BIO 1500: BASIC LIFE DIVERSITY (SECTION 001)

Course Syllabus, Spring/Summer 2017 (4 credits with lab)

Class meeting location: Room 0046 DeRoy Auditorium
Class meeting time: 12:30 pm – 2:00 pm; Monday, Wednesday

Instructors: Dr. Markus Friedrich
Building and office number: Biological Sciences 3117
Office phone: 313-577-9612

Email address: ag7274@wayne.edu

Office Hours: By appointment per email

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 the syllabus carefully.** I look forward to a fun semester of exploring biological diversity with you.

COURSE DESCRIPTION AND OBJECTIVES

This course is an overview of the diversity of protists, fungi, 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 become a biologist, lawyer, teacher, engineer or doctor, a solid understanding of the mechanisms of life critical for your career success.

METHOD OF INSTRUCTION

Discussion initiated by lecture materials.
LINK TO ONLINE LECTURE SLIDES:
https://drive.google.com/folderview?id=0B6RXcc7dd6CObWh0X1VxaVVUZzQ&usp=sharing

All lecture slides will be made available online. Unless explicitly stated via class email during the course of the class, exams will cover only materials discussed in detail in lectures.

Lecture attendance is highly recommended and incentivized as follows:

- Three attended lectures per month ahead of each of the three midterm exam and the final exam will be rewarded with one bonus percentage point added to the final average exam percentage score. This can amount to a maximum of 4 bonus points.
- Attendance will be scored by i>clicker 2 response during lectures
- To enjoy this benefit, you will need to register your i>clicker on the blackboard course website

LEARNING OUTCOMES

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

1. Recognize major differences between major groups of the tree of life (bacteria, archaea, protists, plants, fungi, 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 bacteria, archaea, protists, plants, fungi, and animals to the everyday life of humans and to critically consider modern biological issues that involve these organisms.
4. Develop microscope and 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 21 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 (kwalk@biology.biosci.wayne.edu) during the first week of class.

REQUIRED TEXTS

Textbook ─ Biology, 11th edition, by Raven, Johnson, Mason, Losos and Singer (ISBN-13: 978-1259188138, ISBN-10: 1259188132).

Laboratory Manual ─ Biological Investigations - WSU Special 2014-2015 edition.

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

OFFICE HOURS

By email appointment: friedrichm@wayne.edu

Any questions regarding the lab portion of the course should be directed to your lab teaching assistant or Ms. Michelle Serreyn, Room 2012 Science Hall, e-mail: michelle.serreyn@wayne.edu.

COMMUNICATION

When e-mailing us, Ms. Serreyn or your teaching assistant, please be professional. Include your course number in the subject line, a proper greeting (e.g., "Dear Dr. Friedrich, Dear Ms. Serreyn, or Dear Ms/Mr/Mrs. Teaching assistant") and use correct punctuation, spelling and grammar. No texting abbreviations.

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.

STUDENT SUPPLEMENTAL INSTRUCTORS

In addition to your instructors, this course may be assigned a student supplemental instructor (SI) or undergraduate tutor. Their function will be to help you 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 the SI with questions about the lecture material. You will be provided with directions on how to contact the SIs during the first or second week of the class.

EXAMS

There will be THREE in-class midterm examinations of 30 true/false or multiple choice questions and 3-5 short answer questions. Each exam will be worth 175 points. There will also be a cumulative final exam that will cover material presented in the entire course. The final exam will count for 175 points of the grade if none of the midterm exams is dropped. The final exam will count for 350 points of the grade if one of the midterm exams is 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

Midterm exam I: Wednesday May 24th

Midterm exam II: Wednesday June 21st
Midterm exam III: Monday July 17th
Final exam: Monday July 31st

The final exam will take place in the same room as the regular classroom. 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.

Students with other exam scheduling conflicts (religious holidays (see below), exam overlaps or other legitimate reasons) must contact Dr. Friedrich in writing by class time on **May 15th**. No makeup exams will be given unless he is notified in writing by this date. Reasonable exceptions will be granted in cases of illness or family emergencies, both of which will require notification prior to the exam and must be followed up with documented proof.

All exams are held in 0046 DeRoy Auditorium. You MUST bring your student ID (OneCard) with you to the exam. Scantrons are provided at the exam. Exams begin promptly at 1:00 pm and end promptly at 2:35 pm. Students will not be able to leave and re-enter the room once the exam begins for any reason (including bathroom breaks). **Most importantly, you will not be allowed to begin the exam once the first student has finished the exam and left the classroom.**

Religious holiday conflicts (from the online Academic Calendar)

"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."

Students who have a conflict with any of the scheduled exam times due to religious reasons must notify Dr. Friedrich in writing by class time on **May 15th .** Accommodations will not be provided unless he is notified in writing by this date.

Final exam time conflict university policy

(http://reg.wayne.edu/students/exams.php)

"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."

Our class currently has ~100 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 are 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. 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 Blackboard as soon as possible after the exam has been administered.

Note that lecture exam scores can be improved by lecture attendance:

- Three attended lectures ahead of each of the three midterm exams will be rewarded with one bonus percentage point added to the final average exam percentage score. This can amount to a maximum of 3 bonus points.
- Attendance will be scored by i>clicker response during lectures
- To enjoy this benefit, you will need to register your i>clicker on the blackboard course website

EXAM GRADE DISPUTES/CHALLENGE OPTION

Students will have one week after the return of an exam or a written assignment 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 published material that you cite.

CHEATING POLICY

Students found to be cheating during an exam (using a "cheat sheet", looking at another's paper, or allowing another to look at yours), 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 Dishonesty - Plagiarism and Cheating (from DOSO website) *"Academic misbehavior means any activity that tends to compromise the academic integrity of the institution or subvert the education process. All forms of academic misbehavior are prohibited at Wayne State University, as outlined in the Student Code of Conduct* (http://www.doso.wayne.edu/student-conduct-services.html). *Students who commit or assist in committing dishonest acts are subject to downgrading (to a failing grade for the test, paper, or other course-related activity in question, or for the entire course) and/or additional sanctions as described in the Student Code of Conduct."*

- "*Cheating*: *Intentionally using or attempting to use, or intentionally providing or attempting to provide, unauthorized materials, information or assistance in any academic exercise. Examples include: (a) copying from another student's test paper; (b) allowing another student to copy from a test paper; (c) using unauthorized material such as a "cheat sheet" during an exam."*

- *"Fabrication: Intentional and unauthorized falsification of any information or citation. Examples include: (a) citation of information not taken from the source indicated; (b) listing sources in a bibliography not used in a research paper."*

- *"Plagiarism: To take and use another's words or ideas as one's own. Examples include: (a) failure to use appropriate referencing when using the words or ideas of other persons; (b) altering the language, paraphrasing, omitting, rearranging, or forming new combinations of words in an attempt to make the thoughts of another appear as your own."*

- "*Other forms of academic misbehavior include, but are not limited to: (a) unauthorized use of resources, or 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; (b) enlisting the assistance of a substitute in the taking of examinations; (c) violating course rules as defined in the course syllabus or other written information provided to the student; (d) selling, buying or stealing all or part of an un-administered test or answers to the test; (e) changing or altering a grade on a test or other academic grade records."*

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. Arriving late is distracting to me and the rest of the class. If you must arrive late or leave early, enter or exit quietly and sit near the entrances/exits.
- You are encouraged to ask questions during lecture if the questions are relevant to the subject matter.

COURSE DROPS AND WITHDRAWALS (http://reg.wayne.edu)

"*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 on Academica. 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 10th 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"* http://reg.wayne.edu.

Class specifics

Students can enroll in this class through Academica up through **May 21st**. Note that students cannot be added to closed labs, so please don't ask.

If a student drops this class by **May 22nd**, 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 **Mon May 23 - Sun Jun 5**, tuition will not be reimbursed and this class will not be shown on the student's transcript.

If a student drops this class between **Mon Jun 6 - Sun Jul 16**, 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 through Academica and cannot be granted after Jul 16. 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 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 2nd 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 Newsline - (313) 577-5345*
- WSU Homepage (www.wayne.edu)*
- WSU Academica *
- 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".

TENTATIVE SCHEDULE OF LECTURES AND EXAMS

Section 1:

Mon May 8	12:30pm – 2:00pm	BIO 1500: Exploring the tree of life
Wed May 10	12:30pm – 2:00pm	BIO 1500: Viruses
Sun May 14	All day	Mother's Day
Mon May 15	12:30pm – 2:00pm	BIO 1500: Bacteria
Wed May 17	12:30pm – 2:00pm	BIO 1500: Protists
Mon May 22	12:30pm – 2:00pm	BIO 1500: Fungi
Wed May 24	12:30pm – 2:00pm	BIO 1500: Midterm exam 1
Mon May 29	All day	Memorial Day

Section 2:

Wed May 31	12:30pm – 2:00pm	BIO 1500: Seedless plants I
Fri Jun 2	12:30pm – 2:00pm	BIO 1500: Seedless plants II
Mon Jun 5	12:30pm – 2:00pm	BIO 1500: Seed plants I
Wed Jun 7	12:30pm – 2:00pm	BIO 1500: Seed plants II
Mon Jun 12	12:30pm – 2:00pm	BIO 1500: Angiosperms
Wed Jun 14	12:30pm – 2:00pm	BIO 1500: Plant defense
Sun Jun 18	All day	Father's Day
Mon Jun 19	12:30pm – 2:00pm	BIO 1500: Plant behavior
Wed Jun 21	12:30pm – 2:00pm	BIO 1500: Midterm exam II

Section 3:

Mon Jun 26	12:30pm – 2:00pm	BIO 1500: Early animal evolution
Wed Jun 28	12:30pm – 2:00pm	BIO 1500: Early bilaterian evolution
Mon Jul 3	12:30pm – 2:00pm	BIO 1500: Platyhelminthes (flatworms)
Tue Jul 4	All day	Independence Day
Wed Jul 5	12:30pm – 2:00pm	BIO 1500: Lophotrochozoa: Mollusca
Mon Jul 10	12:30pm – 2:00pm	BIO 1500: Lophotrochozoa: Annelids
Wed Jul 12	12:30pm – 2:00pm	BIO 1500: Protostomes: Ecdysozoa: Nematoda+Arthropoda
Mon Jul 17	12:30pm – 2:00pm	BIO 1500: Midterm exam III

Section 4:

Wed Jul 19	12:30pm – 2:00pm	BIO 1500: Deuterostomes: Non-chordate deuterostomes
Mon Jul 24	12:30pm – 2:00pm	BIO 1500: Deuterostomes: Non-vertebrate deuterostomes
Wed Jul 26	12:30pm – 2:00pm	BIO 1500: Deuterostomes: Vertebrates I
Mon Jul 31	All day	BIO 1500 Final exam