

BIO 1500: Basic Life Diversity (MWF 9:30-10:20 AM)
Course Syllabus, Winter 2021

Instructor: Dr. William Branford
Email address: wbranford@wayne.edu
Office hours: T 3:00-4:30 PM or by appointment

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 the policies listed in the syllabus and those that are mandated by the University. Therefore, **I highly recommend that you read the syllabus in great detail.** I look forward to a fun and exciting semester with all of you!

COURSE DESCRIPTION AND OBJECTIVES

BIO 1500 is one course 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 and the processes that impact it. The primary objective of BIO 1500 is to expose students to a great variety of organisms (viruses, bacteria, protists, fungi, plants, and animals) and to examine 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 viruses, bacteria, protists, fungi, protists, and animals.
2. Demonstrate an understanding of their structure and function and how they are adapted to interact with their environment.
3. Appraise the relevance of viruses, bacteria, protists, fungi, protists, and animals to human's everyday life and critically consider modern biological issues that incorporate them.
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 and the forces that generate and influence the patterns of this diversity.

As this course fulfills the General Education requirement, there are specific learning objectives focused on the nature of science and understanding how science works. Completion of this course is expected to help you be able to:

1. Explain natural phenomena using scientific concepts, theories, and/or principles.

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2. Describe the process of scientific inquiry.
3. Analyze historical or contemporary societal subjects using scientific concepts and principles.
4. Apply the scientific method to evaluate data.

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 manage 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 one of the Biology Department's undergraduate advisors during the first week of class.

COURSE CREDITS

This is a four (4) credit course. Students must register for both the lecture and the lab.

REQUIRED TEXTS:

- Biology, 12th edition, by Raven, Johnson, Mason, Losos, and Singer (ISBN: 978-1-26016-961-4)
- Exploring Biology in the Laboratory, custom for WSU, by Pendarvis and Crawley (ISBN: 978-1-64043-301-4)

Your textbook can be accessed digitally through your Canvas account. Although an optional print copy of the book is available at the campus bookstore, NO other purchase is necessary. You will have the option to opt-out of this delivery and billing option on or before 2/1/2021.

- This course is participating in a new course material affordability program called First Day. This program makes your required course materials directly available to you on or before the first day of class.
- A direct charge for the course material will be placed on your student account, and you may opt-out within Canvas until 2/1/2021.
- Opting-out will result in a refund being placed against your student account. You will, however, then be responsible for sourcing the course material on your own. For information regarding the cost of the material for this course, please visit this link: <https://studentservices.wayne.edu/bookstore/inclusive-access>.
- For questions regarding First Day Inclusive Access please visit the First Day FAQ page at <https://customercare.bncollege.com/hc/en-us>.

ADD/DROP INFORMATION (<https://wayne.edu/registrar/registration/dropping-and-withdrawing>)

Students can enroll in the class until **Jan 25**. If a student signs up for the class and decides to drop it before or on **Jan 25**, the tuition for the class will be canceled, the student will be reimbursed, and the class will not show on his/her transcript. If the student drops the class between **Jan 26 and Mar 28**, the tuition will not be reimbursed and a final grade of "WP" (withdrawal with a passing grade, if average of all your exam

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scores earned to date is greater than or equal to 60%), “WF” (withdrawal with a failing grade, if average of all your 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 Academics, and they will not be granted after Mar 28** (<https://wayne.edu/registrar/withdrawals/>). 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 way to exit the course after **Mar 28**.

STUDENT CODE OF CONDUCT

All participants in the course are bound by the Student Code of Conduct that can be found at (<https://doso.wayne.edu/conduct/academic-misconduct>). **Students who engage in dishonest conduct, including acts of cheating or plagiarism, will receive a zero for that assignment or exam with no opportunity to drop or replace that score.** Dishonest conduct also includes helping another student engage in dishonest conduct and will result in a zero for both the helper’s and the helped student’s assignment/exam. 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. (The University is aware that students often use *WhatsApp* and/or other group messaging apps for the purposes of cheating on their classwork. Be aware that that using group messaging apps in this manner is indeed a violation of the academic integrity honor code and can come with consequences.)

In short, do not 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 instructors, your TA, and your classmates, and the instructors will show no leniency in how it is handled.

OFFICE HOURS AND COMMUNICATION

My contact information and my office hours are provided above.

The best way to communicate with me is by e-mailing me. Responses are usually provided within a day or two. Given the number of students in the class, you should not expect an immediate response, so try to avoid last-second or rushed questions.

When e-mailing me, Dr. Madelyn Tucker (lab coordinator), or your lab instructors, whom are often teaching assistants (TA), **please use a professional style with your course number in the subject, a proper greeting (e.g., “Dr. Branford, Dr. Tucker, or Ms./Mr./Mrs. “teaching assistant”), and correct spelling, capitalization, grammar, and punctuation.** No texting abbreviations should be used.

Please do not e-mail me with questions regarding your laboratory section or its activities and grading system. Those questions should be directed to your TA or to Dr. Tucker (madelyntucker@wayne.edu) the laboratory coordinator for the course. Given the circumstances, it is important that you learn your TA’s name early in the course and make sure that you are in regular contact with them. It is important that you do everything necessary to keep up with your lab work. Consult your laboratory Canvas site and syllabus for this information.

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In addition to myself, this course has been assigned a student supplemental instructor (SI). Supplemental instructors work alongside faculty in traditionally difficult classes and help students organize classroom materials and notes and develop effective study strategies. They have recently taken the course, attend all lecture sessions, and organize and hold their own study sessions with students. As they are likely easier to reach for quick help, you are encouraged to approach your SI with questions about the lecture material as you would your instructor.

Your SI will be **Loveleen Banga** (gp4890@wayne.edu). Her availability will be provided on the course Canvas site. I encourage you to use this valuable resource.

The Academic Success Center offers individual tutoring and group workshops to students, which are free of charge (<https://success.wayne.edu/pal>). You should schedule appointments or request group sessions early in the semester. There is also a Writing Center (<http://www.clas.wayne.edu/writing/>) that provides individual consultations free of charge. This service might aid you with the written assignments in lab.

INFORMATION ABOUT EXAMS

There will be **FOUR online examinations prior to the final exam** that will consist of multiple choice and true/false questions. Some questions will contain images. Each exam will be worth 175 points. There will also be an **optional, cumulative final exam** worth 175 points that will cover all the material presented in the course. **If you take all five exams, your lowest score will be dropped. Only your highest four scores will count toward your final grade.** All exams are “closed book” and are related to the material covered in lecture and any other assigned material.

Exam dates will be **Feb 3, Feb 26, Mar 29, and Apr 23. Your only opportunity to make up an exam will be taking the optional, cumulative final exam.** The final exam will be on **May 3 at 8 AM** as designated in the Final Exam schedule for this term (https://wayne.edu/registrar/scheduling/final_exam_schedule_winter_2021.pdf).

If you need to miss an exam, including the final exam, for any reason, including computer problems, 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 to 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 zero points. **Headaches, common bouts of illness, waking up late, vacations, work, etc. are not extenuating circumstances.**

Religious holiday conflicts (from the online Academic Calendar - <https://wayne.edu/registrar/registration/calendar20-21/>)
“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

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that conflict with their religious observances are expected to notify their instructors by” Feb 1 “so that mutually agreeable alternatives may be worked out.”

Final exam time conflict university policy (https://wayne.edu/registrar/scheduling/final_exam_schedule_winter_2021.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.”

“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.”

All exams will be administered online through Canvas Quizzes using Respondus LockDown Browser and Respondus Monitor, which requires a webcam, to ensure academic integrity. Respondus software is compatible with Microsoft Windows, macOS, and most Wayne State-managed Chromebooks. However, it is not compatible with personally owned Android devices or Chromebooks. To download Respondus in Canvas, click **Help** and then **Students: Links and Downloads**. Visit the Respondus Student Resources web page at <http://web.respondus.com/student-help/> for more information.

If you need assistance obtaining course materials (including technology), you may be eligible to receive CARES Act funds through the University. More information can be found here: <https://wayne.edu/financial-aid/resources/coronavirus>.

Exams will be timed, and students will have only a single attempt for each exam. Once you have finished answering the questions, click the Submit button at the bottom of the exam. If you do not submit the exam, you will receive no credit for your answers. No extra time will be given to those students who start working on their exam late.

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 may be extra credit questions on the exams, but otherwise, there is absolutely no opportunity for extra credit or alternate assignments for the lecture portion of the course. Under this scheme, each exam is worth 17.5% of your final grade and your lab grade is 30% of your grade. The final exam grade can only replace one midterm lecture exam grade, even if two or more midterm lecture exams are missed. If more than one exam is missed, the additional missed exams will receive scores of zero All exam scores will be posted in Canvas Grades. It is the student’s responsibility to keep track of his/her scores.

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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 (based on 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 |

At the end of the semester, this grading scale may be modified, if appropriate, depending on the class average and point distribution. Exam grades will be posted on Canvas after everyone has completed the exam.

GRADE DISPUTES

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.

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. The SDS telephone number is 313-577-1851 or 313-202-4216 for videophone use.

Once you have your accommodations in place, please send me an email describing 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. You can learn more about the disability office at <https://studentdisability.wayne.edu/>. To register with Student Disability Services, complete the online registration form at: https://wayne-accommodate.symlicity.com/public_accommodation/.

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:

1. the University Newline (313) 577-5345*
2. WSU Homepage (<https://wayne.edu/>)*
3. Academica (<https://academica.aws.wayne.edu/>)*
4. WDET-FM (Public Radio 101.9)
5. by other local radio and television stations

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

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COVID-19 COMPLIANCE

All students are expected to familiarize themselves with mandatory campus health and safety guidelines – including practicing social distancing and wearing a face covering – by completing the [Warrior Safe Training](#) modules in Canvas. University policy requires students to complete a [campus daily health screener](#) beginning 48 hours before first coming to campus.

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 consider writing a letter of recommendation for any student who earns a grade of A, A-, or B+ and communicates with me often enough that I know them relatively well.

CLASS MEETING TIME/LOCATION (SYNCHRONOUS)

Lectures will be given by Zoom from 9:30-10:20 MWF, the scheduled class time. Exams will also be given during this time. The lectures will be recorded and will be posted on Canvas. As such, you can watch my lectures whenever you wish, but I recommend that you attend the live class sessions if possible, especially if you struggle with sticking to a schedule in the online environment. All my lecture slides will be posted to Canvas, and I will try my best to post each set of slides the day before I lecture on them. It is the student’s responsibility to complete all exams on time.

You do not need to report that you will be missing a lecture: Attendance is expected and highly encouraged, but is not taken, and is left to your discretion as a college student. You are responsible for all material presented during lecture (including in-class discussions stimulated by student questions) regardless of your attendance; how you obtain the material is up to you. You must decide what works best for your study habits.

PRIVACY AND CONFIDENTIALITY RULES

The University’s shift to remote teaching has created some new privacy and confidentiality concerns. Recordings of classes taught via Zoom may capture students saying things they consider embarrassing. Zoom recordings often include views of the inside of students’ residences, which many students consider to be private. Students have the right to be confident that video, audio, and still images of class sessions will not be viewed by anyone other than those who are enrolled in the course. To preserve the integrity of the course when it is taught in future semesters, the contents of quizzes and other class materials must be kept confidential.

For these reasons, every student enrolled in the course must abide by the following set of rules aimed at protecting privacy and confidentiality. If you feel that you need to make your own recordings of class sessions, please contact me so we can discuss your situation individually.

1. The audio or video of any online class session shall not be recorded.
2. Screenshots of any screen displayed as part of any online class session shall not be taken.

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3. Any audio, video, or still image from an online class session shall not be shared with anyone who is not a student enrolled in the class.
4. Material from lectures and exams shall not be shared with anyone who is not a student enrolled in the class.
5. Recordings of class sessions made by the professor shall not be shared with any other person.

IMPORTANT DATES

1/18 - University Holiday – no class

2/3 - Exam I

2/26 - Exam II

3/15-3/20 - Spring Break – no class

3/28 - Last day to withdraw

3/29 - Exam III

4/23 - Exam IV

5/3 - Final Exam - 8 AM

ORDER OF TOPICS

Genes within Populations (Ch. 20.1, 20.3-20.4)

Viruses (Ch. 26.1, 26.4 (up through the flu section))

Prokaryotes (Ch. 27 subsections TBA)

Protists (Ch. 28.1 - 28.2)

Fungi (Ch. 31.2 - 31.4)

Seedless Plants (All of Ch. 29)

Seed Plants (All of Ch. 30)

Plant Reproduction (Ch. 40.1 - 40.2)

Plant Form (Ch. 35 subsections TBA)

Transport in Plants (All of Ch. 36)

Animal Diversity & Evolution of Body Plans (Ch. 32.1 – 32.5)

Protostomes (Ch. 33.1 - 33.2, 33.4, 33.6, 33.8 - 33.9)

Deuterostomes (Ch. 34.1 - 34.9)

Other chapters may be covered if time allows