

BIOL 1103: Concepts in Biology

404E Biological Sciences Building

INSTRUCTORS

Dr. Sayali Kukday

405 Biological Sciences

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Dr. Zachary Lewis

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CLASS HOURS: 11am - 12.15pm and 3.30pm - 4.45pm on Tuesdays and Thursdays

TEACHING ASSISTANT: Adrienne Starr (astarr@uga.edu)

OFFICE HOURS

Dr. Kukday: 9-10 am Tuesdays and Thursdays (or by appointment)

Dr. Lewis: 1-2 pm Tuesdays and Thursdays (or by appointment)

Adrienne Starr: 10-11 am Mondays and 3-4 pm Wednesdays (or by appointment)

PRIMARY RESOURCES

- Notes and assignments from class
- Textbook: *Discover Biology*, 5th Ed., by Singh-Cundy & Cain
- Other reading materials and websites posted on eLC
- Top Hat Monocle: <https://www.tophatmonocle.com/register/student/>

COURSE DESCRIPTION AND GOALS

This course is intended to improve your general science literacy skills and fulfill the UGA General Education Core Curriculum science requirement. Our intention is for you to develop skills that are useful in your daily lives. The science literacy skills you will master will help you address issues in your everyday life regarding scientific claims about health, the environment, and society. You will develop quantitative literacy skills important for you to be a critical consumer of science information in the media. At the end of this course, you will expand your abilities to:

- Apply principles of cellular and molecular biology to real world situations like evaluating how healthful a certain food is or whether you should be vaccinated for a certain disease
- Identify and evaluate valid sources of scientific information.
- Analyze and apply scientific information to make everyday decisions.
- Explain how scientists test scientific claims and compose scientific arguments.
- Communicate scientific ideas and build scientific arguments orally and in writing.

COURSE ORGANIZATION AND DESIGN

The content of this course will be taught in context of real-life biological issues. Now that the Internet puts the world at your fingertips, you do not need to memorize facts. Instead, you need to practice applying science concepts and principles and using facts to make science-related decisions. You will still learn content, but it will be in the context of specific problems divided into five (5) units:

Unit	Instructor	Approximate Dates	Exam Dates
Alcohol Metabolism	Kukday	January 8 - 29	January 29
Cancer and Stem Cells	Kukday	January 31 - February 21	February 21
Genetic Testing	Lewis	February 26 - March 21	March 21
Allergies and Immunity	Kukday	March 26 - April 9	April 9
Nutrition	Kukday	April 9 - 25	am class – May 2 (8-11am) pm class – May 7 (3.30-6.30pm)

COURSE ACTIVITIES

Learning content

1. **Readings:** You will be able to learn most of the basic content for this course by reading the textbook or other assigned readings. These readings will help you master basic content before coming to class so that we can use class time to apply the content to real-world problems.
2. **Top Hat Monocle reading assessments:** Often we do not remember what we read unless we have specific cues that help us focus. We have created these cues in the form of short quizzes. To do this we will make use of a web-accessible questioning tool called Top Hat Monocle (<https://www.tophatmonocle.com/register/student/>). Top Hat Monocle is useful for out-of-class assessment of what you have read, know and understand and what you are struggling to understand so that we can tailor instruction accordingly. To access Top Hat Monocle, you will need to register and purchase a subscription (\$20 for the semester), which you can access with any wifi enabled device (smart phone, laptop, iPad, iPod, etc.) or texting phone. You will need to bring your wifi device to class to be able to participate. Quizzes will be posted by dates on the course calendar, and typically will be due before class to test your mastery of basic content. You usually have 2-3 days to take these two- to ten-question quizzes.

Applying content

The course content and discussions will be tailored to build on your existing knowledge and address your questions and concerns, so your attendance is essential. There will be opportunities to earn points during class on assignments and extra credit work, which you can earn only if you attend class.

1. **Powerpoints:** Powerpoint presentations will be posted after class as a reference to help you master difficult applications of the content.

2. **Top Hat Monocle:** During class, we will make use of Top Hat Monocle for real-time assessment of your understanding and what you are struggling to grasp so that we can tailor instruction accordingly, without the fuss of clickers. You will need to bring your registered wifi device to class to be able to participate.
3. **In-class and out-of-class assignments:** Each unit will include in-class and out-of-class assignments. You will complete some of these assignments solo and others with your group. The due dates for all assignments will be posted on the course calendar (eLC). Detailed instructions for each assignment will also be posted on eLC. All written assignments for the course must be submitted as hard copies in one of two boxes placed near the exits to the classroom.
4. **Solo tests:** Our overarching goal this course is for you to learn content and skills we think will be useful in your daily lives. Tests provide incentive for you to study and evidence that you have learned. Tests will be multiple-choice with a focus on application and analysis. There will be a total of 5 tests, but only 4 scores will be counted in your final grade. If you have to miss a test or choose to miss a test, you will not be penalized. If you take all 5 tests, the test with the lowest score will be dropped. Consequently, there are no make up tests, but you are welcome to request to take the test early if you have a *valid* conflict. If you miss more than 1 test (for documented reasons that are out of your control, e.g. illness, family emergency), please contact us as soon as this happens, so that we can discuss possible options.
5. **Group tests:** Unfortunately, students sometimes do not know they are confused until they see an exam question they do not know how to answer. Group tests offer one last chance to master the content and demonstrate knowledge and skills. You need to sign up to one of 79 groups seated throughout the classroom. For each of the first four tests given during the regular semester, you will be given an opportunity to take the same test a second time, this time in with your group, and earn an additional grade (25 points per group test). If you did not understand a question on the exam, this is your opportunity to have it clarified and corrected for you by someone in your group. This instant feedback will not only improve your grade, but it will help you learn the material better.
6. **23andMe Project:** You will complete one project this semester that involves applying the content you learn in class to a real-world, personal situation: whether to have your DNA analyzed by 23andMe. You will have about two (2) weeks to complete a rough draft. You will receive feedback on the draft, and will then submit a final version that has been revised in response to the feedback. Instructions will be posted on eLC.

COURSE GRADING

You will be graded on your performance on these activities as follows:

Activity	Points	% Overall Grade
Assignments and Reading quizzes	140 points (28 per unit)	28%
Solo Tests	4 best scores / 5 (50 points each) = 200 points	40%
Group Tests	4 scores (25 points each) = 100 points	20%
23andMe Project	rough draft = 10 points final draft = 50 points	12%
Total	500	100%

Final grades will be assigned as follows:

Grade Earned	Points	Percentage
A	465-500	>93%
A-	450-464	>90%
B+	435-449	>87%
B	415-434	>83%
B-	400-414	>80%
C+	385-399	>77%
C	365-384	>73%
C-	350-364	>70%
D	300-349	>60%

Regrade request submission policy: Students have the opportunity to submit regrade requests for assignments or exams if they feel that they deserve more credit than they received. All requests must be submitted in written form including an explanation for why they should be awarded more points. Regrade requests must also be submitted within one week after grades for a particular assignment have been posted on eLC. Requests that do not meet these criteria will not be considered. If you are missing a grade for an assignment you have submitted, please contact the concerned instructor or the Teaching Assistant (TA) within a week after grades for that assignment have been posted on eLC. Inquiries for missing grades beyond this time point will be ignored. All assignments submitted past a due date will be considered late.

STEAM peer evaluations: You will have two opportunities throughout the semester to evaluate the contribution of your peers regarding group work. The first evaluation is an opportunity for individual members to provide and receive constructive feedback or identify and resolve any issues that you face as a group. In the instance that a person shows a lack of commitment to the group (not attending meetings, submitting unacceptable work for group assignments, not completing assigned portion of group work), they will be given a warning. Failure to cooperate will result in immediate expulsion of that person from the group and all group privileges will be lost (ability to complete group assignments). The second evaluation will count towards your group members' final grade. Students who fail to complete these will lose all points associated

with peer evaluations. Evaluations will be available online and instructions for completing them will be provided.

OTHER COURSE INFORMATION

Academic Honesty and the Honor Code: **Academic Honesty** means performing all academic work without plagiarism, cheating, lying, tampering, stealing, giving or receiving unauthorized assistance from any other person, or using any source of information that is not common knowledge without properly acknowledging the source. The academic honesty policy of the University is supplemented (not replaced) by an **Honor Code** which was adopted by the Student Government Association and approved by the University Council May 1, 1997, and provides: *I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others.* All students agree to abide by this code by signing the UGA Admissions Application. For more information on Academic Honesty and the Honor Code, please refer to: <http://honesty.uga.edu/>.

Any person found using unauthorized assistance (including plagiarism, copying answers from another student during the solo tests, turning in group work to which you have not contributed) will be reported immediately to the Office of the Vice President for Instruction. The minimum penalty for using unauthorized assistance is a failing grade, and the maximum penalty is suspension from the University. **Do not risk your academic future – it is simply not worth it!**

Disability Accommodations: Reasonable accommodations are available for students who have a disability. The Disability Resource Center in the Division of Student Affairs (114 Clark Howell Hall; 706-542-8719 voice; 706-542-7719 fax; 706-542-8778 tty) coordinates accommodations and services for students with disabilities. Please notify the instructors of any accommodations needed for the course.

Technology: Relevant uses of wifi enabled devices (laptops, iPads, iPods, smart phones, etc.) in class is encouraged, since it may be helpful to access information on Wikipedia, PubMed, Google Scholar, Web of Knowledge, or eLC during class and you will need these devices to participate in Top Hat Monocle questioning. However, it is expected that you will not use technology for off-topic purposes. If the use of technology (shopping online, checking Facebook, etc.) becomes distracting to you, we highly recommend installing some of the browser add-ins listed on this blog: <http://techpp.com/2011/06/09/block-distracting-websites/>. Be mindful of students sitting around you because your distraction can become their distraction (audio-visual). **No technology is allowed during exams. If caught, the student will be held in violation of the Academic Honesty Policy.**

It is your responsibility to make sure you have access to eLC and Top Hat Monocle. You will have adequate time to complete all of these assignments. If you wait until the last minute (<3 hours before it is due, or after 9 am-5 pm business hours), we will not be able to help you. If you forget to complete an online assessment, it will not be available to make-up. You have control over your schedule and one of the important skills you need to develop is how to organize and manage your time.

- If you have any problems or questions about accessing eLC, you can contact the EITS Helpdesk: (706) 542-3106, or online at <https://eits.uga.edu/support/request>. You need to remember to have the appropriate browser on your computer (see: <http://elc.uga.edu/browser.html>)
- If you have any problems with accessing Top Hat Monocle, please contact their technical support at: <https://www.tophatmonocle.com/register/student/>

The Miller Student Learning Center has computers available at all hours and hosts an EITS Helpdesk. The Bioscience Learning Center (BLC), located in Room 406, also has computers, textbooks on reserve, and a black and white printer for use at 6 cents/page, a color printer for 11 cents/page, and a copier for 11 cents/page (Bulldawg Bucks ONLY). BLC is open: Monday - Thursday 8:30 am - 7:00 p.m. and Friday - 8:30 am - 5:00 p.m. **We will not consider technology excuses!** You need to make sure you have a backup computer if your computer should be down at any time.

Communication: We encourage students to approach us during the semester with concerns and problems with their grade in the course. If you are doing poorly on tests, you need to talk to the relevant instructor as soon as possible after you get your test back. Many students put off contacting an instructor until late in the semester when it is difficult to turn things around. **Do not let this be you!** To comply with the Family Educational Rights and Privacy Act (FERPA), all communication that refers to individual students must be through a secure medium (UGAMail or eLC) or in person. Instructors are not allowed to respond to messages that refer to individual students or student progress in the course through non-UGA accounts, phone calls, or other types of electronic media.

Once final exams have been graded, there is no way that we can change your grade unless there has been some clerical error. You may feel that you are just a point or two away from earning a higher grade, but we cannot with fairness add points to your score without affecting the grades of everyone else in the class. That is why we give you opportunities to earn points by completing extra credit assignments throughout the semester. Take advantage of these opportunities. Changing your grade simply because you need a higher score is in violation of the Culture of Honesty guidelines of the University. If you have a general question from withdrawals versus dropped classes, to final exam conflicts and missed classes for illness, to the Hope scholarship you can visit the Student Affairs Website and view the FAQ page: <http://studentaffairs.uga.edu/students.htm>.