

SYRACUSE UNIVERSITY
GENERAL BIOLOGY II (BIO 123) – COURSE SYLLABUS
SPRING 2020

COURSE DESCRIPTION

BIO123 – General Biology II, 3 credits

The second of a two-course sequence comprising a survey of major biological concepts ranging from the molecular level to global ecology. Units within Biology 123 include biodiversity, plant structure and function, human and comparative animal anatomy and function, ecology, and evolution, which is the central and unifying concept of biology and the framework around which the understanding of other concepts in this course is constructed.

GOALS

- To give a broad introduction to biology
- To learn about science as a way of exploring the natural world
- To gain a deep understanding of the fundamental principles which underlie all of the life sciences

COURSE COMPONENTS:

Active Learning Lecture:

M & W 12:45 – 2:05 pm
Gifford Auditorium

OR

M & W 3:45 – 5:05 pm
Watson Theater
Students should ONLY attend the section in which they are enrolled.

Attendance essential. Cell phones should be silenced during these sessions and put away unless used for class purposes. Please attend with the intention to be fully “present”, and respect others who wish to focus on learning.

Exams (seen on MySlice as 2nd Lecture item):

Exam 1: Monday, February 10, 7 – 8:30 pm

Exam 2: Monday, March 2, 7 – 8:30 pm

Exam 3: Monday, April 6, 7 – 8:30 pm

Cumulative Final Exam: Friday, May 1, 3 – 5 pm

INSTRUCTIONAL TEAM:

Course Professor:

Dr. Jason Wiles

150 Life Science Complex

Office Hours: Wednesdays, 11:30 am – 12:30 pm, or by appointment via email

jwiles01@syr.edu

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Course Coordinator:

Bev Werner
142 Life Science Complex
315-443-3722; bfwerner@syr.edu
Office Hours: Monday – Friday, 9 am – 4:30 pm

Howard Hughes Medical Institute (HHMI) Supported Instructional Team Members: (office hours by appointment, arranged via email)

Dr. Eve Humphrey HHMI DBER Fellow 150 Life Science Complex eahumphr@syr.edu	Kelly Schmid, M.S. Biology Active Learning Fellow Ph.D. Candidate, Biology kschmid@syr.edu
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Peer-Led Team Learning Team Members: (office hours by appointment)

Dr. Julia Snyder Teaching Assistant Professor Department of Science Teaching jjseymou@syr.edu	Mariah Maxwell HHMI Graduate Fellow Biology & Science Teaching M.S. & Ph.D. student
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Teaching Assistant:

Ryan Dunk, Ph.D. Candidate, Biology
140 Life Science Complex
rddunk@syr.edu
Office hours as per Bb

All BIO 123 & 124 TAs will hold office hours in LSC 152 at the time listed on Bb. Office hours and email addresses will be posted on Blackboard by January 21. Students visiting office hours should arrive prepared with specific questions and goals for the meeting. Tutoring sessions are available through CLASS on the SU website: <http://class.syr.edu/>

REQUIRED MATERIALS:

*Please Note: The materials listed as required at the bookstore are correctly listed as required.

- **Textbook: Campbell Biology General Biology I and II, Custom Edition for Syracuse University** ISBN-978-1-323-90619-4. Includes **Modified Mastering Biology** (used for online homework assignments which is 20% of final course grade), and eText, available at SU Bookstore [*other versions of Campbell Biology will require additional purchase of Mastering Biology*]. Comparison pricing is available on the SU bookstore website: https://bookweb.syr.edu/ePOS?store=1&form=shared3%2ftextbooks%2ftext_browse%2html&design=1&campus=MAIN
- **Clicker:** TurningPoint brand Response Card, Rf (credit card size). Other TurningPoint clicker models, other brands or smart phone apps are NOT supported. Students MUST bring their response devices to lecture if they wish to earn

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participation credit during lecture sessions. Lecture participation credit can ONLY be earned via your properly licensed, registered and functioning clicker. Clickers are available for purchase at the SU bookstore.

- Other required materials, such as lab activities, will be distributed via Blackboard (Bb). All students MUST access the course Bb page to obtain weekly documents (print and take to lab/discussion session), view course announcements, participate in online discussions or other activities, and monitor their grades. You will log into Blackboard (Bb) via your NetID (the portion of your SU email address appearing before the @syr.edu). Your password is the same as the password for your SU email address. If you do not know your NetID and password, go to <http://its.syr.edu/netid/> for assistance. To access Blackboard, go to <https://blackboard.syr.edu>.
- Students should check their syr.edu email account daily for messages from course instructors and staff.

COURSE TOPICS & SCHEDULE:

This schedule includes exam dates and important academic milestones that relate to BIO 123; students should also consult the Syracuse University website for official university policy when in doubt.

* Notice: The “Reference Readings” column below does NOT imply that students must assimilate the entirety of each listed chapter. This is not a “required reading assignment,” rather it is a guideline indicating where to find information relevant to material presented in the lectures, lab, and Mastering Biology (MB) Assignments.

EXAM DATES BIO 123:

Exam 1: Monday, February 10, 7 – 8:30 pm

Exam 2: Monday, March 2, 7 – 8:30 pm

Exam 3: Monday, April 6, 7 – 8:30 pm

Cumulative Final Exam: Friday, May 1, 3 – 5 pm

DATES:	TOPICS:	Relevant Chapters:
January 13/15	Introduction & Plant Structure I	Ch 35; review 29 & 30 if necessary
January 20	<i>Monday, January 20: Martin Luther King Day: no classes Tuesday, January 21: Add deadline</i>	
January 22	Plant Structure II	Chs 36 & 37
January 27/29	Photosynthesis & Respiration <i>Early Semester Progress Reports due Friday, January 31</i>	Chs 10 & 9

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February 3/5	Plant Reproduction, Growth & Development	Chs 38 & 39
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Academic / Financial Drop Deadline – Monday, February 3

EXAM 1	MONDAY, FEBRUARY 10, 7 – 8:30 PM	Rooms TBA via Bb
February 10/12	Overview of Animal Structure	Ch 40
February 17/19	Animal Nutrition	Ch 41
February 24/26	Internal Transport, Immunity, & Gas Exchange	Chs 42 & 43
EXAM 2	MONDAY, MARCH 2, 7 – 8:30 PM	Rooms TBA via Bb
March 2/4	Excretory & Endocrine Systems <i>Mid Term</i>	Chs 45 & 44
March 9/11	Neural Signaling & Regulation	Chs 48 & 49
March 14 - 22	Spring Break – no classes <i>Mid-Semester Progress Reports due Wednesday, March 18</i>	
March 23/25	Sensory & Motor Mechanisms	Ch 50
March 30/April 1	Genetic & DNA Technology	Chs 20 & 21
EXAM 3	MONDAY, APRIL 6, 7 – 8:30 PM	Rooms TBA via Bb
April 6/8	Animal Reproduction & Development	Chs 46 & 47
April 13/15	Catch-up & Animal Behavior	Ch 51

Withdrawal Deadline – Tuesday, April 14

April 20/22	Primate Evolution, Human Population, & Global Environmental Issues	Chs 34.6 – 34.7, 53.6, 56
April 27	Conclusion	

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Last Day of Class – Tuesday, April 28

FINAL EXAM	Friday, May 1, 3 – 5 pm: The final exam is comprehensive for the entire course.	
May 13	Final Grades will be posted to MySlice	

BIO 123 GRADES:

Point Distribution (out of a total of 1000 points):

Exam 1 = 150 points or 15%

Exam 2 = 150 points or 15%

Exam 3 = 150 points or 15%

Exam 4 / Cumulative Final Exam = 250 points or 25%

Modified Mastering Biology Assignments = 200 points or 20%

Participation / Clicker Responses = 100 points or 10%

Grading Scale:

92.5 – 100	A	76.5 – 79.49_	C+
89.5 – 92.49_	A-	72.5 – 76.49_	C
86.5 – 89.49_	B+	69.5 – 72.49_	C-
82.5 – 86.49_	B	59.5 – 69.49_	D
79.5 – 82.49_	B-	0 – 59.49	F

The grading scale above is not necessarily “written in stone”, as student performance may dictate a normalizing curve, which might deviate from the number presented here. However, this grading scale can be taken as a guarantee that you will receive a letter grade no lower than that which is listed above for a given percentage score range.

Extra Credit:

There will be only 2 categories of extra credit in BIO 123:

1. Peer Led Team Learning (PLTL) sessions; this will be explained by email and through Blackboard by Dr. Snyder.
2. Limited possible opportunities via participation in online surveys.

Students should note that no other extra credit is expected. Extra credit points are added to the total earned points out of 1000 points possible for the entire course graded items, as per the point distribution listed above, and will not be tallied until final exams have been scored.

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LECTURE ATTENDANCE, PARTICIPATION IN ACTIVE LEARNING & EXAMS:

Please read **ALL** of the following as you will be held accountable for it:

Attendance at lectures is required.

1. Students will earn credit for PARTICIPATION in active learning via their TurningPoint personal response device, also called clickers. The clickers will be used periodically throughout the active learning lecture sessions to give students opportunities to answer quiz questions, discussion questions, and class surveys. Points will be awarded for responses, so be in class, don't be late, pay attention, and don't leave early. It is each student's responsibility to bring their clicker to class, to ensure that it is properly registered and licensed via Blackboard (instructions can be found in the lecture area of Blackboard, under announcements), that the batteries are working, etc. Please refer to the academic integrity statement below regarding the use of clickers and sharing clickers (sharing is not allowed!). There will be no make-ups for missed sessions or for points missed because a student came to class late, forgot to bring their clicker, etc. Up to three scores of zero will be disregarded in the calculation of final clicker grades, which includes absences for any reason. No documentation is required. Students get 3 absences with no penalty. Period. Use them wisely.
2. Clicker responses will be recorded and posted to the lecture area of Blackboard site each lecture day. During the first weeks of the semester, announcements will be posted in Bb when points are posted to the My Grades area of Bb. Students should check Blackboard (BIO 123 for lecture MyGrades button) every week to ensure that their device is registered and functioning properly as reflected by points on Blackboard. Points cannot be awarded retroactively; that means, if a student misses the opportunity to respond to a question with their clicker for any reason, including device malfunction, that opportunity is in the past. Accordingly, you should check Blackboard often and attend to any issues you may find as soon as possible if you want to earn points for the next session. Questions about clicker points should always be addressed to Bev Werner, Course Coordinator for Bio 123, either in person in 142 LSC or by email (bfwerner@syr.edu). Technical support for clicker function can be found at ITS in the Life Science Complex atrium.
3. At the end of the semester, students will be awarded a percentage of the 100 available points based upon the total value of their recorded responses throughout the semester. Hence, the total amount of clicker points a student earns for the course will not be calculated until the course has ended. The percentage of course points available for clicker points is 10% of the total course grade (clicker cannot exceed 10% of the course grade even if the student earns more than 100 pts in total).

Exam Policies:

1. There will be **no make-up exams for any reason**. Students with conflicting classes or work schedules should prepare to clear their schedules for exams in Bio 123. If a student has a conflicting class they should contact Bev Werner at bfwerner@syr.edu as soon as possible.

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2. If a student misses an exam, for any reason, regardless of whether that reason is within the student's control or not, the point value of the missed exam will be added to the value of the Cumulative Final Exam. For example, if a student misses Exam 1, then the Cumulative Final Exam will be worth 40% of their total course grade. This is a safety net that covers missing an exam for whatever the reason may be. No documentation is required nor is documentation requested. There are no exceptions to this policy.
3. If a student takes an exam, the score they earn on the exam will be figured into their grade as shown in the point distribution above. All earned exam scores contribute to your final grade in BIO 123.
4. Any student who misses an exam (or expects to miss an exam) should email Bev Werner at bfwerner@syr.edu as soon as possible.

Modified Mastering Biology:

1. To register for Modified Mastering Biology go to "BIO.123.Merged.Lecture.SPRING20.General Biology II" Blackboard item, click on the button "MASTERING BIOLOGY" on the left side, and follow the instructions for registering and logging into Mastering Biology. Students who have purchased MB access in the past year will be able to log in seamlessly through the button in Bb. If you experience technical difficulties please contact Pearson Technical support as listed on the login page of Mastering Biology. If you have contacted Pearson and your issues remain unresolved within 24 hours, please email Bev Werner at bfwerner@syr.edu.
2. Unless otherwise directed, 2 assignments are due each week at 11:59 PM on the date shown on the MB calendar. These assignments will remain available to students for credit until the date of the BIO 123 Final Exam.
3. You can see your homework scores in the "Gradebook" section of Mastering Biology throughout the semester, but they will not appear in Blackboard until the end of the semester. At the end of the course, your total, final percentage score from Mastering Biology will determine how many of the 200 points for homework you have earned, and these will be added to your final grade at that time.

COMMUNICATION WITH FACULTY, TAs & STAFF in BIO 123

Syracuse University has established email as a primary vehicle for official communication between students and faculty, TAs and staff at the university. Email messages sent to faculty, TAs, and staff of Bio 121 should be sent from your syr.edu account. If you choose to use another email address please make arrangements that ensure you do not miss any messages sent from course instructors or staff. Students in BIO 123 should check their @syr.edu email account at least daily to be sure they receive important messages from the course professor, TA and staff. Please note that TAs and staff in BIO 123/124 are not obligated to check email on holidays or weekends; generally, a reply can be expected within 24 hours or issues will be addressed via Bb or lecture announcements. Do not expect a reply to email sent the evening/night before lab, lecture, or an exam.

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SYLLABUS CHANGES

The course administration reserves the right to make changes to the syllabus policies and dates as deemed necessary. Such changes will be communicated to students via Blackboard and email (university policy requires that we communicate to students via @syr.edu email accounts), and every effort will be made to minimize changes to this document.

ACADEMIC INTEGRITY STATEMENT

Syracuse University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same work in more than one class without receiving written authorization in advance from both instructors. Under the policy, students found in violation are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered as described in the Violation and Sanction Classification Rubric. SU students are required to read an online summary of the University's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice.

The Violation and Sanction Classification Rubric establishes recommended guidelines for the determination of grade penalties by faculty and instructors, while also giving them discretion to select the grade penalty they believe most suitable, including course failure, regardless of violation level. Any established violation in this course may result in course failure regardless of violation level.

The following link gives additional examples that should help students figure out if they are in danger of violating the academic integrity policy: <http://class.syr.edu/wp-content/uploads/2018/08/What-Students-Need-to-Know-About-Academic-Integrity-8.6.18.pdf>

From your professor: There are certain aspects of Biology 123, which bear particular address with regard to academic integrity. Namely, Turning Point response devices ("clickers") are to be registered to one, and ONLY one, student during the semester. Use of a clicker by a student to whom the device is not registered will be considered to be a serious breach of academic integrity. Any student involved in such activity will face swift and firm disciplinary action. **DO NOT USE A TURNINGPOINT RESPONSE DEVICE THAT YOU ARE NOT PERSONALLY REGISTERED TO USE IN THIS CLASS.** Periodically, the number of students actually in attendance will be checked against the number of devices that respond to questions. Should the number of

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“clickers” responding exceed the number of students in attendance; NO ONE will receive credit for that session.

Syracuse University sets high standards for academic integrity. Any suspected incident of academic integrity will be subject to review. If a student is found to have committed an academic integrity violation, the resulting consequences can range in severity, up to and including failure of the course and expulsion from the University.

For additional information, please see <http://class.syr.edu/academic-integrity/policy/>.

ACCOMMODATIONS (INCLUSION POLICY)

If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), <http://disabilityservices.syr.edu>, located at 804 University Avenue, Room 309, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities “Accommodation Authorization Letters,” as appropriate. Students must apply each semester they enroll in classes and expect to utilize these services. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. Students in Bio 123 with “Accommodation Authorization Letters” must submit these to Bev Werner, Bio 123 Course Coordinator, in person in room 142 or via email as soon as possible; no appointment is needed.

Syracuse University values diversity and inclusion; we are committed to a climate of mutual respect and full participation. My goal is to create learning environments that are useable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, I invite any student to meet with me to discuss additional strategies beyond accommodations that may be helpful to your success.

SAFE SPACE

The classrooms and communities of Biology 123 are intended to be safe spaces for students of all identity groups. The course professor agrees with the vision, mission, and values of the SU LGBT resource center and endeavors to conduct the course under its Statement of Allyship <http://lgbt.syr.edu/about/mission.html>. The professor and course staff expect and are expected to foster an environment of mutual respect for and between all students.

FAITH TRADITION OBSERVANCES:

https://policies.syr.edu/policies/university-governance-ethics-integrity-and-legal-compliance/religious-observances-policy/?_ga=2.128337098.758265248.1535058228-536004855.1484058627 Students who expect to be absent from campus and/or Bio 123 class components due to observing a religious holiday on a class day need to register their anticipated absence via the “My Religious Observances” link, under the Student Services section of MySlice as per the policy at the link above. Note that this anticipated absence must be registered via MySlice before the end of the second week

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of classes. Students should also consult this syllabus for specific Bio 123 policies. Our policies are designed to be fair to all students enrolled in Bio 123 and to give full disclosure to those students that expect to be absent occasionally and also to ensure the academic integrity of the 4-credit tuition value we offer to each student. If you have any questions please contact Bev Werner, Bio 123 Course Coordinator, at bfwerner@syr.edu.

Guidelines for Class Participation

- Respect others' rights to hold opinions and beliefs that differ from your own. When you disagree, challenge or criticize the idea, not the person.
- Listen carefully to what others are saying even when you disagree with what is being said. Comments that you make (asking for clarification, sharing critiques, expanding on a point, etc.) should reflect that you have paid attention to the speaker's comments.
- Be courteous. Don't interrupt or engage in private conversations while others are speaking. Use attentive, courteous body language.
- Support your statements. Use evidence and provide a rationale for your points.
- Share responsibility for including all voices in the discussion. If you have much to say, try to hold back a bit; if you are hesitant to speak, look for opportunities to contribute to the discussion.
- Recognize that we are all still learning. Be willing to change your perspective, and make space for others to do the same.

Participation Guidelines for STEM Classrooms

- Be aware of how much you are contributing to in-class discussions. Try not to silence yourself out of concern for what others will think about what you say. If you have a tendency to contribute often, give others the opportunity to speak. If you tend to stay quiet, challenge yourself to share ideas so others can learn from you.
- Listen respectfully. Don't interrupt, engage in private conversations, or turn to technology while others are speaking. Use attentive, courteous body language.
- Understand that there are different approaches to solving problems. If you are uncertain about someone else's approach, ask a question to explore areas of uncertainty. Listen respectfully to how and why the approach could work.
- Take pair-work or small group work seriously. Remember that your peers' learning partly depends upon your engagement.
- Make an effort to get to know other students. Introduce yourself to students sitting near you. Refer to classmates by name and make eye contact with other students.
- Keep in mind that we are all still learning and are bound to make mistakes in this setting, as anyone does when approaching a complex task or exploring new ideas. Be open to changing your mind, and make space for others to do so as well.

Guidelines for Dialogue / Community Expectations

- Confidentiality. We want to create an atmosphere for open, honest exchange.

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- Our primary commitment is to learn from each other. We will listen to each other and not talk at each other. We acknowledge differences amongst us in backgrounds, skills, interests, and values. We realize that it is these very differences that will increase our awareness and understanding through this process.
 - We will not demean, devalue, or “put down” people for their experiences, lack of experiences, or difference in interpretation of those experiences.
 - We will trust that people are doing the best they can. We will try not to ‘freeze people in time’ but leave space for everyone to learn and change through our interactions with one another.
 - Challenge the idea and not the person. If we wish to challenge something that has been said, we will challenge the idea or the practice referred to, not the individual sharing this idea or practice.
 - Speak your discomfort. If something is bothering you, please share this with the group. Often our emotional reactions to this process offer the most valuable learning opportunities.
 - Step Up, Step Back. Be mindful of taking up much more space than others. On the same note, empower yourself to speak up when others are dominating the conversation.
-