

FALL 2017, CofC's Biology 111-01, Introduction to Cell and Molecular Biology

COURSE OBJECTIVES: BIOL 111 Introduction to Cell and Molecular Biology (3)

A foundation course for science majors emphasizing the concepts of structure and function in biological systems at the molecular and cellular levels. Topics include biochemistry, biochemical and molecular evolution, cell function, respiration, photosynthesis, genetics and molecular biology. Lectures three hours per week. <http://catalog.cofc.edu/index.php?catoid=7>

Co-requisite(s): [BIOL 111L](#). *Course Frequency:* Fall and Spring

Note: [BIOL 111](#), [BIOL 111L](#), [BIOL 112](#), [BIOL 112L](#) are prerequisites for all upper-division biology courses except for [BIOL 204](#) and [BIOL 209](#), which have no prerequisites. Students who have completed [BIOL 101](#), [BIOL 102](#), [BIOL 101L](#), [BIOL 102L](#), and who wish to take upper-division biology courses, may do so only with permission of the department. Students may not receive credit for both [BIOL 101/BIOL 101L](#) and [111/BIOL 111L](#), or for both [BIOL 102/BIOL 102L](#) and [BIOL 112/BIOL 112L](#), or for both [BIOL 111/BIOL 111L](#) and [BIOL 112/BIOL 112L](#) and Honors Biology. [BIOL 211](#) and [BIOL 211D](#) are prerequisites, and [BIOL 305](#) is a co- or prerequisite for all 300-, 400-, and 500-level course.

SPECIFIC LEARNING OUTCOMES:

1. Students will be able to identify the different biological molecules and their functions in living organisms
2. Students will become familiar with the diversity, structure, and function of cellular organelles
3. Students will comprehend how living organisms acquire energy from the environment and how energy is converted into different forms through processes of photosynthesis, cellular respiration, and fermentation
4. Students will demonstrate an understanding of cell division including both mitosis and meiosis
5. Students will demonstrate understanding of the basics of Mendelian genetics
6. Students will demonstrate an understanding of the mechanisms of DNA replication, RNA transcription, and RNA translation
7. Students will learn about cell communications between cells that are responsible for development of one cell to an organism, and its importance in normal cell and tissue maintenance and the breakdown of these communications in cancers.
8. Students will learn factual knowledge (terminology, classifications, methods, trends, and nearly a new language of biology).
9. Students will think and learn about applications of course material (to improve thinking, problem solving, and decisions)
10. Students will gain a real life-long appreciation about the applications of the classroom learned concepts and theories to practical biology that will promote a life-long passion of learning in as many possible students.

COURSE TIMES: Tuesday and Thursday, 6pm – 7:15pm in SSMB 138.

2 HOLIDAYS: **FALL BREAK:** S Oct. 15, 2017 – T Oct. 17, 2017, Classes resume: 10/18/17
: **THANKSGIVING:** W Nov. 22, 2017 – S Nov 26, 2017, Classes resume: 11/27/17

FINAL EXAM: Tuesday Dec 12 2017 in SSMB 138 from 7:30 – 10:30 pm.

INSTRUCTOR: Dr. Richard Southgate, PhD in Biology at U. Geneva Switzerland, 1984

E-MAIL: southgater@cofc.edu, I will respond to your important e-mail in less than a day in the weekday and max. 2 days on weekends.

OFFICE + PHONE: HWWE (Harbor Walk West) 308, Harbor Walk, 360 Concord Street, Charleston SC 29401. The tel.: 843-953-0340 is not very reliable as I am only sometimes in this room to my College of Charleston BIOL-111-02 class, Spring 2017.

teaching load this semester, so please communicate with me by e-mail: southgater@cofc.edu first. Of course, please try to call but there is no guarantee

I teach twelve hours per week, six hours in classes (BIOL-111 (SSMB) and BIOL-313 (HWWE)) and six hours at MUSC in two BIOL-313L laboratories and these 12 hours does not include extra time for lab. prep., lab. clean-up, buying/ordering life materials and chemical supplies, as well as both BIOL-111 and – 313 grading: quizzes, exams, final, lab. reports etc., lecture prep. & quiz/exam preparations, and many student questions / meetings etc., due to the time constrictions as listed above, and scattered parking arrangements across Charleston (between HWWE and MUSC).....

OFFICE HOURS: My official office hours for this semester for BIOL-111 will be in **SSMB 138 (this classroom is not supposed to be used after ~5pm) on**

a) Tuesday ~5:15 – 5:55pm and after class 7:15 – ~7:30 pm.

b) Thursday at 7:15 pm - ~7:30pm AFTER class.

c) appointment, please e-mail me to set up a good time for both of us.

I have a lab. from 2 – 5pm on Thursday at MUSC and then to clean up the lab, or finishing an experiment and then coming to SSMB, so I am not planning of having meetings on **Thursdays before the class**. Normally you would have a lot of extra time for meetings but with another 3 months to finish the Biology Department, I am squished in three different places and parking lots. For straight forward questions, please see me before or after class on T and after class on R or e-mail me for one or two questions or give me your available times so as to find a good time for a meeting.

My teaching schedule is: M, W and F, 10:30 – 11:20 am (CB), T and Th. 6 – 7:10 pm (111) and two labs, 2 – 5pm on W and Th = 12 hours (CBL) per week.

I will post all new schedule change information on OAKS and / or bulk e-mail.

Later in the semester, one Thursday class may have to be taught by someone else or with another task, as I have to finish a protein gel in my Cell Biology Laboratory at MUSC as I will probably not have time to finish it before the BIOL-111 class, I will let you know in class & OAKS.

REQUIRED COURSE TEXTBOOK:

Biological Science by Scott Freeman et. al. Sixth Edition (Pearson Publishers).

You can buy it, rent it, get the ebook, borrow it, or share it with a classmate, but you **MUST have access to this textbook! You will also need it for biology 112 (and most likely biology 211 if you are a bio. Major) so keep the book (as it is also a great reference book for all the later more advanced courses in the college).** Use the text and figures to preview and to reinforce what you are learning in class. There are self-quizzes that can be great study guides in the book, as well as a variety of web links to help you understand the material. So, there is a lot of material to cover in this course, so keep up with the reading and if get behind, definitely go to SI sessions (more the better) or see me (instructions above). Also access to **MasteringBiology with the textbook/web site.**

SUGGESTED HELPER COURSE MATERIAL:

The Study Guide for Biological Science by Freeman 6th Edition (Pearson Publishers).

This is not required, but it can be very helpful for many students.

ALL COURSE WEBSITE INFORMATION: will be found on My Charleston, OAKS, CONTENTS: all will be PDFs (due to space issues), + some Voice Thread videos, communications notes, notices, you tube videos etc. and Socrative for class quizzes and OAKS quizzes etc. (see below). Socrative will be explained below.

You are, therefore, responsible for ALL the information on OAKS/hand-outs/videos questions etc. in the Fall 2017 cell biology class, which will be the basis for its quizzes,

exams and final questions for your final grade.

SUPPLEMENTAL INSTRUCTION: The College of Charleston offers supplemental instruction (SI) for courses with especially high attrition rates (i.e., 25% or more of enrollees typically earn grades of D, F, or must withdraw). There are only 10 courses at CofC that fit into this category! That means BIOL 111 is considered one of the most difficult courses on campus! You will have a Biol-111 Fall 2017 SI leader for this course, and more information will be given in class and updated in class and OAKS very soon. Your SI helper can help you enormously to actively comprehend the materials and grasp the concepts that are presented in the class room and the textbook for quizzes and exams. Many years of data have shown that students who regularly attend SI do a lot better in their exams, usually at least a grade higher or more. Visit the Center for Student Learning on the first floor of the Addlestone Library with a walk-in science tutoring lab. (<http://csl.cofc.edu/labs/science-lab/index.php>). * Also go to their seminars and workshops on things like time management, note taking, effective studying, and test taking strategies (<http://csl.cofc.edu/study-strategies/workshops/index.php>). Many of the workshops are online (<http://csl.cofc.edu/study-strategies/workshops/online-workshops/index.php>) so you can watch them whenever you want.

REVIEWING CLASSROOM MATERIALS

- Students should expect to dedicate **MINIMAL 9 hours per week** to get a good grade (3 hours in class and ~2 hours extra at home **for each lesson**) to get a good grade = **9 hours**.
- **Think this course (and all the others) as a job, which requires hard work and dedication to be successful and please your boss ... (here your grade and the College, as I just collect your correct/incorrect answers to questions for a grade, which I am obliged to collect and give to the registrar.**
- This class should be student-driven as the motivation needs to come from the students first with my help and you need to taste the satisfaction with a good grade – work hard.
- Our class should be interactive and engaging but again it is up to you collectively to ask questions and engage and students are expected to **contribute** to our learning community.
- There are weekly obligations: quizzes, exams, home-work & power point presentations etc.
- **Procrastination will doom you, the course builds pretty quickly and if you are not on top, things can easily snowball.**

COURSE WEBSITES:

OAKS: Log on to My Charleston, Click on OAKS, Click on this course.

Click on CONTENT to see the homework assignments and lecture material posted after class.

You can also access OAKS at <https://lms.cofc.edu/>; <http://blogs.cofc.edu/oaks/students/tutorials/>

- **QUIZZES:** There will be two planned quizzes per week, one either using socrative app. or a paper quiz in the class room on random weekdays and an OAKS home weekend assignments, each with 2 points per question = 10 points per quiz (5 questions) = 20 points totally per week → and a total grade of 200 points. There may be also be some extra credit quiz questions, if not everyone comes to class but it can really help those in class

- **EXAMS:** There will be 3, 125 point exams in the semester
Th, Sep. 21; T, Oct 24 and Th, Nov. 30, 2017 in SSMB 138).

-

- **CUMULATIVE FINAL:** 175 points, 3 hours max. Tuesday Dec. 12, 2017 in HWWE 211 starting at

7:30 – 10:30 pm. <http://registrar.cofc.edu/calendars/#FES>

- **CLASS POWER POINTS:** As we have ~41 students in this class, there will be 10 short, ~10 minute review power points, one per week on various Cell Biology themes that are being impacted by current global problems and the effects on biology and other rare biologically connected observations/topics that needs explanations: topics (global warming, plastic waste in the oceans, endangered or about to be extinct soon species etc., Hydrothermal vents, Chemosynthesis rather than photosynthesis and energy, Europa and Mobile cave, Bacteria and Human cell numbers in the human gut / body, the term of surface area / volume and diffusion in the lung etc., coral bleaching, forest deforesting and the moon's effects on life etc. as teams of 4 students. This team will be four presenters and each will talk for a few minutes before the class. Each presentation will be worth 25 points, mainly on the presentation itself and the team will also create a two-page summary of the talk and the biological theme in question (Ariel, font 12, double-spaced, worth 25 points).

SUMMARY:

- QUIZ: 20 quizzes @ 10 points each @ 2 pts. each = total: 20 X 10 = 200 points.
- EXAM: 3 X 125 points = 375 points.
- FINAL: 175 points.
- Power Point Presentation: 50 points.

TOTAL: 200 + 375 + 175 + 50 = 800 POINTS.

Your **FINAL GRADE** is determined as a **percentage (%)** of your totally collected correct points of a maximum of 800 points. So a minimal A grade would be 92.9 % out of 100% or 743 / 800 pts. etc. So 92.8% = an A-

A	93-100 min. 743 pts.	C	73-76 min. 583 pts.
A-	90-92 min. 719 pts.	C-	70-72 min. 559 pts.
B+	87-89 min. 695 pts.	D+	67-69 min. 535 pts.
B	83-86 min. 663 pts.	D	63-66 min. 503 pts.
B-	80-82 min. 639 pts.	D-	60-62 min. 479 pts.
C+	77-79 min. 615 pts.	F	0-59 Failing grade

Please pick up your exam results! In every semester, there are several students who NEVER pick up ANY of their exams, and they have no clue what their overall grade is. You can discuss with me about your exam in the office hours, or by appointment via e- mail if you have missed many classrooms.

Quizzes = 200 / 800 points = 25 % of the total grade.

3 Exams = 375 / 800 points = 47 % or 16 % for each exam of the total grade.

Cumulative final = 175 / 800 points = 22 % of the total grade.

Power point presentations = 50 / 800 points = 6 % of the total grade.

SOCRATIVE INSTRUCTIONS: My Secretive #room number is 360792 and you need their app, as some of the classroom quizzes will be tested with Secretive (using cell phones, iPads, & laptops) and the its success largely depends on the strength of Wi-Fi in SSMB 138) ...

<https://play.google.com/store/apps/details?id=com.socrative.student&hl=en>, APP

<https://b.socrative.com/login/student/> login; <http://www.socrative.com/>;

VOICE THREAD is available on OAKS. The first time you use it, you have to sign in with your student ID and password. More info: <http://voicethread.com/about/features/>.
<http://blogs.cofc.edu/tltutorials/2016/02/09/socrative/>

QUIZZES/EXAMS/FINAL INSTRUCTIONS.

- During the exam, I will only answer clarification questions.
- Cell phones must be **TURNT OFF** (mine will be on for any important College notices) and they should be put away in bags, back packs, or purses during the exams and the final.
- If you need to use the restroom, tell me in person you are leaving the classroom and show me where your cell phone, Ipad, or laptop but putting it on the front desk to pick it up after.
- Exams may consist of multiple choice, short answer, and/or essay questions. The questions will come from course material covered in class discussions, OAK PDFs, assigned readings, and from the integration of material from any homework assignments, cases, projects and exercises.

STUDENTS WITH DISABILITIES who have the proper documentation through the CofC's SNAP services for extended exam times can take the exams at the SNAP office (assuming you want to use the additional time, if not you are welcome to take the exam with your classmates and as they will be on Fridays, you can finish the exam in my office [this not the case in the final, due to CofC policy]). Those students who will take their exams in the SNAP office must schedule their exams with them and inform me when they will be taken before the event. See Center for Disability Services (SNAP) for more info. <http://disabilityservices.cofc.edu> Please see me in class, lab. or my office to make sure you receive all the help by law. You also need to give me a copy of your official letter from the SNAP office.

COLLEGE OF CHARLESTON HONOR CODE AND ACADEMIC INTEGRITY

Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved.

- Incidents where the instructor determines the student's actions are related more to a misunderstanding will handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student's file.
- Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student's transcript for two years after which the student may petition for the XX to be expunged. The F is permanent. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.
- Students should be aware that unauthorized collaboration--working together without permission--is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others' exams, fabricating data, and giving unauthorized assistance.
- Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the *Student Handbook* at <http://studentaffairs.cofc.edu/honor-system/>
<http://studentaffairs.cofc.edu/honor-system/studenthandbook/>
<http://parkj.people.cofc.edu/HonorCode.pdf>

CENTER FOR STUDENT LEARNING see above. call (843)953-5635. <http://csl.cofc.edu/>

College of Charleston BIOL-111-02 class, Spring 2017.

Page: 5

STUDY SKILLS WORKSHOPS: Each semester a series of study skills workshops are offered free of charge to all College of Charleston students. The Workshop Series 101 is geared towards the general student population wanting more information on study skills. The Workshop Series 101 occurs three times a week lasting about 50 minutes for each session. Students will receive weekly reminders via email and Facebook for the upcoming session with time and place. You can also visit <http://csl.cofc.edu/study-skills/workshops/index.php>

CELL BIOLOGY FALL 2017 ATTENDANCE POLICY:

Students are expected to **ATTEND ALL CLASSES.**

Non-urgent/non-emergent situations (i.e. wedding, medical and/or counseling appointments, etc.) should be addressed by the student during times that do not interfere with the student's course schedules, just as if you were seeking time off from an employer....In the event that a student misses a class with a legitimate, documentable reason, that student may bring documentation to the Absence Memo Office located at 67 George Street (between Stern Center and Glebe Street) where the student may fill out a form with a schedule of missed class(es), dates missed, etc. A representative from the Absence Memo Office will notify the appropriate faculty by E-mail.

Any missed assignments, class work, papers, tests, etc., are to be arranged between the professor and the student. It is important to note that the only individual who can authorize an excused absence is the professor of the missed class. <http://studentaffairs.cofc.edu/about/services/absence.php>

If a student is ill or has a tragedy or any health issues etc. and cannot come to a regular classroom, these students with proof (doctor's note etc.), I will make arrangements to make up any quizzes/exams and will help that student as much as I can to catch up but remember, any student with 4 unexcused classes in this class is a candidate for WA.... I really hope we never get to this point but to be sure, attendance checks will be frequent by socrative.

Any athletics in the Cell Biology class have to show me their official schedule if you are away on that class and if not they will be labeled as non-excused.

I will take random attendance throughout the semester and the weekly class quizzes automatically creates an attendance list. If I see you have not been in the classroom and without an excuse, I will e-mail you after 3 times to have a meeting with you, and after I have documented non-attendance after 4 classes with **no excuse(s)**, I have the right to give you a **WA**, something I clearly do not like this chore at all but it's your choice. <http://facultysenate.cofc.edu/archives/2010-2011/oct-5-10/senate-minutes-oct-2010> <http://blogs.cofc.edu/parents/2011/02/04/missing-classes-excused-absences-policy/>. Details in <http://catalogs.cofc.edu/undergraduate/class-attendance.htm>

The College of Charleston's Calendar for Fall 2017.

<http://registrar.cofc.edu/pdf/ac-2017fall.pdf>

THE FALL 2017 EXAM SCHEDULE

Exam Time	Wednesday Dec 6	Thursday Dec 7	Friday Dec 8	Saturday Dec 9	Sunday Dec 10	Monday Dec 11	Tuesday Dec 12	Wednesday Dec 13
8:00am-11:00am	MWF 7:30am	TR 9:25am 9:55am	MWF 10:00am 10:30am	TR 8:00am 8:30am	Reading Day	Math All 101,111, Exams	TR 10:50am 11:20am	MWF 9:00am 9:30am
12:00pm-3:00pm	MWF 8:00am 8:30am	TR 7:05am	MWF/MW 2:00pm 2:30pm	MWF 1:00pm 1:30pm		MWF 11:00am 11:30am	TR 12:15pm 12:45pm	MWF 12:00pm 12:30pm
4:00pm-7:00pm	E	TR 1:40pm 2:10pm	MWF/MW 4:00pm	H	Online Exam	F	TR 3:05pm 3:35pm 4:00pm	MWF 3:00pm 3:30pm MW 3:25pm
7:30pm-10:30pm	G	J	C	B		D	I	A

EVENING CLASSES: Exam blocks A through J

Class meets two days/week during term:

(The time the class normally **begins**, along with the meeting days, determine the exam block)

TUESDAY & THURSDAY EVENING CLASSES:

Class begins at or after 5:00pm but before 5:30pm: Use block H

Class begins at or after 5:30pm but before 6:45pm: Use block I

Class begins at or after 6:45pm:

Use block J

← US!

A VERY TENTATIVE LECTURE SCHEDULE*

Week/Day	Topic	Readings
Aug 22, 24	Introduction	Chap 1
Aug 29, 31	Chemistry, Water and Life	Chap 2
Sept 5, 7	Organic Macromolecules, Proteins	Chap 2
Sept 12, 14	Nucleic Acids, Carbohydrates, Lipids and Membranes	Chap 3,4 Chap 5,6
Sept 19	Membranes 2	Chap 6
Sept 21	Membranes 3 EXAM 1 Intro, BC, Water, Macromolecules, Membranes	
Sept 26, 28	Cell Structure	Chap 7
Oct 3, 5	Bioenergetics and Enzymes Cellular Respiration	Chap 8 Chap 9
Oct 10, 12	Cellular Respiration 2	Chap 10
Oct 17	FALL BREAK	
Oct 19	Photosynthesis	Chap 10
Oct 24	Photosynthesis 3 EXAM 2 Cell Structure, Biogenetics, Enzymes, Cellular Respiration, Photosynthesis	
Oct 26	Cell Cycle	Chap 12
Oct 31	Cell Cycle 2 and Cancer	Chap 12
Nov 2	Cell Signaling	Chap 11
Nov 7	Meiosis	Chap 13
Nov 9	Mendelian Genetics	Chap 14
Nov 14, 18	DNA replication Central Dogma- how genes work	Chap 15 Chap 16
Nov 21	Transcription and Translation THANKSGIVING BREAK	Chap 17
T Nov 28	Transcription and Translation 2 Regulation of Gene Expression	Chap 17 Chap 18/19
R Nov 30	Regulation of Gene Expression 2 Exam III Cell cycle, Cell Signaling, Meiosis, Mendelian Genetics, DNA, Transcription, Translation, Regulation of Gene expression.	Chap 18/19
Sun Dec 10	READING DAY, hopefully in SSMB 138 (INFO LATER)	
T Dec 12	EXAM IV- FINAL, everything above (7:30 - 10:30 pm) in SSMB 138.	

*This schedule is likely to change.....

HOW TO DO WELL IN THIS COURSE:

Reading the text and attending lecture that are required. This is a detail-oriented course and you will not do very well if you never read the book. If you must miss lecture, get the notes from another student in class but there will be a quiz, attendance and your power presentations every week so unless proved you are ill.

- Read the text assignments before lecture.

- Take many notes during lecture!!!!

- Within 1-2 days (before the next class, best on the same day before you forget), rewrite or

consolidate your notes to incorporate the classroom teaching, textbook material, homework, and what you went over in supplemental instruction. This makes you **ACTIVELY** learn the material, and makes a huge difference in what you remember. **Repetition makes you a scholar but it takes time, effort and energy.** Just staring the screen is not good enough.

• When I was a student, I wrote everything I could and then overtime, wrote it on cards (OK that was a lot of years ago and no internet) with the goal to make a short list of a few cards that I repeated to myself many times before the exam as I it was difficult to remember these facts/terms for a long time. Talk to yourself or to your friends to get that info into you head. In essence you have to use **several different ways** to review the material. **Just looking at the computer screen is not enough, it goes in one ear and out the other ear**

- When you study the book, answer the textbook questions that are in blue throughout the chapters.
- Come to class on time, every time unless ill etc.
- Ask questions!
- Go to supplemental instruction religiously (see below / soon). These sessions meet several times per week with a schedule based on when students are available.
- Get a dedicated notebook for the class to stay organized.

(OK a lot of bossy instructions but these “suggestions” make a huge difference!!! as I do not like giving an F or even a D grade to a student. To have a chance in the biological war that includes medicine, your minimal needs to be a B- or C+.

EXPECTATIONS: the below guidelines should create a comfortable and productive learning environment throughout the semester.

YOU CAN EXPECT FROM ME:

- To start and end class on time (6 to 7:15 pm on Tuesdays and Thursdays in SSMB 138 unless an emergency. I am aiming to be in SSMB 138 around 5:10 pm +/- 5 minutes for any student discussions if the classroom is still free.
- To reply to e-mails within 24 hours on weekdays and 48 hours on weekends (and hopefully quicker).
- To assign homework that adequately covers the material & meets the learning objectives of the course.
- To give exams that accurately reflect the material covered in class and assigned in homework.
- To release the grades to you, at the best of my ability, before the next class by using Scantron sheets because by hand, it takes 1 to 2 weeks to grade the ~40 students or if I am ill etc. I do not have a TA and I do have 12 hours of teaching per week, so I grade as fast I can but it must be both accurate and unbiased.
- To help all student in this classroom **who asks for help**, if you do not ask, I assume you are doing great..... My advice for you, if you are struggling with understanding the course materials, is to see me before the class or a meeting either alone or best with friends or e-mail questions, earlier rather than later, i.e. not later than the first exam. I have many requests for urgent help from students within the last two to three weeks before the end of the course begging for extra credit and the truth is that there is very little I can do to help these as it is simply way too late, as I have to give this extra credit to everyone in the course and even ~20 more points have no effect, so please seek help.

I CAN EXPECT OF YOU:

- To come to class on time.
- To be attentive, engaged in class and ask many questions.
- The ready for quizzes and even a few pop-up quizzes.
- To respect others in the classroom, and adhere to the rules of the honor code.... i.e. NO CHEATING.
- To refrain from using cell phones during the class time for messages, gossip, games etc. but your cell Phone, laptop or I- Pad will be used with Socrative classroom quizzes.

- To spend an **adequate amount of time** on the homework each week (for **every 1-hour** in class is equivalent to **2 hours** at home (CofC suggested) i.e. 3 hours per week in class and 6 hours in prep. time per week minimal for a decent grade. **The bottom-line is that to understand biological concepts and its interactions in depth requires time So do all your homework first and then have fun not the other way.**
- To seek help when needed.
- To enjoy Biology and all its fascinating interactions, not only in the classroom but for the rest of your life, you must genuinely love Biology because it is very easy to see that students are passionate about Biology or not. I suppose the test is that you react if you hear some new biology news and your response. True Biology lovers are continually seeking more.

If you see mistakes in this syllabus, please let me know.