INTRODUCTION TO ANIMAL BIOLOGY BIOL 160, Fall 2020 Section 03H (Honors) Syllabus Addendum

There will be additional assignments and course activities specifically for the honors students in this course. Points for these assignments will be added to the total points for the course and will count toward your final grade. The point breakdown for these assignments is as follows:

Thought Questions	40 pts
Research Proposal	10 pts
Semester-Long Group Project	40 pts
Total	90 pts

<u>Thought Questions:</u> Approximately twice per unit (8 @ 5 pts each), you will be given thought questions, with a typed response/answer due the following week. These questions are intended to spur your thinking on content we are considering in lecture or laboratory, so there may not be a single, or even a correct, answer. For these assignments, you are encouraged to consult multiple sources and discuss your thoughts/ideas with your classmates. You will be graded (individually) on the quality of your typed response and discussion participation.

<u>Research Proposal:</u> During the semester, all students in the course will be required to give an Animal Diversity presentation (details to follow). For this assignment, you will expand on that presentation by creating a short research proposal involving the animal you chose for that presentation. Your proposal will address an issue or question relevant to the animal and to course content. For example, you could propose to study the impact of climate change on your animal's migratory patterns, or the influence of food availability on reproductive cycles, etc. A rubric outlining expectations will be provided.

<u>Semester-long Group Project:</u> For this assignment, you will work in groups of 3-4 students (to be assigned randomly during the second or third week of class). As a group, you will choose ONE of the following to work on over the semester:

- 1. A board game (with complete instructions)
- 2. A video (with typed transcript)
- 3. A children's book (with illustrations)

For whatever medium you choose, you should cover EITHER:

- 1. A group of animals (e.g. the Phylum Porifera)
- 2. A biological process relevant to animal biology (e.g. cellular respiration) OR
- 3. A physiological system (e.g. digestion)

Again, a rubric outlining expectations will be provided.

Please see the following for a schedule of due dates and mark your calendars accordingly.

HONORS SCHEDULE Week Dates **Lecture Topic** Chapter Honors Assignment Schedule Unit 1: M 8/31 No Class 1 Macromolecules W 9/2 Introduction to Animal Biology 1 and the Cell 2 F 9/4 Chemistry of Life **Thought Question 1 Assigned** M 9/7 Labor Day Holiday 2 W 9/9 Water and Life 3 F 9/11 5 Macromolecules Thought Question 1 Due; Thought Question 2 Assigned 3 M 9/14 Macromolecules 5 W 9/16 6 Cellular Organization F 9/18 Cell Membranes 7 **Thought Question 2 Due** 4 M 9/21 **Cellular Communication** 11 W 9/23 Cellular Communication 11 F 9/25 **Thought Question 3 Assigned** Exam 1 Unit 2: From 5 M 9/28 Cellular Respiration 8 & 9 **DNA to RNA to** W 9/30 Cellular Respiration 8 & 9 Protein F 10/2 Mitosis and the Cell Cycle 12 **Thought Question 3 Due** M 10/5 13 6 Meiosis W 10/7 Patterns of Inheritance 14 F 10/9 Chromosomal basis for inheritance 15 **Thought Question 4 Assigned** 7 M 10/12 Chromosomal basis for inheritance 15 W 10/14 Molecular basis for inheritance 16 F 10/16 Molecular basis for inheritance 16 **Thought Question 4 Due** 8 M 10/19 17 Gene Expression W 10/21 Gene Expression 17 F 10/23 Exam 2 **Thought Question 5 Assigned** Unit 3: Animal 9 M 10/26 **Animal Diversity** 32 Diversity, W 10/28 Invertebrates 33 Reproduction, F 10/30 Invertebrates 33 **Thought Question 5 Due** and Development 10 M 11/2 Vertebrates 34 W 11/4 Vertebrates 34 F 11/6 **Animal Reproduction** 46 **Thought Question 6 Assigned Animal Reproduction** 11 M 11/9 46 W 11/11 **Animal Development** 47 F 11/13 **Animal Development** 47 **Thought Question 6 Due** M 11/16 Exam 3 Unit 4: Animal W 11/18 Basic Principles 40 **Thought Question 7 Assigned** 12 Form and F 11/20 **Animal Nutrition** 41 **Function** 13 M 11/23 Circulation and Gas Exchange 42 W 11/25 Circulation and Gas Exchange 42 Thought Question 7 Due; Animal Research Proposal Due F 11/27 Thanksgiving Holiday M 11/30 14 Hormones & Endocrine System 45 W 12/2 Hormones & Endocrine System 45 F 12/4 48 **Neuronal Signaling Thought Question 8 Assigned** 15 M 12/7 **Neuronal Signaling** 48

49

44

Thought Question 8 Due

Semester Project Due

W 12/9

F 12/11

W 12/16

Finals

Week

Nervous System

Osmoregulation

Exam 4: 2:45-4:45 p.m.