Welcome to BIOL 113 – Issues in Modern Biology! With continuing advances in medical care and research, it is important for you to understand what qualifies as “good” science. As you mature and take responsibility for your own health, it is particularly important to be capable of discussing with medical professionals what treatments are available and how they work. In order to make informed decisions you will need a basic understanding of the nature of science and principles of biology. The nature of science is more than doing experiments; fundamentally, the scientific approach uses data and observations to come to conclusions. From the central dogma to evolution, the principles of biology establish a framework for how our bodies function. Both are essential for a complete understanding of virtually all facets of modern health, including how cancer develops in the body and why it is difficult to treat.

By the end of this course you will be able to do the following:

1. Explain how scientific research is conducted and how scientific research improves our understanding of cancer;
2. Explain what cancer is and how it grows in a body;
3. Explain what causes cancer and how it persists and recurs;
4. Explain how cancer is treated and whether a miracle cure is possible.

Prerequisites: Non-biology major student who has not taken a biology course previously.

Course Website: http://sakai.unc.edu

This syllabus and other useful materials will be posted on the course website throughout the semester. It is your responsibility to check it and your UNC email account regularly.

Materials: There is no assigned textbook for this course. All required readings and handouts will be available on Sakai. It is your responsibility to bring these materials with you to class. For questions about using the printers on campus, please visit https://help.unc.edu/help/its-labs-cci-printing-faqs/ or speak with the ITS Service Desk.

Grading: There are a total of 4 units worth 50 points each and a final worth 50 points. Your letter grade will be based on the sum of your performances on these units and the final according to the following scale:
A: 93-100%  C+: 76-79.9%
A-: 90-92.9%  C: 73-75.9%
B+: 86-89.9%  C-: 70-72.9%
B: 83-85.9%  D: 65-69.9%
B-: 80-82.9%  F: <65%

In order to achieve a fair grade distribution, at the end of the semester, the instructors may adjust grade thresholds class-wide to improve your letter grades; the thresholds will under no circumstances be adjusted to lower your grades. **There will be absolutely NO appeals regarding the final grading scale (e.g. We will not round a score of 89.9 to a 90.0).**

**Grading disputes:** Scores for summative assessments will be changed **ONLY** in the event that a question was mis-graded or if assignment points were totaled incorrectly. If your assessment points were added incorrectly, please speak with an instructor and we will be happy to make a correction. All other requests for assessment re-grading must be in the form of a WRITTEN appeal to the instructor teaching that material justifying why your answer should be accepted. For every regrade request we reserve the right to re-grade your entire assignment, therefore a regrade request could lead to an increase, decrease, or no change in your final score. All appeals for changes must be made within 7 days after the assignment is returned. We will not re-grade any question or exam after the 7 days have elapsed, but will still work to correct exam point totals if you find an error.

**Class Participation:** Attendance and participation in activities is mandatory for the course. You must be excused by an instructor within 48 hours of any absence. Permission to make up the class missed is granted for:

1. Your own illness, or illness or death in your family with a written note from the Office of the Dean of Students or a health agency.
2. Official university function with written excuse from the official in charge.

If you know you need to miss class, you should immediately contact an instructor. Do not assume an email has been received unless you receive a reply. **An unexcused class deducts 10 points from your final grade and counts as a zero on any missed work.**

**Final:** The final will consist of an exam portion and a performance task. The final exam is cumulative. Exam questions will consist of a variety of question types including: true-false, multiple choice, fill in the blanks, and short answer. You will be given details of the performance task prior to the final as well as opportunities to practice the task during several units. However, the final product of the performance task must be completed in class.

**Communicating with your instructors:** This course will have several instructors assisting our class. These are graduate students who are volunteering their time to assist you both in and out of the classroom. Although they do not have office hours, they are reachable by email to schedule a meeting throughout the course. Please make use of these wonderful people. They want you to have your best chance for success.
Digital Etiquette:
This course may require you to use your laptop and/or cell phone during class time. Please be respectful of your classmates and restrict your use of digital devices to course content. Despite what you may know about yourself, multi-tasking is actually a myth and the brain cannot perform two or more tasks simultaneously. Please be respectful of your own learning and those around you who will be distracted as you scroll through Instagram, or catch up on basketball highlights.

If we see that you or your peers are distracted, we will ask you to put your devices away and you may forfeit your ability to earn participation points that day. There will be times when you have completed your work or answered a question, but your peers have not. We ask that you assist your peers when appropriate or use the time to review your notes while you wait. We understand that your devices connect you to your friends and family, but the classroom should be a place apart, however briefly, from the outside world and distractions. You will learn more if you concentrate on the course while you are here, and your classmates will thank you for not impeding their ability to learn. If you have to answer a text or a phone call, please step out of the room and return once you have completed your conversation.

Students needing accommodations: Please contact an instructor within the first two weeks of class if you will need special accommodations. For students who register through Accessibility Resources and Service (ARS) https://ars.unc.edu/ for different types of disabilities, you will be given accommodations such as extended time on exams or help in the class if needed.

The Department of Biology values the perspectives of individuals from all backgrounds reflecting the diversity of our students. We broadly define diversity to include race, gender identity, national origin, ethnicity, religion, social class, age, sexual orientation, political background, and physical and learning ability. We strive to make this class and this department an inclusive space for all students.

HOW TO BE SUCCESSFUL IN BIOL 113:

Participation is essential for success in this course. Attendance is required to participate. If you must miss a class, obtain a set of notes from a friend (we will also post some lecture slides on the course website). Review the materials before class because it will be much easier for you to understand the content and to participate in the discussions. After class, go back to your notes and study the points we have stressed. Ask questions as soon as you realize that something isn’t clear. The more you do with the material, the better you will remember it. You are not responsible for the subjects we do not cover. However, finding additional sources that explain the material in a way you understand will improve your understanding of the subject. While we will only test subjects that we have covered in class, additional examples may prove very helpful!

Take hand written notes using the lecture outlines. Research shows that students who take handwritten notes learn more (Mueller and Oppenheimer, 2014). Print out the materials before coming to class. Review them before and after class. Put your electronics away while you are taking notes.

Ask for help early and often. Email your instructors if you have questions. The sooner you reach out, the sooner it will get clarified. Review and quiz yourself frequently. Research has shown that the more often you practice retrieving the information (remembering without looking at your notes), the more you will retain (Karpicke and Roediger III, 2007). You may also
approach the instructors to discuss matters *unrelated* to class (e.g. your research and career interests).

**Uphold the Honor Code.** Academic honesty means that we respect each other and the work that we do; this means we behave with integrity in and out of the classroom, and do not lie, cheat or steal (e.g. plagiarism is a form of stealing). The University of North Carolina at Chapel Hill has had a student-led honor system for over 100 years. It is our responsibility to report any instances of academic dishonesty and violations of the Honor Code. The student-led Honor System is responsible for adjudicating any suspected violations of the Honor Code. *All suspected instances of academic dishonesty will be reported to the Honor System and students will receive a zero on the assignment or exam in question.* Your full participation and observance of the Honor Code is expected. Please report any violations that you observe. Information, including your responsibilities as a student is outlined in the Instrument of Student Judicial Governance (here: [https://studentconduct.unc.edu/sites/studentconduct.unc.edu/files/documents/Instrument.pdf](https://studentconduct.unc.edu/sites/studentconduct.unc.edu/files/documents/Instrument.pdf)).

**College can be challenging in unexpected ways.** It is possible that at some point this semester your multiple competing personal responsibilities and interests may get in the way of your academic success. It is also possible that you may get sick or have other personal emergencies. The bottom line is this: asking for help is a sign of strength and self-care! **Please ask for help early and often!** Small problems are easier to cope with than escalated issues, or waiting until the end of the semester. While we sincerely hope that you will let us know when things are not going well, here are other campus resources you can turn to, as well:

- **Dean of Students:** If at any time during the semester you experience a personal or family illness, loss, financial stress, academic access, living issues, interpersonal violence response, alcohol or similar substance related issues, and other forces that may interfere with your well-being and success and/or academic retention please contact the Dean of Students immediately (or contact your professor and we will do so for you).
  
  **Website:** deanofstudents.unc.edu

- **Academic Advising:** Your academic advisers are familiar with all of the campus policies, procedures and requirements.
  
  **Website:** advising.unc.edu

- **Academic Resource Center:** If you need accommodations due to a documented accessibility challenge, please contact ARS to coordinate for your needs.
  
  **Website:** ars.unc.edu

- **Counseling and Psychological Services (CAPS):** If you are experiencing any distress please speak with a medical professional in a confidential setting. The CAPS office has daily drop in hours or you may call them for an appointment (919-966-2281) or schedule online (healthyheels.unc.edu).
  
  **Website:** campushealth.unc.edu/services/counseling-and-psychological-services

- **LGBT Center:** Provides educational services, resources and advocacy.
  
  **Website:** lgbtq.unc.edu
● Carolina Women's Center: Aims to provide an equitable working and educational environment regardless of gender. Provides assistance to all individuals regardless of gender orientation.
   **Website:** womenscenter.unc.edu

● International Student and Scholar Services: offers services to help international students adjust to life in North Carolina and UNC.
   **Website:** isss.unc.edu

*We reserve the right to make changes to the syllabus, including the scheduled dates for exams or lecture topics and the addition or modification of assignments. These changes will be announced as early as possible so that students can adjust their schedules.*