Fall Semester, 2019  BIOL F103X: BIOLOGY & SOCIETY  Course Syllabus

1. Mon. Aug. 26  Introduction: Course overview & Partner Introductions  
     Wed. Aug. 28  Lab overview / Rules for the laboratory  Lab: Scientific method in experimental design

2. Mon. Sept. 02  ***************************************** LABOR DAY – NO CLASS !!!! *******************************************  
     Wed. Sept. 04  Biological overview: Concepts & Methods; (Ch. 1)

3. Mon. Sept. 09  Chemical building blocks: Important Inorganic Compounds (Ch. 2)  
     Wed. Sept. 11  Lab: Chemical properties - Acids & Bases, pH

     Sept. 08 - Last day to drop w/100% refund

4. Mon. Sept. 16  Organic Molecules: Carbon-based life (Ch. 3)  
     Wed. Sept. 18  Lab: Molecular Models

5. Mon. Sept. 23  Cells and cell membranes: Structure & Function (Ch. 4-5)  
     Wed. Sept. 25  Lab: Introduction to Microscopy – Cell types

6. Mon. Sept. 30  Energy transformations: Photosynthesis & Cellular respiration (Ch. 6-8)  
     Wed. Oct. 02  Lab: Energy Transfer & Freezing Point Depression

7. Mon. Oct. 07  Cell Division: Mitosis & Meiosis (Ch. 9-10)  
     Wed. Oct. 09  Lab: Mitosis & Meiosis


     Wed. Oct. 23  Lab: DNA extraction

     Wed. Oct. 30  Lab: Human Genome Project Film  

     *Last day for topic approval.*

11. Mon. Nov. 04  Evolution: micro and macro (Ch. 17-20) & Ecology (Chs. 45-48)  
     Wed. Nov. 06  Lab: Arctic Dinosaurs Film

12. Mon. Nov. 11  Kingdoms: Viruses, Prokaryotae, Protista, and Fungi (Ch. 21-22, 24)  
     Wed. Nov. 13  Lab: Microbes

     Wed. Nov. 20

     Wed. Nov. 27  Lab: Comparative Anatomy – Comparative Animal Dissection

     Wed. Dec. 04  Lab: Comparative Anatomy – Animal Autopsy

     Wed. Dec. 11  Presentations

This syllabus, like life, is subject to change
• Introduction – Biology & Society is designed to provide the student with knowledge about fundamental concepts of the biological sciences & how they relate to the world around us. The course consists of 3 hours of lecture and/or 3 hours of laboratory work (6:00 – 9:00 P.M.) on Mondays and Wednesdays.

• Text – The textbook for the course is Biology: The Unity & Diversity of Life by Starr and Taggart, 13th Edition. Assigned readings will be listed in the course schedule.

• Grading – During the semester there will be approximately 13-14 weekly quizzes (quests), comprising 60% of the student’s overall grade. All quizzes may be composed of multiple choice, matching, fill in the blank, and true/false questions as well as short answer and essay questions. Missed quizzes will be made up at the instructor’s discretion and may consist of written (or oral) essay questions. Grading for the overall course will be on a percentile basis with 90% & above = A, 80 to 89% = B, 70 to 79% = C, 60 to 69% = D, and < 60% = F. (A minimum of 2 of the lowest weekly quiz grades will be dropped). The Lab section (See details in the Lab sheet) will contribute 25% of the overall grade for the course. (A minimum of 2 lab grades will be dropped).

• Research project (15% of the total grade) – In lieu of a comprehensive final exam, each student will be required to complete:

a. Research paper - on the topic of your choice (subject to instructor approval). This paper will contribute 10% to your final lecture grade. Consider your topic carefully (I suggest that it have some significance, interest, or personal tie to your life). You must sign up for your topic as no two students may research the exact same topic. The paper should focus on a biological topic and include:
   1. References from at least 5 books and/or articles
      (Your text may be included as 1 reference. Internet sources are acceptable as well.)
   2. 4 to 6 typed pages in length (single-sided, double-spaced, size 12 readable font)
   3. A separate title page at the beginning AND a separate reference page at the end.

b. Presentation - Students will also be required to give a short oral presentation of their topic to the class (approximately 10 – 15 min.). Presentations will include a visual aide. The presentation, as well as audience participation, will account for 10% of your final grade. There will be further discussion on appropriate topics, formats, etc. at a future date.

• Attendance – Students are expected to attend all classes or to make up all work for classes missed. Because of the length and acceleration of the classes, there is little time to catch up on missed work. Please consider that missing 2 or more classes may result in you becoming hopelessly behind. Please consult with the instructor as soon as you foresee a problem so we may work something out.

• Academic integrity – Plagiarism and other forms of cheating are prohibited and may result in an F for the course. Plagiarism is defined as copying verbatim from a source without putting it in quotes AND citing the source. (This includes copying another student’s paper!) Consider it a VERY serious offense!!!!

• Cell phones, etc. – Please turn these things off when you come in class. If your job requires you to be on call, put it on vibrate & let me know. Calls & text messages during class are disruptive & just plain RUDE to everyone else. Please be courteous to others😊