

**BIOL 140: INTRODUCTION TO BIOLOGY II
POLICY AND COURSE GUIDE: SPRING 2020 (CRN20395)**

INSTRUCTOR: Dr. Robert G. Laport

Email: laportr@rhodes.edu

Office: FJ 172

Phone: 901-843-3558

Office Hours: TuTh 3:30-4:30 pm and by appointment.

DESCRIPTION: This course is an introduction to the fundamental components of organismal biology. We will explore topics in evolution and the diversity of life, plant and animal biology, animal behavior, and ecology. There are two major goals of this course:

- 1) Provide a broad knowledge base of basic biological principles. This will be motivated by an understanding of evolution, the grand unifying idea of biology, and includes an exploration of the diversity of life and how organisms interact with their environments.
- 2) Develop and refine creative and critical thinking, communication, and research skills. These are skills required of all scientists, but also for applications beyond the sciences. This will be the focus of the co-requisite laboratory course, Biol 141L

After completion of this course and its lab section you should have improved your ability to:

1. Describe basic concepts of biology. This includes an understanding of modern evolutionary theory, and the biodiversity and adaptations that arise from evolutionary processes in dynamic environments.
2. Design, conduct, and interpret the results of an experiment.
3. Problem solve individually and collaboratively.
4. Appreciate that biological systems are complex and that biology is a dynamic field of study.

PREREQUISITES: BIOL 130, BIOL 131L

REQUIRED TEXTS: Reading assignments are not optional. Unless otherwise indicated, you are responsible for all reading assignments as indicated on the syllabus. A portion of all worksheet and exam questions will relate to the reading assignments. We are using the **same textbook as Biology 130.**

Campbell Biology. 11th Edition. 2017. Edited by Urry, Cain, Wasserman, Minorsky & Reece. Pearson, New York. 1284 pages.

MOODLE AND EMAIL: We will use Moodle and Email for this course (moodle.rhodes.edu). The syllabus/course policies, learning objectives, handouts/slides, assignments, and quizzes will be posted here. Check Moodle often, particularly to ensure that you are aware of your grade in the course. Announcements and correspondence will be conducted through Rhodes email accounts. It is the easiest way of contacting me, and it is your responsibility to check your email account for course-related announcements.

PLICKERS: We will use Plickers (“Paper Clickers”) as a classroom response method in this course. You will use your assigned barcode to respond to formalized in-class questions and quizzes. **Responses will count toward your final grade (see below), so be sure to bring your barcode every class period.** Make a note of your barcode number, you can download a new one at get.plickers.com.

ACCESSIBILITY RESOURCES AND SERVICES: Students requiring accommodation should contact the Office of Student Accessibility Services (www.rhodes.edu/accessibility; Burrow Hall, 4th Floor, 901-843-3885, TTY 901-843-3018) as soon as possible.

SCHEDULE: This four-credit course meets twice weekly (TuTh 9:30-10:45 am) in FJ-B.

CLASS ATTENDANCE: Attendance is strongly correlated with success (i.e., mastery of material and higher grades) and is expected of every student. As noted above, in-class clicker quizzes will count toward your grade in the course. Absence from more than four class periods is considered excessive and further absences will result in reductions of 1% to the final grade per additional absence (except in the case of documented medical emergencies).

In the event of an absence, in-class handouts/slides will be available on Moodle. Supplemental notes must be obtained from another student. Students requiring accommodation for conflict(s) (e.g., major religious holidays, college-sanctioned activities, etc.) should privately notify me at the beginning of the semester or well in advance of known absences. Similarly, if you need special accommodations to be successful, please bring these to my attention as soon as possible with any documentation from Student Accessibility Services. Students not registered by the end of the end of the Drop/Add period (see academic calendar:

<https://catalog.rhodes.edu/general-information/academic-calendar>) will not be allowed to attend class.

TECHNOLOGY IN THE CLASSROOM: Use of laptops and phones in class is acceptable, but must be restricted to course activities only. Disruptions to others in the class will not be tolerated.

CAMPUS CLOSURES. In the event that the College is closed unexpectedly for inclement weather, or any other reason, students should expect a missed exam to be given during the next regularly scheduled class period. The course schedule will be adjusted for a missed class meeting. Check email for announcements. **No exams, including the final exam, will be administered prior to the scheduled times.**

PROFESSIONALISM: It is expected that students adhere to the Honor System and display a professionalism in class similar to that expected in the workplace. This pertains to attendance, engagement, organizational skills, initiative, responsiveness to feedback, personal responsibility, interpersonal skills, independence, quality of work, and communication.

ASSESSMENTS:

CLICKER QUIZZES/WORKSHEETS (14%): Quiz questions will be administered in-class via Plickers. Your grade on quizzes will be based on the number of answered questions out of the total number of questions. Questions will be given at the beginning of class to review, as well as during class.

Three worksheets will also be assigned during the semester to review comprehension of course material and to begin thinking more deeply about how science is reported in the media. Readings and worksheets will be posted on Moodle. Due dates will be communicated in class as well as on Moodle.

SEMINAR SUMMARIES (6%): An important aspect of academic pursuits is to attend seminar presentations by active researchers to learn about new findings. The Rhodes College Biology Department strives to complement a vibrant learning environment by hosting speakers to discuss their cutting-edge research with students. **All students must attend three (3) Biology-hosted seminars and submit one page summary and critique for each. Summaries must**

be turned in on Moodle within 24hrs. of attendance with the following filename to receive credit: “Mylastname_Myfirstname_Speakername_date” Seminars will be announced as posters in FJ, in class, and via Moodle.

MIDTERM EXAMS (60%): Three midterm exams each valued at 100 points will be administered during the semester (see class schedule below). Exams will be based on content from class slides, reading assignments, and in-class discussions. Questions will be a combination of multiple choice, true/false, fill in the blank, and short answer/problem-solving.

FINAL EXAM (20%): A cumulative final worth 100 points will be administered during finals week—**Wednesday, 6 May at 8:30a in FJ-B**. The final exam will be based on content from class slides, reading assignments, and in-class discussions from throughout the semester. Questions will be a combination of multiple choice, true/false, fill in the blank, and short answer/problem-solving.

No midterm or final exams will be administered prior to the scheduled date; please plan accordingly.

GRADES: Letter grades will be assigned as follows based on cumulative performance out of 500pts:

GRADE BREAKDOWN:

>93.3% = A	80.0-83.3% = B-	66.7-69.9% = D+
90.0-93.3% = A-	76.7-79.9% = C+	63.4-66.6% = D
86.7-89.9% = B+	73.4-76.6% = C	60.0-63.3% = D-
83.4-86.6% = B	70.0-73.3% = C-	< 60.0% = F

INCOMPLETE GRADES (X) are not granted for low academic performance. Administration of an incomplete is at the discretion of the instructor. To be eligible for an Incomplete Grade, a student must have (1) successfully completed 75 percent of the course with a “C” or higher, (2) have special circumstances (verification may be required) that preclude the student from attending class and completing graded assignments (e.g., illness), and (3) make arrangements to complete missing assignments with the original instructor by the fourth week of the following semester. A course completion agreement must be filed with the Registrar.

HONOR SYSTEM AND ACADEMIC DISHONESTY: It is assumed that all students are familiar with the policies delineated in the Academic Handbook. As members of the Rhodes College academic community, faculty and students accept the responsibility of maintaining the highest standards of intellectual honesty and ethical conduct consistent with the Honor System (below). Academic dishonesty is defined as the use of unauthorized assistance with intent to deceive, or to misrepresent the work of another as their own, in meeting course and degree requirements. Academic dishonesty consists of plagiarism, cheating, fabrication and falsification, multiple submission of the same work, misuse of academic materials, and complicity in academic dishonesty (see below). All work in this class is to be completed independently and in accordance with the honor system, unless otherwise indicated. Non-compliance will result minimally in a grade of zero for that effort, documentation of the episode, and disciplinary action as set forth by College policy, with penalties ranging from failure of this course to dismissal from the College.

Examples of academic dishonesty include, but are not limited to:

A. Plagiarism: Plagiarism is the use of another person’s distinctive words or ideas without acknowledgment.

Examples include:

1. Word-for-word copying of another person's ideas or words;
2. The mosaic (interspersing of one's own words here and there while, in essence, copying another's work);
3. The paraphrase (rewriting of another's work, yet still using their fundamental idea or theory);
4. Fabrication of references (inventing or counterfeiting sources);
5. Submission of another's work as one's own;
6. Neglecting quotation marks on material that is otherwise acknowledged.

NOTE: Acknowledgment is not necessary when material used is common knowledge.

B. Cheating: Cheating involves the possession, communication, or use of information, materials, notes, study aids or other devices not authorized by the instructor in an academic exercise, or communication with another person during such an exercise. Examples include:

1. Copying from another's paper or receiving unauthorized assistance from another during an academic exercise or in the submission of academic material;
2. Using a calculator or other electronic device when its use has been disallowed;
3. Collaborating with another student or students during an academic exercise without the consent of the instructor.

C. Fabrication and Falsification: Fabrication involves inventing or counterfeiting information, i.e., creating results not obtained in a study or laboratory experiment. Falsification, on the other hand, involves the deliberate alteration of results to suit one's needs in an experiment or other academic exercise.

D. Multiple Submissions: This involves submitting work for which academic credit has already been earned, when such submission is made without instructor authorization.

E. Misuse of Academic Materials: The misuse of academic materials includes, but is not limited to:

1. Stealing or destroying library or reference materials or computer programs;
2. Stealing or destroying another student's notes or materials, or having such materials in one's possession without the owner's permission;
3. Receiving assistance in locating or using sources of information in an assignment when such assistance has been forbidden by the instructor;
4. Illegitimate possession, disposition, or use of examinations or keys to examinations;
5. Unauthorized alteration, forgery, or falsification;
6. Unauthorized sale or purchase of examinations, papers, or assignments.

F. Complicity in Academic Dishonesty: Complicity involves knowingly contributing to another's acts of academic dishonesty. Examples include:

1. Knowingly aiding another in any act of academic dishonesty;
2. Allowing another to copy from one's paper for an assignment or exam;
3. Distributing test questions or information about test materials before the assessment;
4. Taking an exam or test for someone else;
5. Signing another's name on attendance roster or on an academic exercise.

COMMITMENT TO DIVERSITY: Rhodes College and The Biology Department are committed to creating an academic climate that is safe and respectful of all students, staff, and faculty regardless of race, ethnicity, sexual orientation, gender identity, age, size, socioeconomic background, religion, spirituality, physical ability, mental ability, or any other aspect of one's identity. A climate of mutual respect allows us to ask difficult questions and to participate in honest discussions, even in the context of strong disagreement. Creating this kind of open, honest, and respectful climate is our mutual responsibility.

SEXUAL MISCONDUCT DISCLOSURE: I will do my best to help any student who comes to me with non-course related concerns. Please keep in mind, however, that all faculty members are mandated to report any incidents of sexual misconduct that comes to their attention. That means that I cannot keep information about sexual misconduct confidential from the college if you share it with me, but the college has specific confidentiality and anti-retaliation protections in place. The Rhodes Counseling Center, the Student Health Services Staff, and the College Chaplain can advise you confidentially. Also, the Title IX Coordinator (Ms. Tiffany Cox) at x3354 can help you access other resources on campus and in the local community. The student

Sex/Gender Discrimination and Sexual Misconduct Policy and other Title IX information is in the Student Handbook, and can be found on the website at:
<https://sites.rhodes.edu/titlenine/policy>.

GRIEVANCES: A student who has a grievance with any aspect of this course should meet with me during office hours (not via e-mail or phone) to discuss the problem. If an honest and sincere dialogue cannot resolve the grievance, the student may make an appointment to discuss the problem with the Biology Department Chair as the appropriate next step.

STRATEGIES FOR SUCCESS: Following are suggestions that students have found useful in the past for ensuring success in this course:

- Read all of the assigned material promptly (set aside time prior to each class meeting). Each week you will be responsible for substantial readings. Interact with your texts. Write in them! Highlight them! Look up unfamiliar or new terminology or concepts as you encounter them.
- Practice summarizing what you read to a friend. Being able to accurately summarize will help form a foundation for understanding.
- Take hand-written notes as you read, and during class. Review your notes along with the slides shortly after each class — the sooner the better. Rewrite them, or at least annotate them. Write down all questions and ask them during class or during office hours.
- Bring slide printout to class. Take notes on them. Read assignments promptly. Each week you will be responsible for substantial readings. Set aside one or two hours each week to complete the readings. Interact with your texts. Write in them! Highlight them!
- Form a study group of your peers for regular, if only brief, meetings.
- Participate fully and actively in class. Ask questions, volunteer to respond when questions are asked. It's OK if you are unsure of an answer, chances are others are, too!
- Utilize office hours and appointments. Come prepared with questions.
- Email Dr. Laport before the second class meeting with "Wallace" in the subject line once you have read the syllabus for two bonus points.

TENTATIVE CLASS SCHEDULE		
Date	Topic	Reading
16 Jan	Introduction to Evolution	Ch. 22
21 Jan	Evolution of Populations	Ch. 23
23 Jan	Origin of Species	Ch. 24
28 Jan	Origin of Species	Ch. 24, 25
30 Jan	Adaptive Radiation & Phylogeny	Ch. 25, 26
4 Feb	Biodiversity: Prokaryotes & Protists	Ch. 27, 28, 37
6 Feb	Biodiversity: Plants & Fungi	Ch. 29, 30, 31
11 Feb	Exam I	
13 Feb	Biodiversity: Animals	Ch. 32, 33, 34
18 Feb	Vascular Plant Structure & Development	Ch. 35

20 Feb	Vascular Plant Respiration & Photosynthesis	
25 Feb	Plant Resource Acquisition, Transport & Nutrition	Ch. 36, 37
27 Feb	Plant Reproduction	Ch. 38
3 Mar	Plant Responses to Signals	Ch. 39
5 Mar	Exam II	
10 Mar	Spring Break	
12 Mar	Spring Break	
17 Mar	Animal Form & Function	Ch. 34, 40
19 Mar	Animal Nutrition, Circulation & Gas Exchange	Ch. 41, 42
24 Mar	Animal Immune System, Osmoregulation & Excretion	Ch. 43, 44
26 Mar	Animal Hormones & Endocrine System	Ch. 45
31 Mar	Animal Reproduction & Development	Ch. 46, 47
2 Apr	Animal Nervous Systems	Ch. 48, 49
7 Apr	Exam III	
9 Apr	Spring Recess	
14 Apr	Animal Sensory and Motor Mechanisms	Ch. 49, 50
16 Apr	Animal Behavior	Ch. 51
21 Apr	Ecology & Biosphere	Ch. 52
23 Apr	Population Ecology	Ch. 53
28 Apr	Community Ecology	Ch. 54
30 Apr	Ecosystems, Restoration, and Conservation	Ch. 55, 56
6 May	Cumulative Final Exam, FJ-B @ 8:30a	