BIO 1500: Basic Life Diversity

Lecture Syllabus, Spring/Summer 2018

4 credits with lab

Room 2009 Science Hall

10:30 am -12:00 pm; Mondays and Wednesdays

Welcome to Biology 1500!

In this document, you will find all the information you need regarding the course structure, the content of the course, grading policies, exam dates, and other important information. By registering for the class, you agree to follow all of the policies listed in the syllabus and those that are mandated by the University. Therefore, I highly recommend you read the syllabus in a great detail. I look

forward to a fun and exciting semester with all of you!

Dr. Turchyn

COURSE DESCRIPTION AND OBJECTIVES

BIO 1500 is the first of two courses in a two-semester sequence of introductory biology for biology and science majors, including science education and pre-allied health students. This course provides an overview of the diversity of life on Earth. The primary objective of BIO 1500 is to expose students to a great variety of plants, fungi, protists, and animals, examining their structure, function, growth, evolution, and distribution. Biology is the study of organisms as well as the composition of those organisms. Whether you have aspirations to be a doctor, a lawyer, a teacher, an engineer, or a janitor, having an appreciation of the life around you is a critical skill that is invaluable both to yourself and the world around you. Students must take both lecture and laboratory components.

STUDENT LEARNING OUTCOMES

Upon successful completion of the course, students should be able to:

- 1. Recognize major differences between four kingdoms of life (plants, fungi, protists, and animals).
- 2. Demonstrate an understanding of their structure and function, and how they are adapted to and interact with their environment.
- 3. Appraise the relevance of plants, fungi, protists, and animals to human's everyday life and critically consider modern biological issues that incorporate them.

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- 4. Develop microscope and gross dissection skills, and work as part of a team in the laboratory.
- 5. Enter advance biology courses with a solid foundation of the diversity of life on this planet.

COURSE PREREQUISITES

Students are required to have completed **either** BIO 1050 (Introduction to Life) with a grade of *C*- or above; **or** have an *ACT* score of 24 or higher, **or** have a passing score on the Biology placement examination. Students who managed to enroll in this course without satisfying these prerequisites are not likely to succeed in this course and for this reason will be required to drop it. Students who have questions about these prerequisites should see the Biology Department's Undergraduate Advisor, Ms. Kim Walkowiak-Hunter (<u>kwalk@biology.biosci.wayne.edu</u>) during the first week of class.

TEXTBOOK INFORMATION

Textbook — Biology, 11th edition, by Raven, Johnson, Mason, Losos, and Singer is available in two forms: hardcover (ISBN: 9781259188138) and loose leaf (ISBN: 9781259668890). Each of them includes the chapters covered in both BIO 1510 and BIO 1500.

Laboratory Manual - 1500 Biology Lab Manual >C< by Dolphin (ISBN: 9781308834115).

Highly Recommended Resource — Van De Graaff's Photographic Atlas for the Biology Laboratory, 7^{th} edition by Adams and Crawley (ISBN: 9781617310584).

ADD/DROP INFORMATION

Students can enroll in the class until May 20th. If a student signs up for the class and decides to drop it before May 20th, the tuition for the class will be cancelled, the student will be reimbursed, and the class will not show on his/her transcript. If the student drops this course between May 21st and June 3rd, it will not be shown on the student's transcript, but the tuition will not be reimbursed. If the student drops the class between June 4th and July 15th, the tuition will not be reimbursed and a final grade of "WP" (withdrawal with a passing grade, if average of all lecture exam scores earned to date is greater than or equal to 60%), "WF" (withdrawal with a failing grade, if average of all lecture exam scores earned to date is less than 60%), or "WN" (withdrawal never attended) will be shown on his/her transcript. All withdrawals must be requested through Academica and they will not be granted after July 15th. If the student signs up for the class, stops attending lectures, and fails to withdraw, he/she will receive a failing grade "F" for the course. Please note that "incomplete" grades will not be issued to students in poor standing who are seeking an alternative to a late drop.

CODE OF CONDUCT

Professional behavior is expected in the lecture, which includes respecting your classmates by arriving on time, turning off cell phones, and not talking, texting, surfing internet (facebook, twitter, etc.) or playing any games. If a student is caught performing any of the above during lecture, he/she will be required to leave the room. If a student is caught performing any of the above during an exam, he/she will receive a grade of "F" for the course (see below).

CHEATING POLICY

A student found to be cheating during an exam (using a "cheat sheet" or notes written on a desk, looking at another student's exam, or allowing another student to look at his/her exam) will automatically receive a grade of "F" for the course and may be expelled from the University. For discussions of cheating and plagiarism see the "Student Code of Conduct" that can be found at http://www.doso.wayne.edu/judicial/index.htm

OFFICE HOURS AND COMMUNICATION

Any questions/comments regarding the lecture portion of the course should be directed to:

Dr. Nataliya Turchyn

Office Location: Room 3119, Biological Sciences Building

E-mail: ai7380@wayne.edu

Office Phone: 313-577-2910

Office Hours: 12:30 pm - 2:00 pm on Mondays and Wednesdays, or by appointment

If you have a question about the lecture/textbook material, please post your question in Canvas

Discussions: https://canvas.wayne.edu/courses/77370/discussion_topics

I will not reply to e-mails when the answer can be found in the syllabus or on Blackboard. In addition, I will not reply to e-mail questions that have already been answered on the **Canvas Discussions**.

If you would like to make an appointment to meet with me, please contact me through e-mail or in person after lecture.

If you have a question about your lecture grade, please send me an e-mail containing the scores you have in your records and I will check them with my records.

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Any questions regarding the lab portion of the course should be directed to a student's lab teaching assistant (TA) or Ms. Michelle Serreyn, Room 2012 Science Hall, e-mail: ac3042@wayne.edu

When e-mailing me, Ms. Serreyn, or TA, please use professional style with your course number in the subject, a proper greeting (e.g., "Dr. Turchyn, Ms. Serreyn, or Ms/Mr/Mrs. Teaching assistant"), and correct punctuation including capitalization and no texting abbreviations. E-mails that do not follow these rules may take longer to get a reply or may be returned for correction.

EXAMS

There will be four exams given during the semester and one optional, cumulative make-up exam. Each exam will consist of 50 multiple choice and true/false questions. Only the highest four scores will count towards your final grade (your lowest score will be dropped). All exams are closed book and are related to the material covered in the lecture, study guides, and assigned in reading of the textbook. Each exam will be worth 175 points.

YOU MUST BRING YOUR STUDENT ID (ONECARD) TO EVERY EXAM! Scantrons are provided at the exam. Each midterm exam begins promptly at 10:30 am and ends at 12:00 pm. The OPTIONAL CUMULATIVE, FINAL EXAM is scheduled for MONDAY, JULY 30TH at 10:30 - 12:30 PM. All exams will be given in 2009 Science Hall. Your only opportunity to make up an exam will be taking the optional final exam. The final exam is scheduled as designated in the Schedule of Classes for this term. No other time for the final exam will be available, and no exceptions will be made for conflicts such as student travel plans or other exams the same day. Moreover, no other opportunities will be available to make up any missed exams except for the designated make-up exam. Students will not be able to leave and re-enter the room once the exam begins for any reason (including bathroom breaks). No students will be allowed to enter and take an exam after one student has finished an exam and left the exam room. Students who arrive after another student has left will receive a zero for their exam score. If more than 80% of the class answers an exam question incorrectly, everyone will receive credit for that question.

CALCULATING GRADES

The total points possible for this course are 1000 points (700 from lecture exams + 300 from lab).

There is absolutely no opportunity for extra credit or alternate assignments under any

circumstances. The optional make-up exam can only substitute for one midterm lecture exam, even if two or more midterm lecture exams are missed. All exam scores will be posted in Canvas Grades.

Exams will not be given in advance.

The final grade in the course is determined from total point accumulation (lecture + lab) at the end of the semester, with letter grades assigned based on the following percentage:

Α	93.5 - 100%	С	72.5 - 75.4%
A-	89.5 - 93.4%	C-	69.5- 72.4%
B+	85.5 -89.4%	D+	65.5 - 69.4%
В	82.5 -85.4%	D	62.5 - 65.4%
B-	79.5 - 82.4%	D-	59.5 - 62.4%
C+	75.5 - 79.4%	F	≤ 59.4%

GRADE DISPUTES

Students will have one (1) week after the return of an exam to challenge a grade for any question. Failure to challenge the grade within this period indicates a willingness to accept the grade as is. The challenge should consist of a written description of why the answer is correct based on other published material that you cite. It is not an opportunity to complain. Be advised that an exam challenge constitutes an entire re-grade of your exam.

UNEXPECTED UNIVERSITY CLOSURES

If the University is officially closed on an exam day, the exam will be held on the next regularly scheduled class day. Closure of the University is announced by the following mechanisms:

- The University Newsline (313) 577-5345*
- WSU Homepage (www.wayne.edu)*
- WSU Pipeline (www.pipeline.wayne.edu)*
- WDET-FM (Public Radio 101.9) and
- By other local radio and television stations.

^{*} Note: The information on closures and class cancellations is likely to be found at these locations before local radio and television stations broadcast it.

EXAM TIME CONFLICTS

Students are not required to take more than two exams in one day. A student with more than two scheduled final exams on one day may (not must) contact the instructor of the course with the lowest number students enrolled, to arrange an alternate time for the final exam. Such petitions must be made at least one week prior to the scheduled date of the exam. Our class has 70 students.

RELIGIOUS HOLIDAY CONFLICTS

Students who have a conflict with any of the scheduled exam times due to religious reasons must notify Dr. Turchyn in writing by class time on **Monday**, **May 21**st. Accommodations will not be provided unless we are notified in writing by this date.

STUDENTS WITH DISABILITIES

If you have a documented disability that requires accommodations, you will need to register with Student Disability Services for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department. SDS telephone number is 313-577-1851 or 313-577-3365 (TTY: telecommunication device for the deaf; phone for hearing impaired students only). Once you have your accommodations in place, we will be glad to meet with you privately during office hours to discuss your special needs. Please refer to the SDS website for further information about students with disabilities and the services we provide for faculty and students:

http://studentdisability.wayne.edu/

SCHEDULE OF LECTURES AND EXAMS

The lectures will be audio- but not video-recorded and posted in the Echo360 Recordings on Canvas. If there are any problems with the lecture capture system, please contact Computing & Information Technology (C& IT) at (313) 577-4778 or helpdesk@wayne.edu. You are welcome to record lectures for your personal use and to take pictures of my handwritten notes, questions, and concept maps. All lecture PowerPoint slides can be found in the Modules on Canvas.

Here is the schedule with dates of all the exams and a tentative schedule indicating which chapter(s) will be covered each class day. Note that some chapters may take more or less time than indicated on the schedule below.

Date	Lecture (number/topic)	Chapter(s)
5/7	Course Introduction	
5/7	(1) Why study plants?	1.1, 1.3 & 1.4
5/9	(2) Angiosperms & reproductive development	31.3 & 41.3
5/9	(3) Pollination	41.1, 41.2 & 41.4
5/14	(4) Plant development	31.4, 31.5, 41.5 & 41.6
5/14	(5) Plant cells & tissues	36.1 & 36.2
5/16	(6) Roots & stems	36.3 & 36.4
5/16	(7) Plant transport	37
5/21	(8) Leaves	36.5 & 41.7
5/21	(9) Gymnosperms	31.2
5/23	EXAM #1	(Lectures #1-9)
5/28	NO CLASS - MEMORIAL DAY	
5/30	(10) Seedless plants	30
5/30	(11) Fungi	32.1 - 32.7
6/1	(12) Fungi & symbiosis	32.8 - 32.9
6/1	(13) Plant nutrition & soils	38.1 - 38.4
6/4	(14) Plant defense	39
6/4	(15) Plant sensory systems	40
6/6	(15) Plant sensory systems	40
6/6	(16) Ecology of individuals and populations	55

<u>Date</u>	Lecture (number/topic)	Chapter(s)
6/11	(16) Ecology of individuals and populations	55
6/11	(17) Community ecology	56
6/13	Exam #2	(Lectures 10-17)
6/18	(18) Protists	29
6/18	(19) Animal diversity	33.1 - 33.3
6/20	(19) Animal diversity	33.1-33.3
6/20	(20) Sponges, cnidarians & ctenophores	33.4 & 33.5
6/25	(21) Platyhelminthes & rotifers	34.1 - 34.3
6/25	(22) Mollusks & nemerteans	34.4 & 34.5
6/27	(23) Annelids, lophophorates & nematodes	34.6 - 34.8
6/27	(24) Arthropods	34.9
7/2	(24) Arthropods	34.9
7/2	(25) Echinoderms & chordates	35.1 - 35.4
7/4	NO CLASS - JULY 4TH	
7/6	EXAM # 3	(Lectures 18-25)
7/9	(26) Fishes	35.5
7/9	(27) Amphibians	35.6
7/11	(28) Reptiles	35.7
7/11	(29) Birds & mammals	35.8 & 35.9
7/16	(29) Birds & mammals	35.8 & 35.9
7/16	(30) The digestive system	47
7/18	(30) The digestive system	47
7/18	(31) The respiratory system	48
7/23	(31) The respiratory system	48
7/23	(32) The circulatory system	49
7/25	EXAM #4	(Lectures 26-32)
7/30	MAKE-UP EXAM	(Lectures 1-32)