of the paper** (including the Literature Cited section) as well as **all citations for the references within the text**. You may give 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 Feb. 16) be used as part of this peer-review process.
Continue to work on your paper.

Thurs. Mar. 9 **Papers are due (both printed & electronic versions must be submitted).**
Please do your best writing!

SPRING BREAK

Thurs. Mar. 23 Senior Exit Questionnaire (computer lab)

Thurs. Mar. 30 Oral Presentations
Written feedback on papers will be given to students during class. Students whose papers were unsatisfactory will have ONE chance to revise their papers. Revisions are due on April 13 by 4:45 pm. A paper copy as well as an electronic copy of the revision must be submitted.

Thurs. April 6 Oral Presentations

Thurs. April 13 Oral Presentations
If you revised your paper, it is due on April 13 by 4:45 pm. A paper copy as well as an electronic copy of the revision must be submitted.

Thurs. April 20 Oral Presentations

Thurs. April 27 Return Assignments, etc.
Oral Presentations
Possible make-up oral presentation(s) (only in the event of a documented, serious emergency)

This course will have no final exam. However, the final exam period listed below may be used for possible make-up oral presentations (only in the event of a documented, serious emergency).

Wed. May 3 Final exam period: 9:30 pm – 11:30 pm

Grading – This course is graded Satisfactory (S) or Unsatisfactory (U).

Each assignment will also be graded as Satisfactory (S) or Unsatisfactory (U). In BlazeView, a Satisfactory assignment will receive 100 points; whereas, an Unsatisfactory assignment will receive 0 points.

Students must receive a satisfactory grade (100) on all assignments in order to pass the course.

Please read the syllabus carefully so you understand the policies and procedures to be followed in the course.

List of Assignments and Due Dates/Comments

Selection of general topic	(Jan. 12, in class)
Signed academic integrity documents	(Jan 19, due in class)
Selection of specific focus of research	(Jan 19, discuss in class; submit in BlazeView by 10 pm)
Submission of printed PDF files of references etc.	(Jan. 26, in class)
Selection of primary source for oral presentation in consultation with instructor	(Jan. 26 or Feb. 2)
List of references with working links to full text sources due in class & BlazeView	(Feb. 2 or Feb. 9)
Literature Cited section of paper (properly formatted)-due in class & BlazeView	(Feb. 16, by 10 pm)
<u>Take the ETS Major Field test in biology by midterm (March 2) and score at least 140. Retake the test, if necessary. There is a firm deadline for submitting updated test scores directly to instructor (Noon-May 1).</u>	
Major field test taken by March 2	(March 2, 2 pm)
Scored at least 140 on Major field test	(May 1, noon)
Peer review of complete draft of paper (required)	(March 2, in class)
Written paper due (printed & electronic copies)	(March 9 in class for paper copy; electronic copy March 9 by 9 pm)
Revised papers due (printed & electronic copies)	(April 13 in class for paper copy; electronic copy, April 13 by 9 pm)
Completion of Departmental Senior Exit Questionnaire	(March 23, in class)
Oral PowerPoint presentation on primary source (Schedule starting March 30 - to be determined)	
Submission of PowerPoint slides and notes in BlazeView on same day as scheduled presentation	
Thursday class attendance	
Attendance at seminars on Tuesdays & timely submission of summaries of Tuesday seminars	
