### Syllabus Biology 1302 section 60 Term Spring 2025

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(The best way to contact me is the Canvas Email System.)

Office Hours: by appointment via Zoom or on campus T, R, and Fridays

Course Overview: Biology 1302 is the second of two courses designed to help understand the scientific study of life at the organismal, population, and community levels including form, function, reproduction, taxonomy, systematics, ecology, and evolutionary history of biodiversity.

# **Student Learning Outcomes:**

To define biology, comprehend and apply the scientific process.

- To describe and understand the concept of evolution as genetic change in a population over time. To show how evolution is a unifying theme in biology.
- To describe the concept of phylogeny and apply it to prokaryotes, protists, plants, fungi, and animals.
- To describe and understand vertebrate anatomy and physiology.
- To describe and understand the ecology of population, communities, ecosystems, and the biosphere. Understand the role of humans in the ecology of the biosphere.

• To understand the significance of biology to you and your life and apply the knowledge acquired to making educated decisions as a member of society.

• To apply new learning and studying skills to your life.

# **Required Textbooks and Readings:**

Modified Mastering Online Workbook for Belk and Maier's - Biology: Science for Life with Physiology (6th edition). Publisher: Pearson Benjamin Cummings, NY. © 2019 ISBN: 9780134819549

Note: This comes bundled with an electronic version of the textbook, so you do not have to purchase the textbook in addition to the mastering.

<u>Special Course Notes:</u> -- Webcam, computer, and Internet connection are critical: Given the online nature of this course, there will be a large amount of material that will be delivered through Canvas, online homework will need to be completed, and quizzes will be proctored using the LockDown Browser. To provide you the most flexibility, I recommend that you have easy access to these materials.

School computer labs and the Muntz Library computers provide an adequate option; however, they have specific hours, and a limited number of computers with webcams attached to the computers for proctoring (see computer lab on 4th floor), so plan your time accordingly if you go with this option.

Late Work and Make-Up Exams: Late work will be accepted, but it will be penalized. Each day late will decrease the maximum point value by 5%; i.e., if an assignment is 10 days late the maximum an assignment could receive is 50%. An assignment that is late by 20 days will no longer yield points.

\*\*\* Exception\*\*\* The group video project is an exception, since it will be due toward the end of the semester and will be peer assessed for extra credit point awards. Late submission of your video project will also result in an inability to compete for the extra credit points that are awarded.

Make up quizzes will be allowed in extenuating circumstances. Talk with your instructor if this is required; however, please don't put these off to the last minute if at all possible.

<u>Attendance Policy</u>: "Attendance" in an asynchronous learning environment involves the viewing of course recordings and materials as necessary. Answering quizzes, completing homework, or submitting comments in discussions is required so that I can note attendance in class. I am required to provide attendance data for Financial Aid, midterm, and final grades submissions; therefore, it is critical that you maintain activity in this class. If you cannot for reasons of Illness or other acceptable situations, please contact your instructor to determine the best course of action.

A list of acceptable absences can be found in the UT Tyler <u>Class Attendance policy</u> in the catalog.

## Graded Course Requirements Information:

**Mastering Biology:** For each chapter, there will be assigned reading and lectures. Following this, you will want to work through the assigned workbook problems that go with each Module/Chapter. *Please note that some assignments require you to read articles at the NY Times website. UT Tyler has a subscription, so if it tells you that you cannot read the article because you have past your limit, contact the library to get access.* 

**Post-Module Quizzes: End of Module Quizzes:** At the end of each module there will be a short quiz that will ask you to apply the knowledge that you have gained from that module. This allows me to assess how the activities, readings, and lectures are conveying the information. These quizzes will be timed and proctored through the LockDown Browser. These quizzes replace the utilization of a midterms and final. We do not have a final for this class; however, there will still be material assessed during finals week.

**The Group Video Project:** You will work in assigned groups up to 4 people. You should pick a topic in Biology that interests you and make a video presentation that informs the class on this topic. This does not have to be a topic that we cover in class, but it can be. Please discuss options for the topic with your group. Please upload the topic via Canvas for instructor topic approval. Once the topic is approved (5 points), then an outline will be generated by the group and responsibilities assigned. Your group will create a 5–7-minute video on the biological topic. This will be uploaded, and the instructor will select the top videos to nominate for Awards. You will get to vote on the winners that will receive extra credit points for their work. The winning three groups will receive 20 points extra credit for first, 15 points extra credit for second and 10 points extra credit for third. Additional prizes for cinematography, Best Actor/Actress, etc. Will be awarded at my discretion and may earn 5 points extra credit.

**Science Round up:** Changes in journalism have decreased the amount of science and biology specifically that is reported in the popular press; however, there are still several shows/websites that focus on distributing science to the public. You will listen to your choice of Radio Programs/Articles/Videos (from the list of podcasts \*See Canvas site for links) then answer the following questions for each Round up.

- Which podcast/date did you listen to?
- What was one biology story that you found interesting?
- What was their hypothesis? If not explicit, you may need to infer their hypothesis.
- How did the story correlate with topics that have been covered in class?
- What was one question that you had based on one of the stories?

If you have a podcast that you think is appropriate and not on the list, please contact your instructor for approval.

## **Discussion Boards:**

There will be 3 discussion boards that will need to be completed. In each discussion board, a portion of your grade will come from the post that you create, while the other portion of the score coming from your participation by commenting on other students work.

#### iNaturalist Biodiversity Assignment:

This will be a semester-long assignment, with updates throughout. Students will be expected to download an app, iNaturalist, and instructed in its use. This app is a citizen science project in which the biodiversity of a community is determined by individuals living in that community. Students will be expected to learn and follow the standard rules for uploading pictures to the app, and follow standard rules of the assignment with check-ins throughout the semester.

#### Assignments and weights/point values

| 1. Mastering Biology Workbook | 390 pts. |
|-------------------------------|----------|
| 2. Science Roundup            | 100 pts. |
| 3. iNaturalist Biodiversity   | 100 pts. |
| 4. Group Presentation         | 100 pts. |
| 5. Post Module Quizzes        | 280 pts. |
| 6. Discussion Board           | 30 pts.  |

Total Points: 1000 pts.

## **Grading Scale:**

| А | 895 or greater |
|---|----------------|
| В | 795 – 894      |
| С | 695 – 794      |
| D | 595-694        |
| F | below 594      |

\*\*\* Please note\*\*\*\* As the syllabus is setup, we will start a little slower to get used to the format, technology, and flow of the course. The material covered will accelerate as we proceed toward the end. Since this is an asynchronous course, you can complete work at your pace. Therefore, although I know that procrastination is a basic trait of humanity, I would suggest that you could get ahead if you wanted this will make your semester a lot less stressful towards weeks 14 and 15.

# Calendar of Topics, Readings, and Due Dates

| Dates     | Week #            | Class Topic                                 | Readings | Assignments Due   |
|-----------|-------------------|---|----------|---|
| 1/13-1/17 | 1                 | Class Setup                                 | Syllabus | Intro Video<br>Group introduction and signup<br>Welcome Quiz<br>iNaturalist username                              |
| 1/20-1/24 | 2                 | Where Did we come from?                     | Ch. 11   | Roundup 1<br>Introduction to Mastering  |
| 1/27-1/31 | 3                 | An Evolving Enemy                           | Ch. 12   | Mastering Biology Ch. 11<br>Quiz Ch. 11   |
| 2/3-2/7   | 4                 | Understanding Race                          | Ch. 13   | Group Video Project Topics<br>Mastering Biology Ch. 12<br>Quiz Ch. 12   |
| 2/10-2/14 | 5                 | The Greatest Species on Earth               | Ch. 14   | Roundup 2<br>Mastering Biology Ch. 13<br>Quiz Ch. 13  |
| 2/17-2/21 | 6                 | Is the Human Population to Large?           | Ch 15    | Discussion Assessing Information:<br>Evolution<br>Mastering Biology Ch. 14<br>Quiz Ch. 14                         |
| 2/24-2/28 | 7                 | Conserving Biodiversity                     | Ch. 16   | Round up 3<br>Mastering Biology Ch. 15<br>Quiz Ch. 15   |
| 3/3-3/7   | 8                 | The Human Footprint                         | Ch. 17   | Group Video Outline and Annotated<br>Bibliography<br>Mastering Biology Ch. 16<br>Quiz Ch. 16                      |
| 3/10-3/14 | 9                 | Organ Donations                             | Ch. 18   | Mastering Biology Ch. 17<br>Quiz Ch. 17   |
| 3/17-3/21 | Spring Break Week |   |          |   |
| 3/24-3/28 | 10                | Binge Drinking                              | Ch. 19   | Round up 4<br>Mastering Biology Ch. 18<br>Quiz Ch. 18   |
| 3/31-4/4  | 11                | Clearing the Air                            | Ch. 20   | Mastering Biology Ch. 19<br>Quiz Ch. 19<br>March 31 <sup>st</sup> - Last day to withdraw<br>with a ''W''          |
| 4/7-4/11  | 12                | Study Drugs: Brain Boost or<br>Brain Drain? | Ch.24    | Round up 5<br>Mastering Biology Ch. 20<br>Quiz Ch. 20   |
| 4/14-4/18 | 13                | Feeding the World                           | Ch. 25   | Group Video Projects Due<br>Peer Evaluation for Group Video<br>Project<br>Mastering Biology Ch. 24<br>Quiz Ch. 24 |
| 4/21-4/25 | 14                | Growing a Green Thumb                       | Ch. 26   | Discussion Assessing Information:<br>Climate Change<br>Mastering Biology Ch. 25<br>Quiz Ch. 25                    |
| 4/28-5/2  | 15                | Finals Week                                 |          | Mastering Biology Ch. 26<br>Quiz Ch. 26   |