

## **BIO 1500: BASIC LIFE DIVERSITY (SECTION 001 and 500)**

### **Course Syllabus, Winter 2020 (4 credits with lab)**

**Class meeting location:** Room 0046, DeRoy Auditorium

**Class meeting time:** Monday, Wednesday, Friday; 9:30 pm-10:20 pm

**Instructor:** Dr. William Branford

**Building and office number:** Biological Sciences 3111

**Office phone:** 313-577-3605

**Email address:** [wbranford@wayne.edu](mailto:wbranford@wayne.edu)

**Office Hours:** 10:45 am – 11:45 am on Mondays and Wednesdays or by appointment

### **WELCOME TO BIOLOGY 1500**

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

### **COURSE DESCRIPTION AND OBJECTIVES**

This course is an overview of the diversity of plants and animals. We will study organisms that represent the variety of life on this planet and examine their classification, structure, function, growth, origin, evolution, and distribution.

This course 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 is required for students planning to major in biology and is a prerequisite for all higher-level biology courses. **Students must take both the lecture and laboratory components.**

The objective of this course is to expose students to the diversity of life on Earth. Biology is the study of organisms, as well as the composition of those organisms. Whether you have aspirations to be a doctor, lawyer, teacher, engineer or janitor, having an appreciation of the life around you is a critical skill that is invaluable both to you and the world.

### **STUDENT LEARNING OUTCOMES**

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

1. Recognize major differences between four kingdoms of life (protists, fungi, plants, and animals).
2. Demonstrate an understanding of the structure and function of the organisms in these kingdoms and how they are adapted to interact with their environment.
3. Appraise the relevance of protists, fungi, plants, and animals to the everyday life of humans and to critically consider modern biological issues that involve these organisms.
4. Develop microscope and gross dissection skills and work as part of a team in the laboratory.
5. Enter advanced 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 a Biology Department undergraduate advisor during the first week of class.

## **REQUIRED TEXTS**

**Textbook** — Biology, 12<sup>th</sup> edition, by Raven, Johnson, Mason, Losos and Singer (ISBN: 9781260169614).

**Laboratory Manual**—BIO 1500 Lab – WSU special (ISBN: 9781307481976).

## **OFFICE HOURS AND COMMUNICATION**

**Office Hours:** 10:45 pm – 11:45 am on Mondays and Wednesdays or by appointment

**Any questions/comments regarding the lecture portion of this course should be directed to: Dr. William Branford.** If you would like to make an appointment to meet with me, please contact me through e-mail or in person before or after lecture. I will try to answer questions in e-mails within a day or two. 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.

**Any questions regarding the lab portion of the course should be directed to your lab teaching assistant or Dr. Madelyn Tucker**, Room 2012, Science Hall; e-mail: [ax6019@wayne.edu](mailto:ax6019@wayne.edu) .

When e-mailing me, Dr. Tucker or your teaching assistant, please be professional. Include your course number in the subject line, a proper greeting (e.g., “Dear Dr. Branford, Dr. Tucker, or Ms./Mr./Mrs. Teaching assistant”) and use correct punctuation, spelling, and grammar. No texting abbreviations should be used.

You do not need to report to me that you will be missing class. Attendance is highly encouraged, but is not taken, and is left to your discretion as college students. You are responsible for all material presented during lecture regardless of your attendance; how you obtain the material is up to you. You must decide what works best for your study habits.

## **EXAMS**

There will be **FOUR in-class midterm examinations** of 50 true/false, multiple choice or short answer questions. Each exam will be worth 175 points. There will also be **ONE optional cumulative final exam** (also worth 175 points) that will cover material presented in the entire course. **Only the highest four scores will count towards your final grade (your lowest score will be dropped).** Exams cover material presented in class and assigned in readings of the textbook. Exams must be taken during your assigned class period.

**Exam dates will be Friday, January 31<sup>st</sup>; Friday, February 21<sup>st</sup>; Friday, March 27<sup>th</sup>; and Friday, April 17<sup>th</sup>.** Your only opportunity to make up an exam will be taking the optional, cumulative final exam on **Monday, April 27<sup>th</sup> from 8:00 -10:00 am** in the same room as the regular classroom. The final exam is scheduled as designated in the Schedule of Classes for this term and cannot be rescheduled. No other time for the final exam will be available, with the exception of the Final Exam Conflict policy (see below). Do not ask for exceptions based on travel plans.

**If you need to miss an exam, including the final exam, for any reason and have not missed any previous exams, you must use your drop for the exam that you will be missing. Make-up exams for a second missed exam will only be given under extremely extenuating, documented circumstances, such as a severe illness, family death, etc. Such circumstances will require notification of the instructor prior to the exam and must be followed with original, official signed documentation confirming your extenuating circumstance. Otherwise, missed exams will be scored as 0 points. Headaches, common bouts of illness, waking up late, vacations, work, etc. are not extenuating circumstances.**

All exams will be held in Room 0046, DeRoy Auditorium. You MUST bring your student ID (OneCard) with you to the exam. Scantrons are provided at the exam. In-semester exams begin promptly at 9:30 am and end promptly at 10:20 am. Tardy students will not be granted additional time to complete the exam. **Most importantly, tardy students may not be allowed to take the exam once the first student has finished the exam.**

If more than 80% of the class answers an exam question incorrectly, everyone will receive credit for that question.

**Religious holiday conflicts (from the online Academic Calendar)**  
(<https://wayne.edu/registrar/registration/calendar19-20/>)

*“Because of the extraordinary variety of religious affiliations of the University student body and staff, the Academic Calendar makes no provisions for religious holidays. However, it is University policy to respect the faith and religious obligations of the individual. Students with classes or examinations that conflict with their religious observances are expected to notify their instructors well in advance so that mutually agreeable alternatives may be worked out.”*

**Final exam time conflict university policy**

([https://wayne.edu/registrar/scheduling/final\\_exam\\_schedule\\_winter\\_2020.pdf](https://wayne.edu/registrar/scheduling/final_exam_schedule_winter_2020.pdf))

*“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) petition to 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 final exam.**”*

*“In situations where conflicts exist between the regular day schedule and the group exam schedule, the group exam takes precedence. If there is a conflict among the regular schedule, group exam and evening schedule, the group exam takes precedence. The instructor with the fewest students in the remaining two classes will offer alternate arrangements to students.”*

As of 1/5/2020, our class has 227 students.

*“Any student unable to take a final exam at the scheduled time due to religious convictions shall petition the instructor in advance of the final exam to arrange an alternate time.”*

### **GRADING**

A total of 1,000 points is available to be earned in this course: 700 from lecture exams and 300 from the laboratory. **There is absolutely no opportunity for extra credit or alternate assignments under any circumstances.** Under this scheme, each exam is worth 17.5% of your final grade and your lab grade is 30% of your grade. **The optional make-up exam can only substitute for one midterm lecture exam, even if two or more midterm lecture exams are missed.** Course grades are determined from total point accumulation (lecture + lab) at the end of the semester, with letter grades assigned based on the following scale (1,000 possible points):

929.5 or more	A	799.5 – 829.49	B-	669.5 – 699.49	D+
899.5 – 929.49	A-	769.5 – 799.49	C+	629.5 – 669.49	D
869.5 – 899.49	B+	729.5 – 769.49	C	599.5 – 629.49	D-
829.5 – 869.49	B	699.5 – 729.49	C-	599.49 or less	F

This grading scale may be modified if appropriate, depending on the class average and point distribution. Exam grades will be posted on Canvas as soon as possible after the exam has been administered.

### **EXAM GRADE DISPUTES / CHALLENGE OPTION**

Students will have one week after the posting of the exam answer key to challenge any question. Failure to challenge the question within this period indicates a willingness to accept the question’s answer as is. The challenge should consist of a written description of why your answer is correct based on published material that you cite. It is not an opportunity to complain.

### **CHEATING POLICY**

Students found to be cheating during an exam (using a “cheat sheet”, looking at another’s paper, allowing another to look at yours, etc.), will receive a zero for that test with no opportunity to drop or replace that score. A second episode of cheating will result in a grade of F for the course and may also result in initiation of university disciplinary action.

**No electronic devices (cell phones, smart phones, smart watches, iPods, iPads, computers, cameras, calculators, etc.) are to be in sight or on during an exam.** If they are, they will be confiscated until the exam is completed. Students using such devices to cheat on an exam will receive a zero on the exam.

**In short, don’t cheat.** It rarely helps you with your final course grade and the consequences are simply not worth the risk. Be aware that cheating is a very personal and disrespectful insult to me, your TA, and your classmates, and I will show no leniency in how it is handled.

For discussions of cheating and plagiarism see below and/or see the “Student Code of Conduct” that can be found at <http://www.doso.wayne.edu/student-conduct-services.html>.

### **Academic Misbehavior - Plagiarism and Cheating (from DOSO website)**

*“2.1 “Academic misbehavior” means any activity which tends to compromise the academic integrity of the institution or subvert the education process. Examples of academic misbehavior include, but are not limited to: (1) cheating, as defined in Section 2.3; (2) fabrication, as defined in Section 2.5; (3) plagiarism, as defined in Section 2.8; (4) 2 unauthorized reuse of work product, as defined in Section 2.11; (5) academic obstruction, as defined in Section 2.10; (6) enlisting the assistance of a substitute in the taking of examinations; (7) violation of course rules as contained in the course syllabus or other written information provided to the student.*

*2.3 “Cheating” means intentionally using or attempting to use, or intentionally providing or attempting to provide, unauthorized materials, information or assistance in any academic exercise.*

*2.5 “Fabrication” means intentional and unauthorized falsification or invention of any information or citation.*

*2.8 “Plagiarism” means to take and use another’s words or ideas as one’s own.*

*2.10 “Academic obstruction” means any attempt to limit another student’s access to educational resources, or any attempt to alter equipment so as to lead to an incorrect answer for subsequent users.*

*2.11 “Unauthorized reuse of work product” means submission for academic credit, without the prior permission of the instructor, of substantial work previously submitted for credit in another course.”*

### **CODE OF CONDUCT**

You are expected to act professionally in lecture and laboratories. Expectations include:

- Turning off cell phones, smart phones, iPods, etc. Talking on cell phones, texting, tweeting, surfing the internet, playing games, etc. are all rude and inappropriate during lecture. If a student is caught performing any of the above during lecture, he/she might be asked to leave the room.
- No talking during lecture or when instructors are talking in lab. This is no different than common manners in any other educational setting.
- Arrive on time. Class starts promptly at 9:00 am. Arriving late is distracting to me and the rest of the class. If you must arrive late or leave early, enter or exit quietly.
- **You are encouraged to ask questions during lecture.**

### **COURSE DROPS AND WITHDRAWALS**

[\(https://wayne.edu/registrar/registration/dropping-and-withdrawing/\)](https://wayne.edu/registrar/registration/dropping-and-withdrawing/)

In the first two weeks of the (full) term, students can drop this class and receive 100% tuition and course fee cancellation. After the end of the second week, there is no tuition or fee cancellation. Students who wish to withdraw from the class can initiate a withdrawal request online. You will receive a transcript notation of WP (passing), WF (failing), or WN (no

graded work) at the time of withdrawal. No withdrawals can be initiated after the end of the tenth week. Students enrolled in the tenth week and beyond will receive a grade. Because withdrawing from courses may have negative academic and financial consequences, students considering course withdrawal should make sure they fully understand all the consequences before taking this step. More information on this can be found at <https://wayne.edu/registrar/withdrawing-from-a-course/>.

### **Class specifics**

Students can enroll in this class up through **January 17<sup>th</sup>**. I will not add a student to a closed lab, so please don't ask.

If a student drops this class by **January 17<sup>th</sup>**, the tuition for this class will be cancelled and the student will be reimbursed. In addition, this class will not show on his/her transcript.

If a student drops this class between **January 18<sup>th</sup>** and **March 22<sup>nd</sup>**, tuition will not be reimbursed and a final grade of "WP" (withdraw pass, if average of all lecture exam scores earned to date is greater than or equal to 60%) or "WF" (withdraw fail, if average of all lecture exam scores earned to date is less than 60%) will show on his/her transcript.

**Withdrawals must be requested online and cannot be granted after March 22<sup>nd</sup>**. If a student signs up for this class, stops attending and fails to withdraw, he/she will receive a grade of 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.

### **STUDENT DISABILITIES SERVICES (<http://studentdisability.wayne.edu/>)**

*"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 in the Adamany Undergraduate Library. The SDS telephone number is 313-577-1851 or 313-202-4216 (Videophone use only). Once your accommodation is in place, someone can meet with you privately to discuss your special needs. Student Disability Services' mission is to assist the university in creating an accessible community where students with disabilities have an equal opportunity to fully participate in their educational experience at Wayne State University."*

*"Students who are registered with Student Disability Services and who are eligible for alternate testing accommodations such as extended test time and/or a distraction-reduced environment should present the required test permit to the professor at least one week in advance of the exam. Federal law requires that a student registered with SDS is entitled to the reasonable accommodations specified in the student's accommodation letter, which might include allowing the student to take the final exam on a day different than the rest of the class."*

### **STUDENT SERVICES**

- The Academic Success Center (1600 Undergraduate Library) assists students with content in select courses and in strengthening study skills. Visit [www.success.wayne.edu](http://www.success.wayne.edu) for schedules and information on study skills, workshops, tutoring and supplemental instruction (primarily in 1000 and 2000 level courses).

- The Writing Center is located on the 2<sup>nd</sup> floor of the Undergraduate Library and provides individual tutoring consultations free of charge. Visit <http://clasweb.clas.wayne.edu/writing> to obtain information on tutors, appointments and the type of help they can provide.

### **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 Newslines - (313) 577-5345\*
- WSU Homepage ([www.wayne.edu](http://www.wayne.edu))\*
- WSU Academica (<https://academica.aws.wayne.edu/>)\*
- WDET-FM (Public Radio 101.9)
- 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.

### **OTHER**

Any specific issue not covered by this syllabus will be resolved using University policies. Disputes that cannot be resolved following the guidelines present in this syllabus will be resolved by following the guidelines of the University “Student Due Process”.

**Also, I am happy to write letters of recommendation for students who earn a grade of A, A- or B+ and speak with me often enough during class hours or office hours that I know them relatively well.**

### **SCHEDULE OF LECTURES AND EXAMS**

Below are a.) the textbook chapters that will be covered and b.) the dates of all the exams.

#### **Order of topics**

Genes within Populations (Ch. 20)  
 Protists (Ch. 28)  
 Fungi (Ch. 31)  
 Seedless Plants (Ch. 29)  
 Seed Plants (Ch. 30)  
 Plant Form (Ch. 35)  
 Transport in Plants (Ch. 36)  
 Animal Diversity & Evolution of Body Plans (Ch. 32)  
 Protostomes (Ch. 33)  
 Deuterostomes (Ch. 34)

#### **Class dates**

1/6	Introduction/Syllabus
1/8 – 1/17	Lectures 1 through 5
<b>1/20</b>	<b><i>Holiday – University Closed</i></b>

1/22 – 1/29	Lectures 6 through 9
<b>1/31</b>	<b>Exam I</b>
2/3 – 2/19	Lectures 18 through 17
<b>2/21</b>	<b>Exam II</b>
2/24 – 3/6	Lectures 10 through 23
<b>3/9 – 3/13</b>	<b><i>Holiday – University Closed</i></b>
3/16 – 3/25	Lectures 24 through 28
<b>3/27</b>	<b>Exam III</b>
3/30 – 4/15	Lectures 29 through 36
<b>4/17</b>	<b>Exam IV</b>
4/20	Catch-up/Review
4/21	Study Day
<b>4/27</b>	<b>Final Exam – 8:00 am – 10:00 am</b>