

**College of Charleston (CofC)'s Fall 2020 ONLINE, SYNCHRONOUS
Cell Biology (CB) course, BIOL-313-01 (Wed. 8-26-2020 - Fri. 12-4-2020).**

PART A) COMMUNICATIONS AND TEXTBOOK:

INSTRUCTOR: Dr. Richard Southgate, Biology PhD, U. of Geneva, Switzerland, 1984 (see more below).

E-MAIL: southgater@cofc.edu.

How should I correspond with you?

As we are online, communication with me must be done via **email**. Some procedures also need to keep in mind.

- I receive **many** emails every day from students that are asking very similar questions that could be better answered by **reading the syllabus** or **asking a classmate** for this information first by using the follow steps:
- **Refer to the class schedule and syllabus on OAKS.**
- **Check OAKS for new announcements & instructions on its front page, including OAKS discussions.**
- **Discuss these questions with several of your friends and have fun when learning.**

If and only if your question is still a mystery, please email me after having following the suggested steps above.

Email: Most contacts at the College are dependent on email for communications.

The way you present yourself in emails to your instructor, your friends, or inquiring for a summer position at CofC or MUSC etc. **says a lot about your work ethic, and your priorities. Start practicing email etiquette at the College now so that it will be second nature when you get your great new job.**

When emailing with me, please:

- include **"CB BIOL-313"** in the subject line, - use a **"polite"** salutation,
 - please fully sign your name, - use **complete** sentences, and
 - **proofreading your email, don't laugh, it takes seconds,**
- and this simple task makes you look professional.**

I will answer your email within 24 hours, but this will be slower on weekends (24-48 hours).

As I would like to have a sort of private life at home, **I stop responding to emails after ~9:00pm,** unless emergencies. If you do not hear from me after 24 hours, send another email (as it can happen if I did not see the original email, and after 2 days and no answer, send me a third and angry (but still polite) email, but this will be very rare (my badge of honor), although this semester may be very different than the norm.

SUMMARY: I promise to answer your e-mails within 24 hours weekdays (48 hours on weekends), which will be probably much shorter in time, unless there is a major reason.

SOME INFORMATION ABOUT YOUR INSTRUCTOR

I was born in Great Britain many moons ago, and at the age of 17, I moved to Central Europe for 12 years, before arriving legally in the USA in late 1984. As a Post Doctorate (i.e. having earned a PhD), I have worked as a Molecular Biology researcher at Harvard University, Boston University School of Medicine, M.I.T., Lehigh University and now at CofC (since 1999). Currently, due to my teaching load, I no longer contribute much to Dr. Agnes Southgate's CofC's research interests on the origin and evolution of insect flight at both the molecular and cellular levels in insects. We have collaborated



on this research themes since the early 1990s with published articles (some shown below). Starting in 2001, I have been teaching at CofC to now, except an 18-month research grant between in 2006 - 2007. Over the years at CofC, I have taught BIOL-111, 101, 102, 305L, 313, 313L, 322 (class and lab.) and 312L, and I would have loved to teach evolution, but not yet. In late 1998, my wife and I had the honor to become USA naturalized citizens.

A FEW PAST PUBLICATIONS:

- [Molecular analysis of the muscle protein projectin in Lepidoptera.](#) Ayme-Southgate AJ, Turner L, Southgate RJ. *J Insect Sci.* 2013;13:88. doi: 10.1673/031.013.8801.PMID: 24206568. **Free PMC article.**
- [Projectin PEVK domain, splicing variants and domain structure in basal and derived insects.](#) Ayme-Southgate A, Philipp RA, Southgate RJ. *Insect Mol Biol.* 2011 Jun;20(3):347-56. doi: 10.1111/j.1365-2583.2011.01069.x. Epub 2011 Feb 23. PMID: 21349121
- [Nucleotide sequence analysis of the Drosophila small heat shock gene cluster at locus 67B.](#) Southgate R, Ayme A, Voellmy R. *J Mol Biol.* 1983 Mar 25;165(1):35-57. doi: 10.1016/s00222836(83) 80241-1.PMID: 6302284, and another 11articles.

OFFICE: RITA room 224, 2nd floor. Office Tel.: 843-953-7374 is NOT very reliable, as I am often NOT in my office, as I am sometimes at home, teaching or in the labs, etc. so PLEASE e-mail me at southgater@cofc.edu.

As the Cell Biology class will be ONLINE this semester, there will be no official “office hours” in my office, as it is too small (less than 6 feet / ~2 meters for social distancing) thanks to COVID-19.

Instead, we will communicate by GROUP, or even SOME PRIVATE ZOOM MEETINGS if needed, and I have set up a CB/CBL shared virtual zoom meeting: THURSDAY, 11 am to 1pm (probably in RITA 224 or more likely RITA 143, as I need to prep. the CBL, so I am guilty of multitasking, but if you join the Zoom meeting at the time, you have preference.

We will talk all about these various issues in the first ONLINE AND SYNCHRONOUS CLASS, as there will be regular weekly lectures, M, W and F from 12 noon to 12:50 pm to the end, via zoom meetings and recording.

Recording of Classes (via ZOOM)

Class sessions will be recorded via both voice and video recording.

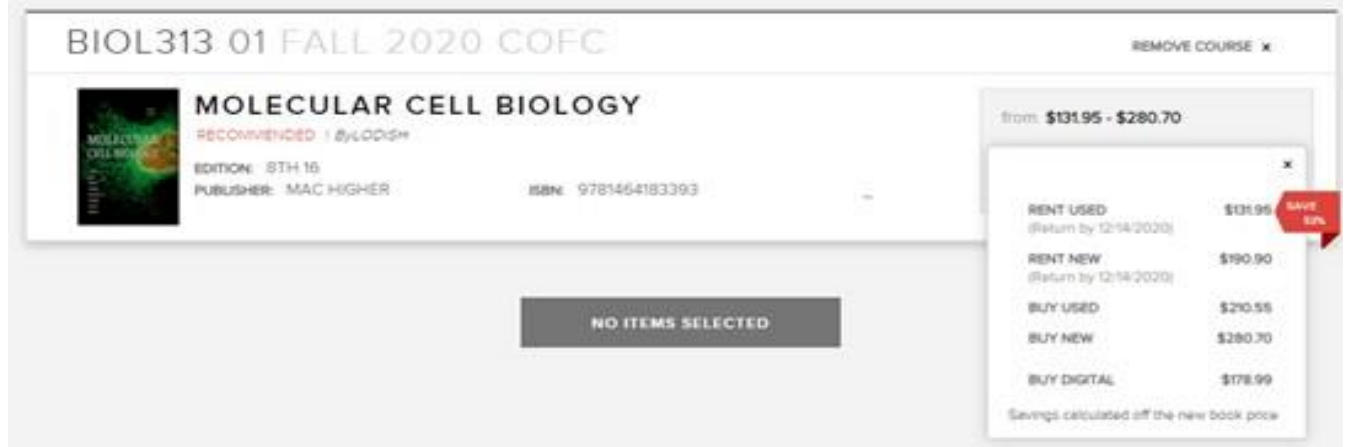
By attending and remaining in this class, the student consents to being recorded. Recorded class sessions are for instructional use only and may not be shared with anyone who is not enrolled in the class. **As the “online” zoom sections will normally have students asking a question in the session, the recording will record your voice. If students do not want to be 'seen' or 'recorded', they can mute or turn off their video during the synchronized meetings, and they can watch a recording of the synchronized meetings afterwards. This is legally up to you, but you have the option.**

If a few of you wish to set up a private zoom, let me know by email because my schedule this semester is 12 hours teaching physically this semester:

- M, W, F Cell Biology online course, 12-12:50 pm, BIOL-313-01, (3 X 50 minutes/week),
- T and W, Cell Biology Lab., BIOL-313L-01 and -3, in RITA 143 and RITA 145 (as all the Molecular Biology labs. will be online, (6 hours).
- M, Genetic Lab., BIOL-305L—3, in RITA 169, and possible RITA 171 (3 hours).

RECOMMENDED TEXTBOOK: “Molecular Cell Biology”, Lodish *et al.*, Version 8, April 1st, 2016
 Hardcover: 1280 pages. Publisher: W. H. Freeman; Language: English; ISBN-10: 1464183392; ISBN-13:978-1464183393. This is a great (but expensive) textbook. Earlier versions of this book miss a lot of current knowledge, (and this textbook it is already nearly five years old, with a new version coming soon, so it should be less expensive ...), so seek a soft book or even an e-book of the 8th version, but the latter is more difficult to see figure details (my opinion). You can find the textbook at the CofC Bookstore:

<https://cofc.bncollege.com/shop/BNCBTBListView?catalogId=10001&langId=-1&storeId=65075>



and there are several great other great ways to get this book, and cheaper, like on Amazon:

https://www.amazon.com/Molecular-Cell-Biology-Harvey-Lodish-dp-1464183392/dp/1464183392/ref=mt_other?_encoding=UTF8&me=&qid=1594769121

Textbooks like Lodish *et al* can also be very useful, if your future career needs a great textbook for reference later i.e. keeping the textbook rather than selling it.

PART B. INFORMATION ABOUT THE COURSE:

All OAKS information will be found on: MYCHARLESTON, OAKS, CONTENTS, MODULES in the form of PDFs, zoom recording (unless modified by the administration), videos, some or many Voice Thread communications (depending on your wishes, my energy levels, and if zoom recording is allowed), plus notes/guides. PDF and recorded zooms of the online class will be available on OAKS immediately AFTER the lecture, but the Notes and guides will be posted, at the latest, on Sunday’s afternoon on OAKS at the beginning of the new week and module(s).

A short and longer PDF version of the same online course information will be also posted on OAKS after the lecture, that includes “extra information, with extra slides that have a red/yellow box” in the longer PDF, an example on the right is famous six-toed cats in Key West, that discusses a particular topic in greater detail, and will not be presented in the zoom or VT lectures on OAKS for clarity. If someone is really interested in one of these extra information slides, we can discuss in an individual, group or even in lecture zoom meetings, but due to severe time restraints, please email to set-it up first with me.

REMINDER: You are responsible, FOR ALL the information in this online course that is presented on OAKS (quizzes, exams +

Ernest Hemingway (1899–1961)
<https://www.Hemingwayhome.com/cats/KeyWest,FL>
https://en.wikipedia.org/wiki/Ernest_Hemingway
 He was given a white, six-toed cat by a ship's captain, and some of the cats who live on the museum grounds are descendants of that original cat named Snow White.

the final etc.) that includes the extra slides, however, these extra slides help in understanding and expanding the topic better rather than really new information. I also state now that the questions for the quizzes, exams and the final questions are based on the information that has been discussed, debated and learned from the lectures, and your projects in these lectures, but not on any topics that we have not been taught in this course.

COURSE OBJECTIVES: This online course focuses on the structure and function of cells.

BIOL 313 Cell Biology (3 credits) studies the structural and functional correlates in cell biology. Topics include membrane specialization and organization, cytoskeleton structure and function of cellular organelles, adhesion, motility, mitotic mechanisms, transport mechanisms, nucleus functions including transcription and translation, simple immunology, bioenergetics, and cell signaling.

(Signal Transduction Pathways (STP) are something very new to most of you, but if you wish to work in medicine or research, you absolutely need to learn its basics.

PREREQUISITES: BIOL 111/111L, BIOL 112/112L & BIOL 211/211D; 1 year of chemistry.

CO-REQUISITES/ PREREQUISITES: BIOL 305. CHEM 232 can be per substituted for BIOL 211 / 305, plus MATH 250 or equivalent course in statistics or permission of instructor.

PART C: COURSE LEARNER-CENTERED EXPECTATIONS or in English:

WHAT CAN YOU COUNT ON TO DISCOVER IN THIS ONLINE CLASS?

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

YOU CAN EXPECT ME:

- To start and end online class on time at 12–12:50 am, M, W and F (if I am healthy).
- To reply to e-mails within max. 24 hours on weekdays, and max. 48 hours on weekends (unless a real emergency – hurricanes, the flu, COVID-19 and anything else you can imagine...).
- To assign discussion board/projects/quizzes/exams and the final that adequately covers the material and meets the learning objectives of this course.
- To give exams that accurately reflect the material covered in previous classes and assigned in homework tasks etc.
- To release the exam grades to you, at the best of my ability, within 7 – 10 days max. unless I am ill etc., as I do have 12 hours of teaching per week plus the “extra tasks, so I grade my 30 + student exams as fast I can, but I must be accurate and unbiased, so I prefer being a bit slow rather than rushing.
- To help all students in this classroom, especially if they ask for help. If you are struggling with understanding the course materials, we can set up a zoom meeting, either alone, or best with friends, earlier rather than later in this course (understand there is little or nothing I can do to help students in the last few weeks of the semester) If you are struggling, there is no shame to ask for help. I always treat all students the same, and I will do my best to help you, but you must contact me first, and as my M, T and W teaching days are very busy, I suggest you re-email me, if you got no answer within 1 or 2 days as it may happen this semester, and make it clear, I would not be happy if it happened.

I CAN EXPECT FROM YOU:

- To join the BIOL-313 online class on time, M, W and F, 12-12:50pm. If you join the lecture late, get notes from your friends, check out the zoom recording if it is allowed and/or Voice Tread videos.
- Online courses mean you still need to be attentive, engaged in the class and ask many questions!!
- To respect everyone around you and adhere to the rules of the CofC's honor code.
- To spend an adequate amount of time on the homework/quizzes each week to earn a great grade at the end. The freshman BIOL-111 rule of 1 hour in class and min. 2 hours of study after each class,

means 3 hours in class requires 6 extra hours per week minimally!!! but as you are not in BIOL-111, but in a BIOL-313-01, the totally amount of time on this course per week must be minimally 9 to 10+ hours to get a great grade.

THE TRICK OF DOING WELL IS:

- have a mindset that wants to win, doing what is necessary to win, and not just looking at the clock all the time.
- Of course, you must balance your many courses, but Cell Biology is an important part of your Biology degree, so put in the time.
- Have fun and take pride in getting great grades. If you are working for a Biology degree, you must be totally immersed into Biology, that means you must love anything biological (OK there are some more boring biological topics, but virtually everything else is fascinating). Whenever you learn something new, I assume you want to know everything about it. In a sense this parallels life. I am not saying you think about Biology all the time, but to be a biologist, you have to crave for biology, and all its wonders, because interest is tied to your effort and success, as nothing is free, and if you really love biology, you are hooked for life. If you are not really interested in biology, look for another career, because if you have no real interest in biology, you have a very low chance of being a great student in this field.
- I personally fell in love with biology in a class many years ago when watching *Elodea*, an aquatic plant, called waterweeds, with a Nomarski microscope that uses Differential Interference Contrast (DIC) to produce a pseudo 3D-effect. The chloroplasts in their cells were swirling, and I was absolutely fascinated looking at them, and then my instructor dropped a small amount of ethanol on the slide, and all that beauty just stopped. That demonstration of living and then instant death, made me into a lifelong biologist, as I want to understand the living.

STUDENT LEARNING:

Students will learn:

- A deep and detailed understanding of the underlying components of modern cell biology, including cell metabolism, membrane organization, organelles, compartmentation, membrane trafficking, the cytoskeleton, cell division, and cell signaling and all their integrated interactions that are responsible for all cellular life on Earth.
- The ability to use the scientific method in obtaining, analyzing, and evaluating empirical evidence for cellular structure and processes.
- have fun, as you will learn to love Biology, as you should/will be fascinated with this course...

HOW TO DO WELL IN THIS COURSE:

Cell biology is a very complicated subject (packing 3.5 billion years into just 3 months) As many of you are seniors, it is expected that you work hard, join every regular synchronous online lecture at noon (M, W and F) unless ill, asking great questions, be interested, and *studying effectively* for the exams.

Attendance, even online, in lectures is required and each online class will be tested via OAKs quizzes and/or Poll Everywhere for class questions and if you are not there, I will know you were not there). Also, as the online lecture is at noon, you have no real excuse unless you are ill or any other proper reasons with documented proof.

PART D, TESTING STUDENT’S RECALL OF THE ONLINE COURSE MATERIALS:

QUIZZES: There will be an online quiz per week on OAKS quiz, posted on Thursdays on the material that has been being discussed in the last three lectures (first quiz: September 3 at noon), and the deadline for the quizzes will be 11:59 pm EST on Saturdays. The quiz, therefore, will be asynchronous i.e. you have the liberty to choose when to want to start, but when you start, you have 7 minutes to answer the 5 multiple choice questions on OAKS, 2 points per question for a total of 10 points (this time can be changed with some students in this class with documented medical reasons – see disabilities below). My wish list is to have 12 quizzes in the semester, and then 2 of your worst quizzes can be dropped, for a total of 100 points in total. If a hurricane or anything else disturbs the planned number or timing of these quizzes, you will be notified on

OAKS and bulk emails that the Syllabus and the number of will be modified. Please remember, we are in hurricane territory, so we do not know what will happen in the next couple of weeks

EXAMS: 3 planned online, synchronous exams, of 100 point each, in 50 minutes, in this semester:

EXAM #1: WED. SEP. 23, 2020.

EXAM #2: WED. OCT. 21, 2020.

EXAM #3: FRI. NOV. 20, 2020.

These dates may be changed in the case of an emergency (hurricane(s), flooding, COVID-19 etc.).

CUMULATIVE FINAL EXAM: 125 PTS., 2 HOURS, officially on SUNDAY DECEMBER 13TH, 3:30 to 5:30 PM. I will also have a 2 hour Zoom meeting to ask questions for the final exam on Saturday morning (Reading Day 2) on December 12th, and we can set up the precise time later.

The College is installing an exam / final proctor system at the College due to the unfortunate possibly of student cheating as we are online ... Of course, I trust you to be honest, but the College feel it is necessary. I will pass on the details when I know. I believe you must sign up, at that time, but the good news, it looks you do not have to pay.

DISCUSSION BOARDS: There's no real hand raising in an online classroom – and no vigorous head nodding when a classmate makes a great point. In a virtual class, there's no chance to approach an instructor after a lecture to ask about the day's discussion. If online college students want to have a real conversation about class material, it's the **discussion board**, a major component of most online courses. Ideally, discussion boards help online students **CONNECT WITH THE COURSE'S INSTRUCTOR, THEIR CLASSMATES** and with **THE CONTENT BEING TAUGHT** as it's a great way to address **ALL THESE THREE ASPECTS**, especially in encouraging students to engage and learn from each other. With this approach, learners address various levels of thinking skills from **RECALLING INFORMATION** to **ANALYSIS** and **SYNTHESIZING** new information in their communications via discussions.

Discussion board components of online classes indicate how to do well:

- **READING DIRECTIONS IS KEY:** simply read and understand the posted instructions.
- **SAY SOMETHING SUBSTANTIVE:** While online instructors want to hear student opinions on discussion boards, they want those opinions to be backed up by **FACTS**. Citing sources from inside and outside of materials covered in class can cut back on **PLAGIARISM** and make a student's argument more legitimate.
- **DON'T PROCRASTINATE:** Participate early and not at the deadline because if everybody participates at the deadline, the quality of the conversation is very, very surface level learning.
- **ASK A QUESTION IF YOU'RE CONFUSED:** If a student is stumped on an assignment, help is often only an email away, the instructor or classmates or both as well as the discussion board.
- **REVIEW CONTENT FOR CLARITY and TONE:** Make sure a discussion post is written clear, complete sentences. Swear words, writing in all capital letters and multiple exclamation points are **OFF LIMITS**, if you are upset or frustrated, there are many peaceful ways to solve this issue.

As an instructor of this course, I will do my very best to assist and guide.

The discussion board will have three components:

1a) A means for you to voice any problems, questions, discussions, and discoveries, primarily target to the students in the course.

1b) The rules here are the same as with email, and in life generally. Respect everyone [See the famous poem: The Desiderata: <https://medium.com/publishous/the-meaning-behind-the-desiderata-poem-8c2e3296d6cb>], write in good English, no angry emails or cursing. Make it clear, if you have a problem or upset with me, or everyone else, voice your thoughts in good English.

At the beginning of the semester (first class), I will ask you to create **15 student groups of 2 students (currently 30 students, 9-14-20)**, but these numbers can change up or down at the beginning of the semester.

I am planning six discussion boards in this semester, one every two weeks starting on September 2, see below, so I open OAKS from W Aug 26 to M Aug 31 for the teams to sign up.

Each will be loosely based on the order of the modules that we will see in the progress of the semester (see below), and I will post two or three open-ended questions to start the conversation. Each group can decide best on one, or two or all three questions, your choice, allowing you to making comments, research, and discussing about the topic(s) with both your group members and other student groups. This format, as long it is under the same umbrella, allows you to be curious, and finding new aspects of this original question. In this way, you will have a chance to learn more of these topics, than just in the lectures. If all the **10 student groups choose only one of the possible two or three questions**, it will be very boring ...

Every chosen group student is also required to do some research from peer-reviewed articles, which can be fun, so to explain your chosen topic.

Each student groups should also comment on at least 2 responses provided by other student's groups on the same topic in the discussion boards. As we are online, the rules are straight forward like before: no bad language, respect every other person in this course, no mischief, and there will be consequences if you break the rules (**Honor Code below**), especially online, but I only use this approach if you are not actively participating in this course or you are deemed to be rude or destructive by and the opinions of your student comrades.

Discussion boards will be restricted by start and end dates and times, and **NO EXTENSIONS WILL BE GRANTED.**

The discussion board topics will cover the following modules:

- 1. 09-02-20 → 09-16-20, INTRODUCTION, BIOLOGICAL CHEMISTRY, MACROMOLECULES, PROTEINS + ENZYMES,
- 2. 09-16-20 → 09-28-20, MEMBRANE STRUCTURE AND FUNCTIONS AND SIGNALING PATHWAYS
- 3. 09-28-20 → 10-14-20, ENERGY: ALL ABOUT CELLULAR RESPIRATION + PHOTOSYNTHESIS
- 4. 10-14-20 → 10-28-20, NUCLEIC ACIDS, DNA and RNA, TRANSCRIPTION AND TRANSLATION
- 5. 10-28-20 → 11-11-20, SECRETORY PATHWAYS, ER, GOLGI, LYSOSOMES, EXOCYTOSIS AND THE PLASMA MEMBRANE RELATED FNCTIONS
- 6. 11-11-20 → 12-02-20, ALL THREE CYTOSKELETON MOLECULES AND MITOSIS

Your collective group need to work together (even online) to create **a max. 2 page, DOUBLE SPACED report (word (NOT PDF), Ariel, font 12, black)**, to summarize your findings and references, together with a short , ~ five minute video, on Zoom to visualize your findings.

Each topic will be 20 points (pts.) each, and all six topics will be 6 x 20 pts. = 120 pts. and your worst report will be dropped leading to a total of 100 pts. All the reports, and the videos of the class's discussion board will be fully visible on OAKS for all the students to see.

Each report will be broken into 7 pts. for your scientific report, 5 pts. for any comments from two other groups, and 8 pts. for your video (zoom, Voice Thread etc.) = for a total of 20 pts. for each topic.

For another 10 points, you will a crossword (you have clues, and you find the word, it's not difficult) and the next discussion board will be a different game, and I will reveal it at the beginning of the

second discussion board. Neither will be bad, but fun, and we can discuss if you have any questions.

The complete reports (report and 2 student comments) will be graded as either:

<https://templatelab.com/rubric-templates/>

20 pts. excellent

Appearance/ Neatness	The text and the illustrations are visually appealing, clear, and colorful. The book is free from smudges and stray marks.
Content Knowledge	Exceptional idea development with supporting details written in the author's own words, or correctly credited if quoted.
Image/Communication	Images are highly engaging for content and audience.
Mechanics	The book contains only minor mechanical errors.
Factual Information (A-Z)	All letters are represented with accurate information, interesting information, and relevant illustrations.

14 pts. average,

Appearance/ Neatness	The text and the illustrations are clear and colorful. No more than a few smudges or stray marks are visible.
Content Knowledge	Satisfactory idea development with some supporting details written mainly in the author's own words, or correctly credited if quoted.
Image/Communication	Images are appropriate to content and audience.
Factual Information (A-Z)	The book contains some mechanical errors but does not distract the reader. All letters are represented with minor errors in information, undeveloped information, or irrelevant illustrations.

7 pts. bad. (even not very good, you did work on the report...)

Appearance/ Neatness	The text and the illustrations are adequate and clear. More than three smudges or stray marks are visible.
Content Knowledge	Unclear, incorrect, or limited idea development with lack of details. Author's own words are not used, or quotes are not correctly credited.
Image Communication	Images detract from or are inappropriate for content and audience.
Factual Information (A-Z)	Mechanical errors distract the reader. Letters are missing from the book, or information is largely incorrect, or illustrations are not accurate.

We will also set up a weekly (or semi-weekly group zoom meeting if needed) for questions etc. to help, again to be planned and discussed at the beginning of the semester.

SUMMARY: Six discussions board sections, every two weeks, 20 points each – 10 pts. for research, references that includes comments of two other group comments on the same topic (you have a choice of one from three max. subjects/questions), and a small summary of your findings and 10 pts. for a short (5 min. Zoom video. There will also include a crossword and another game, one per section. The discussion board sections will also have offer Zoom group meetings, that we will be decided by you.

There will also random one quiz during the lectures with **NO SCORE**, to determine the class's understanding of a specific topics in the lecture time, that will be different to

the planned OAKS quizzes.

Your **FINAL GRADE** will be determined as a **percentage (%)** of your collected correct points from the quizzes, exams, final and homework for a max. 625 pts. for the course:

Cell Biology Online Course Fall 2020 maximum grade = 625 points

10 QUIZZES 100/625 pts. i.e. ~16% of the total grade,

3 EXAMS 300/625 pts. i.e. ~48% of the total grade,
or ~ 16% for each exam,

CUMULATIVE FINAL EXAM 125/625 pts. i.e. ~20% of the total grade,

GROUP DISCUSSION BOARD DISCUSSIONS 100/625 pts. i.e. ~16% of the total grade

TOTAL: 100 + 300 + 125 + 100 = 625 points.

Your grades depend on how many collective points you obtained in all these activities:

A	93 – 100	min. 581 pts.	C	73 – 76.90	min. 456 pts.
A ⁻	90 – 92.90	min. 563 pts.	C ⁻	70 – 72.90	min. 438 pts.
B ⁺	87 – 89.90	min 546 pts.	D ⁺	67 – 69.90	min. 419 pts.
B	83 – 86.90	min. 519 pts.	D	63 – 66.90	min. 394 pts.
B ⁻	80 – 82.80	min. 500 pts.	D ⁻	60 – 62.90	min. 375 pts.
C ⁺	77 – 80.90	min. 481 pts.	F	< 59.90	

How can you earn your grade? College is designed to be challenging, and grades are earned, not just given.

A grade of “C” is earned by students who complete average college work.

Grades in the “B” range signify work that stands above the average.

Grades in the “A” range are earned by students who do *exceptional* work and go ABOVE and BEYOND.

Will you go above and beyond? I hope so and I want to help you achieve this!

If you are having difficulty with the class, please ask me for help. I want you to succeed, but I won't be able to help if you ask for assistance the night before an assignment is due. Also, waiting until the end of the semester to express concern with your grade will not allow me to assist you.

I also use the OAKS gradebook but will not update it *immediately* after every assignment is returned. So, you should keep track of the points you earn during the semester, so you always know how you're progressing.

Please do not solicit your parents to contact me regarding your grades. You are responsible for your grades, not your parents or anyone else. Furthermore, federal legislation (FERPA) PROHIBITS ME from discussing and / sharing your academic record with your family, as I do not want to go to jail, so don't try it. If there is problem, contact me by email, and we can certainly talk on zoom.

PART E: SYLLABUS for CELL BIOLOGY, ONLINE, SYNCHRONOUS Biol-313-01, FALL 2020 (that may be modified due to COVID-19, hurricanes etc.).

All lectures will be available on OAKS as PDFs, notes, hopefully Zoom recording, some planned voice threads.

Week #1 W Aug 26 and F Aug 28, 2020.

Tuesday August 25, Fall full semester and Express I classes begin.

(NO class Quiz, but a weekend OAKS Dropbox quiz, based on BIOL-111 materials)

Brief Syllabus, Course information and INTRODUCTION + a reminder of Biol-111 + major CB concepts etc. on OAKS, which we will review throughout the semester.

READ CHAPTER 1, Intro and BIOL-111 notes (on OAKS)

MODULE 1 LEARNING OUTCOME: A Brief introduction to CB, At the end of this module, you will have learned about: Unity and Diversity, Earth (the pale blue dot), the moon's Earthrise, Earth origins, age, cell sizes, a view of a generic cell, why cells have to be so small because of Diffusion, the critical Surface to Volume ratio of a cell, the cell's nucleocytoplasmic ratio, the Cell theory, description of Prokaryotic and Eukaryotic cells, differences in size and organization of single and multicellular cells, the Endomembrane system, the cell's protein traffic, the cell's cytoskeleton, the differences between prokaryotic binary fission and eukaryotic mitosis.

Week #2 M Aug 31, W Sept. 02 and F Sept. 04, 2020.

Quiz 1, R-Sat

Monday, August 31, Last day of Drop/Add for full semester classes.

Biological related Chemistry,

2.1, 2.2, 2.3 BC note

Simple description of macromolecule concepts

EXTRA only on OAKS: 111 level description of carbohydrates. The basic nucleus, DNA, proteins + lipids macromolecule will be briefly described here, and in more details in coming modules.

MODULE 2 LEARNING OUTCOME: Biological Chemistry. At the end of this module you will have reviewed and relearned about the molecules of life, and covalent, noncovalent, ionic, polar bonds, water and polarity, chemical building blocks, functional groups (amino-, hydro, etc.), and electronegativity. Macromolecules: dehydration reaction and hydrolysis, monomers, polymers, carbohydrates: BIOL-111 reading (on OAKS) and brief review BIOL-111 of lipids (fatty acid tails, glycerol, plasma membrane) and nucleic acids (DNA, RNA, nucleotides, sugar-phosphate backbone), with much more information in module 4 and module 7.

Week #3 M Sep 7, W Sep 9 and F Sep 11, 2020

Quiz 2, R-Sat.

Tuesday September 8, Attendance Verification for faculty opens in My Charleston via Final grades.

Thursday September 10, Last day for faculty to submit Individual Enrollment and bachelor's Essay applications to the Registrar's Office for all full semester,

Proteins [2],

3.1, 3.2 3.3, 3.4 Protein note

MODULE 3 LEARNING OUTCOME: Protein structure, In this module you again will review BIOL-111 material plus a lot of new information (example suggested RNA world, before the DNA world). Amino acids, plus (+, Amino, N) and Negative (-, Carboxy) charges, peptide bond, side chains, primary, secondary, tertiary and quaternary protein structures, protein shapes (alpha helix, beta sheet, beta turn, prokaryotic porins and random coil), collagen (fibrous proteins), globular proteins (enzymes), integral membrane proteins, protein folding. scurvy. tertiary and quaternary protein structures. Super secondary protein structures: Leucine zipper (coil-coiled motifs), helix-turn-helix and zinc finger motifs, that are commonly protein transcription factors in gene expression, as well as domains.

SATURDAY AND SUNDAY, SEPTEMBER 12 AND 13TH, Storm Day Makeup (on campus instruction for PE Activity Courses, labs, studio, performance courses only; virtual instruction on these days for all other courses). (SD*)

Week #4 M Sep 14, W Sep 16, F Sep 18, 2020

Quiz 3, R-Sat

Tuesday, September Sep 15, Attendance Verification for faculty closes at noon.

Bioenergetics. Enzymes,

Membrane Organization [2], Chapter 10. Not in Exam 1

7.1, 7.2, 7.3

MODULE 4 LEARNING OUTCOME: At the end of this module you will have learned a brief introduction into **Bioenergetics**, Laws of Thermodynamics, Adenosine triphosphate (ATP), Adenosine diphosphate (ADP) and Adenosine monophosphate (AMP), Exergonic and Endergonic reactions, **Enzymes**, Viruses and COVID-19.

MODULE 5a: LEARNING OUTCOME: Like above, you will learn about the first part (Chapter 7) on **Lipid Bilayer membrane**, its chemical evolution, micelles into cells, membrane proteins, the famous fluid mosaic model, both membrane organization and its related structure, various membrane, hydrophobic or amphipathic molecules, phospholipids, sphingolipids, cholesterol, membrane proteins, alpha helixes, beta strands, membrane-spanning proteins, integral proteins, receptors, Transmembranes, peripheral proteins.

Week #5 M Sept 21, W Sept 23, F Sept. 25, 2020

Quiz 4, R-Sat

EXAM 1: W SEPT 23, 2020, 100 pts., 12–12:50 PM, covering Online Biol-111, Introduction to Cells, Biological chemistry, (ONLINE: Macromolecule Concepts and Carbohydrates), Proteins, Enzymes and Bioenergetics.

Proteins within membranes, part 2, (Ch. 11). This will NOT in Exam 1 11.1, 11.2, 11.3, 1.4, 11.6, Ch 11

MODULE 5b. LEARNING OUTCOMES: Second part on membranes (Chapter 11) that shows the interaction between the lipid chemical membrane and membrane proteins. porins and beta barrels proteins, exocytosis, endocytosis. 2 major membrane techniques: freeze-fracture + fluorescent recovery after photobleaching (frap), isotonic, hypertonic and hypotonic. pores and pumps: simple diffusion, facilitated diffusion, active transport, co- transport, ions channels, plus channel and carrier membrane transport proteins. P- (sodium-potassium pump and calcium ATPases), V- (lysosomal and plant vacuoles and acidity), F- (ATP synthase making ATP), ABC ATP- powered pumps (moving membrane proteins from one to the other phospholipid bilayer), aquaporins, Flippases. All this will make sense at the end of this module.

SATURDAY AND SUNDAY, SEPTEMBER 26 AND 27TH, Storm Day Makeup (on campus instruction for PE Activity Courses, labs, studio, performance courses only; virtual instruction on these days for all other courses). (SD*)

Week #6 M Sep 28, W Sep 30, F Oct 2 202

Quiz 5, R-Sat

Thursday, October 1, Last day to submit an Undergraduate Application to Graduate in Fall 2020.

Online Metabolism Chap 12, Mitochondria, Glycolysis and the Citric acid cycle.

12.1, 12.2, 12.3, Ch. 12 note

MODULE 6a: LEARNING OUTCOME: This very busy and more complex module will show you the many parts making up Cell metabolism and energy, **cellular respiration, ATP, NADH, FADH₂**, electron carriers, glycolysis, Krebs cycle or the citric acid cycle, fermentation, mitochondria double membranes, outer and inner mitochondrial membranes, cristae, matrix, mitochondrial prokaryotic circular DNA, the endosymbiotic theory, and life.

Week #7 M Oct 5, W Oct 07, F Oct 09, 2020

Quiz 6, R-Sat

Tuesday, October 6, Last day for students to submit incomplete undergraduate coursework to faculty for any Summer 2020 session (Summer 60 Day Deadline). Change of grade form to be submitted by faculty.

Mitochondrial Electron transport chain and ATP synthase (2)

Chloroplast and photosynthesis Part 1

12.4, 12.5, 12.6, 12.7, 12.8

MODULE 6b. LEARNING OUTCOME: At the end of this module, you will have a good general understanding of the terms: fatty acid oxidation, oxidative phosphorylation, the electron transport chain, the proton-motive force, fatty acid oxidation, oxidative phosphorylation, **photosynthesis**, NADPH, photosystem II, and photosystem I, thylakoid and the stroma, chloroplast, the stomata, linear noncyclic and cyclic electron flow pathways, chemosynthesis and life beyond Earth, C₃, C₄ and CAM pathways. It is certainly more difficult than say macromolecules, but at the same time it is also very exciting that you can see the big picture, as it is not that difficult.

Week #8 M Oct 12, W Oct 14, F Oct 16, 2020

Quiz 7, R-Sat

Monday, October 12, Full semester Mid Term and Express I Final grading open to faculty.

Tuesday, October 13, Undergraduate missing and incomplete grades for all Summer 2020 sessions convert to a grade of "F"

Chloroplasts and photosynthesis Part 2

12.6, 12.7, PS note

Simple cell signaling/transduction (2)

15.3, 15.5, 15.6 Signal transduction note

MODULE 6 cont. LAST PART OF THE MODULE 6 LEARNING OUTCOME: Dark Reactions, Rubisco, Carbon fixation, **Calvin cycle**, Production of G3P, sugars and life.

MODULE 7 LEARNING OUTCOME: This is very new for you about the topic of cell signaling (or the cellular internet). Extracellular signals, membrane receptors, endocrine, paracrine, and autocrine signals, Target cells, neurotransmitters, hormones. All their integrated interactions and cellular and signaling pathways are responsible for cellular life on Earth such as gene regulation, metabolic modifications and changes in the cell's cytoskeleton, and is also heavily connected with developmental biology (the journey for ferritization (one cell to trillions) and well as cancer. We will learn about this incredibly complicated field by using simple, baby steps to explain it. This module gives you enough information to be able to interpret any signaling pathway (and some research), but you will understand it, if you become familiar with the basic steps.

Saturday and Sunday, October 17 and 18th, Storm Day Makeup (on campus instruction for PE Activity Courses, labs, studio, performance courses only; virtual instruction on these days for all other courses). (SD*)

Week #9 M Oct 19, W Oct 21, F Oct 23, 2020

Quiz 8, R-Sat

Tuesday October 20, Midterm and Express I final grades due at noon.

Transcription (2) Not in Exam 2

5.1, 5.2, 5.3 + TRANSCRIPTION note

MODULE 8a: LEARNING MODULE: In this module, you will again learn from BIOL-111 and quite a lot more, although not at the level of Molecular Biology, if you have taken it already. Nucleic Acids: Deoxyribonucleic acid (DNA), ribonucleic acid (RNA), messenger nucleic acid (mRNA), ribosomal nucleic acid (rRNA), and transfer nucleic acid (tRNA), **Transcription**.

EXAM 2: F OCT 23, 2020, 100 pts., 12–12:50 PM

(Bioenergetics, metabolism, ATP, Enzymes, Glycolysis, Citric acid cycle, Electron transport chain + ATP, Photosynthesis, and Signaling.

Week #10 Oct 26, W Oct 28, F Oct 30, 2020

Quiz 9, R-Sat.

Wednesday, October 28, Last day for students to withdraw with a grade of "W" from Full semester WA (Failure Due to Excessive Absences) form may now be submitted by faculty for full semester classes.

Translation [1]

5.4, TRANSLATION note

M Moving Proteins into membranes and organelles [1]

MODULE 8b. LEARNING OUTCOME: This is the story of RNA and its multiple forms, mRNA, tRNA and ribosomal RNA and others. Genes, exons, introns, 5'cap, poly A, alternative splicing, guanine triphosphate (GTP), guanine diphosphate (GDP) (used in many different, DNA and RNA polymerases, and gene control. Translation, Ribosomes.

MODULE 9a: LEARNING OUTCOMES: This module was described very briefly in BIOL-111 but this time you will see a lot more details how, after ribosomes produce proteins, where the proteins will be located in the cell. On option is staying in the cytoplasm (glycolysis proteins/enzymes), or being imported into the nucleus, the mitochondria, the chloroplasts, and the peroxisomes. We will learn about organelle functions (the tour of the cell in BIOL-111), the compartmentation of the cell, and membrane trafficking of proteins.

Week 11 M Nov 2, W Nov 4, F Nov 6, 2020

Quiz 10, R-Sat

Tuesday, November 3, Election Day Voting. No Classes. College Closed. Students should remain in Charleston.

Spring 2020 early registration begins based on earned hours. NOTE: Holds will prohibit students from being able to register. Students should settle holds with the office that placed the hold before their opportunity to register.

Nucleus

Endoplasmic reticulum, Signal Hypothesis [2]

13.1, 13.2, 13.3, Ch. 13 note

MODULE 9b: LEARNING OUTCOME: This second part of the module opens the world of secretion: Nucleus, nucleolus, nuclear pores, double membrane, endoplasmic reticulum (ER), smooth and rough ER, signal hypothesis, co-translational translocation, posttranslational translocation, Golgi apparatus, lysosome, transport and secretory vesicles, coat proteins II (COP II) [ER → Golgi], coat proteins I (COP I) [Golgi → ER], and Clathrin [Golgi → lysosome, plasma membrane, exocytosis and endocytosis].

Week 12, M Nov 9, W Nov 11, F Nov 13, 2020.

Quiz 11, R-Sat

Golgi apparatus and Lysosomes

13.6, 14.1, 14.2, 14.3, Golgi note

MODULE 9 cont. LEARNING OUTCOME: A continuation of the Golgi apparatus, lysosome, transport and secretory vesicles, coat proteins II (COP II) [ER → Golgi], coat proteins I (COP I) [Golgi → ER], and Clathrin [Golgi → lysosome, plasma membrane, exocytosis and endocytosis].

Week 13, M Nov 16, W Nov 18 F Nov 20, 2020

Last Quiz 12, R-Sat

Nov 11 Fall 2019 Full semester and Express II Course-Instructor Evaluations open.

Cytoskeleton-microfilaments

17.1, 17.2, Actin note

Cytoskeleton-actin/microfilament dynamics/Muscles

17.3, 17.4, 17.5, 17.7, 17.8,

MODULE 10: LEARNING OUTCOME: At the end of this module, you will know every about the fascinating cytoskeleton, nucleation, microfilaments (actin), Listeria, cofilin, profilin, and thymosin beta 4, cell movements: lamellipodia, stress fibers, filopodia, cell-cell adhesion between different cells, cell shape changes, microvilli, myosin I, myosin II, myosin V. microtubules (tubulin), intermediate filaments, and motor proteins, cilia, flagella.

EXAM #3: FRI. NOV. 20, 2020.

(Transcription, Translation, Endoplasmic Reticulum and Moving proteins into membranes and organelles, Golgi and Lysosomes.

The remaining topics: **Microfilaments, microtubules, IF, and Mitosis will be tested in the Final.**

Week 15, M Nov 23, 2020

Finishing Microfilaments and possible the beginning of Microtubules.

**THANKSGIVING HOLIDAY or HAPPY TURKEY DAY,
W NOV 25–SUN Nov 29, 2019. NO CLASSES, COLLEGE CLOSED.**

Tuesday, November 24	Last day for on-campus instruction.
Wednesday, November 25	Thanksgiving Holiday. No Classes.
Thursday, November 26	Thanksgiving Holiday. No Classes. College Closed.
Friday, November 27	Thanksgiving Holiday. No Classes. College Closed.
Saturday, November 28	Thanksgiving Holiday. No Classes. College Closed.
Sunday, November 29	Thanksgiving Holiday. No Classes. College Closed.
Monday, November 30	All classes resume with online instruction (see each course syllabus for details).

Week 15 M Nov 30, W Dec 02, F Dec 03, 2020, last online class.

Microtubules

18.1, 18.2, 18.3, MT note

Mitosis and the Control of the Cell Cycle

18.6, MITOSIS note

MODULE 11: LEARNING OUTCOME: This is the final week, and we will dive into microtubules, Intermediate filaments and finishing with Cell division, mitosis, cancer, development (one cell to many), cell regeneration, understand how cells undergo mitosis, prokaryotic fission, circular chromosomes, eukaryotic mitosis, linear chromosomes, chromatin and chromosomes, and the process of mitosis.

This is a wrap of the learning outcomes of this course that will help you to learn and interpret all this data, to make you an expert in the interpretation of living cells. Good luck and have fun.

December 2020

Date(s)	Description
Friday, December 4	Last day of online instruction full semester and Express II classes.
Monday, December 7	Reading Day.
Tuesday, December 8	<ul style="list-style-type: none">• Full semester and Express II final exams begin.• Full semester and Express II grading open for faculty.
Monday, December 14	Full semester and Express II final exams end.
Wednesday, December 16	Full semester and Express II final grades due by 5:00 pm (EST). Faculty must submit a Change of Grade Form after the deadline.
Thursday, December 17	<ul style="list-style-type: none">• Final grades for full semester and Express II classes available to students on MyCharleston by 5:00 pm (EST).• Graduate missing and incomplete grades for Spring 2020 and Summer 2020 sessions convert to a grade of "F".
To Be Determined (TBD)	Fall 2020 Commencement To Be Determined (TBD)
Tuesday, December 22	Degrees will be posted.

CB REVIEW: READING DAYS. Monday December 4, and/or Saturday December 12! Time and day will be determined by the class decision by Zoom.

OFFICIAL BIOL-313-01 FINAL EXAM IS ON SUNDAY DECEMBER 13th FROM 3:30 – 5:30 PM, covering the entire course.

Fall 2020 Exam Schedule (Subject to Change)

Exam Times	Tuesday Dec 8	Wednesday Dec 9	Thursday Dec 10	Friday Dec 11	Saturday Dec 12	Sunday Dec 13	Monday Dec 14
8:00am-10:00am	TR 9:25am 9:55am	MWF 10:00am 10:30am	TR 10:50am 11:20am	MWF 9:00am 9:30am	Reading Period	Reading Period	MWF 7:30am
10:30am-12:30pm	TR 8:00am 8:30am	MWF 11:00am 11:30am	TR 7:05am	MWF 1:00pm 1:30pm	Reading Period	Reading Period	
1:00pm-3:00pm	TR 1:40pm 2:10pm	MWF 8:00am 8:30am	TR 12:15pm 12:45pm	Math All 101, 111 Exams		Reading Period	
3:30pm-5:30pm	TR 3:05pm 3:35pm 4:00pm	MWF/MW 3:00pm 3:30pm MW 3:25pm		MWF/MW 2:00pm 2:30pm	MWF/MW 4:00pm	MWF 12:00pm 12:30pm	
6:00pm-8:00pm	I	F	H		E	J	
8:30pm-10:30pm	D	C	B	G	A		

February 2021

Date(s)	Description
Tuesday, February 16	Last day for students to submit incomplete undergraduate coursework to faculty for any Fall 2020 class (Fall 60 Day Deadline). Change of grade form to be submitted by faculty.
Tuesday, February 23	Undergraduate missing and incomplete grades for Fall 2020 sessions convert to a grade of "F".

*SD – Storm Day Makeup (no classes unless the College deems necessary; on campus instruction for PE Activity Courses, labs, studio, performance courses only; virtual instruction on these days for all other courses)

Note: Consistent with all applicable laws, any weekend day or designated holiday may be used as a storm makeup day.

Last Revised: 06-01-2020

***SD – Storm Day Makeup (no classes unless the College deems necessary) The full Fall 2020 calendar info. is available on: <http://registrar.cofc.edu/calendars/ac-2020fall.php>**

Exams will consist of multiple choice, short answer, and possible mini-essay questions (~15 lines of writing minimal), used normally in face to face courses, but it may not work in the online format. There will be no essays in the final for grading time reasons.

The questions will come from course material covered in online class discussions, OAK PDFs (posted after lecture), zoom recording if allowed, extra information slides (X), assigned readings (posted on the syllabus), voice thread recording, the discussion boards quizzes, exams, and the final.

If you have questions about the College's public health measures, please contact the College's COVID-19 team at COVID-19@cofc.edu.

NO ATTENDANCE AND WA GRADES IN FALL 2020.

The COVID-19 public health emergency requires a new approach to constructing class attendance policies at the College and handling student absences. Historically, these decisions about class attendance were made by individual faculty members, but due to the probable increased absence rates, requirements to self-isolate and/or quarantine for 2 weeks or more if infected, and the ever changing public health guidelines on length of isolation etc. has resulted with the administration to review this policy.

- This year, faculty are asked to forgo any attendance policy that either imposes penalties for a fixed number of days missed or makes attendance a substantial part of the final grade. The Faculty Senate also voted to eliminate the WA grade effective Fall 2020.
- So, the absence memo process will not be used this academic year nor no requests for absence documentation. This new policy was decided to reduce the risk of COVID-19 to the entire campus community, including our healthcare providers, for example when students need to provide medical documentation of illness.
- Instead, students are still responsible for reporting directly to your instructor (i.e. that's me) the reasons for all absences including, but not limited to personal illness, COVID-related illness, a requirement that they isolate or quarantine, or the need to care for a family member who is ill due to COVID. **This means even though there is no "official" attendance, you should inform me of your status for your safety and everyone around us.** For example, if the labs will be face-to-face after September 14, half of the students are also in the class, so it is essential to know are you are ill, or your family has illness/Covid-19 issues to help to protect the non-infected.
- The College also informed me that I am responsible if I suspect a student is being dishonest about an illness or a COVID-associated absence, as the Honor Code is still in force and faculty can report a suspected Honor Code violation to the Dean of Students. **I do not want to do this, but communications are far better than silence to avoid these painful situations.**

• So in summary: there is no attendance policy and no WA grade for this semester, and I will trust that the students in the Fall 2020 Cell Biology course will inform me directly at any time a student misses a class, and in return I will trust that the explanation that student tells me the absence is honest and truthful.

- The College also uses the FAST system (<https://capp.cofc.edu/fast/index.php>) that is an online reporting tool available to faculty and staff at the College of Charleston to report concerns about student. In this way, specialized College staff may better provide help to students who are having academic, financial, or personal problems that will keep them from succeeding at the College. This system is designed to identify students who disappear off the radar from my class, have apparent excessive absences or appearing to struggle with other life circumstances. This is no "Big Brother or Sister", it can help a distressed student especially if thinking of suicide that is rare but unfortunately possible if that person is alone, abandoned by society, with drug and health issues, or many other possibilities. **THIS IS WHY THERE IS HELP.**

**Please be aware that the FAST system is not an emergency hotline.
FOR AN ON-CAMPUS EMERGENCY, PLEASE CALL PUBLIC SAFETY AT 843.953.5611.**

- College of Charleston Suicide Prevention Program, Contact: Rachael McNamara, Health Educator, 66 George Street, Suite 300 RSS Building, Charleston, SC 29424, United States, Phone: (843) 953-5640, mcnamarar@cofc.edu
<https://www.sprc.org/grantees/college-charleston-2#:~:text=The%20goals%20of%20the%20CofC,support%20students%20at%20risk%20for>

- I am also responsible to create reasonable accommodations for absences, if students who become ill or indicate a need to quarantine or isolate themselves. As your instructor I will determine reasonable accommodations, based on course content, level, and expectations, to help you. To the extent, all possible arrangements will be made for students with COVID-19-related absences to continue in the class. Depending on the circumstances, and severity of the Covid-19 cases, I may provide individual tutorials for students who are way behind (in addition what I am doing

Syllabus for CofC's Cell Biology Online class (BIOL-313-01) in Fall 2020.

already), and to help students to up make up for missed materials and assignments.

STUDENT LAPTOP REQUIREMENT

Beginning with the Fall 2020 semester, **ALL STUDENTS** will be **required** to have a **LAPTOP COMPUTER**. This **requirement** will reduce the possible spread of germs and Covid-19 by limiting the need for shared public computer stations. It will ensure continuity in the event of school closures, evacuations and other possible emergencies.

Please check up all the help, software requirements etc. at:

<https://it.cofc.edu/laptops/#:~:text=Beginning%20with%20the%20Fall%202020,evacuations%20and%20other%20possible%20emergencies.>

Sample Syllabi Statements:

To complement the [Policy on Course Syllabi 7.6.10](#). Relevant policy sections in parentheses.

SAMPLES FOR MANDATORY SYLLABUS CONTENT:

To minimize confusions or misinterpretations in these largely legal documents from the College, I am including "an appropriate level of detail" for the 13 components of the policy's Section 3.0: "Mandatory Syllabus Content."

ACADEMIC INTEGRITY STATEMENT (3.12):

Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when suspected, 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 misunderstanding and confusion will be handled by the instructor. The instructor designs an intervention or assigns a grade reduction to help prevent the student from repeating the error. The response is recorded on a form and signed both by the instructor and the student. It is forwarded to the Office of 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 an XXF in the course, indicating failure of the course due to academic dishonesty. This status indicator 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.

Students can find the complete Honor Code and all related processes in the Student Handbook at:

[http://deanofstudents.cofc.edu/honor-system/studenthandbook/.](http://deanofstudents.cofc.edu/honor-system/studenthandbook/)"

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES (3.11):

Any student eligible for and needing accommodations because of a disability is responsible to speak with the professor during the first two weeks of class or as soon as the student has been approved for services so that reasonable accommodations can be arranged at the [Center for Disability Services/SNAP](#). The College will make reasonable accommodations for such persons with such documented disabilities, and students should apply to the above services that are located on the first floor of the Lightsey Center, Suite 104.

Legally, the College abides by section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. If you have a documented disability that may have some impact on your work in this class and for which you may require accommodations, and this is why you need to see an administrator at the [Center of Disability Services/SNAP](#), 843.953.1431 and me so that such accommodation may be arranged.

OAKS (3.10, for all instructional modalities)

OAKS, including Gradebook, will be used for this course throughout the semester to provide the syllabus and class materials and grades for each assignment, which will be regularly posted.

INCLEMENT WEATHER, PANDEMIC OR SUBSTANTIAL INTERRUPTION OF INSTRUCTION (3.8)

If in-person classes are suspended, faculty will announce to their students a detailed plan for a change in modality to ensure the continuity of learning. All students must have access to a computer equipped with a web camera, microphone, and Internet access. Resources are available to provide students with these essential tools.

Recommended Syllabus Content *Optional statements related to Section 4.0 of the [Policy on Course Syllabi 7.6.10](#).*

CONTINUITY OF LEARNING (for hybrid classes with face-to-face meetings)

Due to social distancing requirements, this class will include a variety of online and technology enhanced components to

reinforce continuity of learning for all enrolled students. Before the drop/add deadline, students should decide whether the course plan on the syllabus matches their own circumstances. This will be identified in the Cell Biology course syllabus.

ONLINE COURSES WITH EXAM PROCTORING

This course will require the use of an exam proctoring service for the course exams. Students are responsible for registering, scheduling, and the cost of the service prior to each exam. Instructions and additional information on proctoring can be found at <https://academicaffairs.cofc.edu/distance-education/online-proctoring/index.php>. **From what I have learned very recently is that the College has bought this program, so supposedly there will be no cost for you, but by the beginning of the course, you will know the details.**

MENTAL & PHYSICAL WELLBEING:

At the college, we take every students' mental and physical wellbeing seriously. If you find yourself experiencing physical illnesses, please reach out to student health services (843.953.5520). and if you find yourself experiencing any mental health challenges (for example, anxiety, depression, stressful life events, sleep deprivation, and/or loneliness/homesickness) please consider contacting either the Counseling Center (professional counselors at <http://counseling.cofc.edu> or 843.953.5640 3rd Robert Scott Small Building) or the Students 4 Support (certified volunteers through texting "4support" to 839863, visit <http://counseling.cofc.edu/cct/index.php>, or meet with them in person 3rd Floor Stern Center). These services are there for you to help you cope with difficulties you may be experiencing and to maintain optimal physical and mental health.

FOOD & HOUSING RESOURCES:

Many CofC students report experiencing food and housing insecurity. If you are facing challenges in securing food (such as not being able to afford groceries or get sufficient food to eat every day) and housing (such as lacking a safe and stable place to live), please contact the Dean of Students for support (<http://studentaffairs.cofc.edu/about/salt.php>). Also, you can go to <http://studentaffairs.cofc.edu/student-food-housing-insecurity/index.php> to learn about food and housing assistance that is available to you. In addition, there are several resources on and off campus to help. You can visit the Cougar Pantry in the Stern Center (2nd floor), a student-run food pantry that provides dry-goods and hygiene products at no charge to any student in need. Please also consider reaching out to Professor ABC if you are comfortable in doing so.

LGBTQ STUDENTS:

The College of Charleston offers many resources for LGBTQ+ students, faculty and staff along with their allies. [Preferred Name and Pronoun Information](#), [On Campus Gender Inclusive facilities](#), [Campus Resources](#) [College of Charleston Reporting Portals](#), [National Resources for Faculty & Staff](#), [GSEC Reports](#) [Documenting LGBTQ Life in the Lowcountry \(CofC Addlestone Library Special Collections Project\)](#) [College of Charleston Quality Enhancement Plan \(QEP\)](#), [Articles about CofC and LGBTQ+ Issues](#)

OPTIONAL STATEMENT ON "RELIGIOUS ACCOMMODATION FOR STUDENTS" (4.6):

([Faculty/Administration Manual VIII.A.10](#))

The College of Charleston community is enriched by students of many faiths that have various religious observances, practices, and beliefs. We value student rights and freedoms, including the right of each student to adhere to individual systems of religion. The College prohibits discrimination against any student because of such student's religious belief or any absence thereof.

The College acknowledges that religious practices differ from tradition to tradition and that the demands of religious observances in some traditions may cause conflicts with student schedules. In affirming this diversity, like many other colleges and universities, the College supports the concept of "reasonable accommodation for religious observance" in regard to class attendance, and the scheduling of examinations and other academic work requirements, unless the accommodation would create an undue hardship on the College. Faculty are required, as part of their responsibility to students and the College, to ascribe to this policy and to ensure its fair and full implementation.

The accommodation request imposes responsibilities and obligations on both the individual requesting the accommodation and the College. Faculty members are expected to reasonably accommodate individual religious practices. Examples of reasonable accommodations for student absences might include: rescheduling of an exam or giving a make-up exam for the student in question; altering the time of a student's presentation; allowing extra-credit assignments to substitute for missed class work or arranging for an increased flexibility in assignment dates. Regardless of any accommodation that may be granted, students are responsible for satisfying all academic

objectives, requirements and prerequisites as defined by the instructor and by the College.

2020 – 2021 Religious Holidays¹

Date	Holiday	Religion
September 18 2020	Rosh Hashanah ²	Jewish
September 28, 2020	Yom Kippur ²	Jewish
October 2 – October 9, 2020	Sukkot ²	Jewish
October 9, 2020	Shemini Atzeret ²	Jewish
October 19 - October 26, 2020	Navaratri	Hindu
October 19, 2020	Birth of Baha'u'llah	Baha'i
January 7, 2021	Christmas ³	Orthodox Christian
February 17, 2021	Ash Wednesday (Beginning of Lent)	Christian
February 25-26, 2021	Purim ²	Jewish
March 15, 2021	Great Lent Begins	Christian
March 20, 2021	Naw-Ruz	Baha'i
April 2, 2021	Good Friday	Christian
March 26 - April 3, 2021	Passover ²	Jewish
April 12-May 11, 2021	Ramadan	Muslim
April 30, 2021	Good Friday (Orthodox) ³	Orthodox Christian
April 20 and 28, 2021	Ridvan	Baha'i

¹ The previously included Islamic holidays of Eid al-Adha and Eid al-Fitr fall outside the regular academic year and are therefore not listed here.

² All Jewish holidays begin at sunset on the evening before the date given.

³ Orthodox Christian holidays begin at sunset on the evening before the date given.

EXTRA INFORMATION:

TECHNICAL DIFFICULTIES

If you have questions or problems related to the course, please follow the communication procedures noted above. If you have technical problems, please contact Student Computing Support or Helpdesk using these methods:

- Student Computing Support, 843-953-5457, studentcomputingsupport@cofc.edu, blogs.cofc.edu/scs
- Helpdesk, 843-953-3375, helpdesk@cofc.edu, it.cofc.edu/help/helpdesk

It's important to resolve technical problems swiftly, so do not delay getting support. Computer failure or unavailability does not constitute an excuse for not completing assignments.

COFC'S ALCOHOL POLICY

<http://deanofstudents.cofc.edu/honor-system/studenthandbook/alcohol-policies-2019-2020.pdf>

COFC'S DRUG POLICY

<http://deanofstudents.cofc.edu/honor-system/studenthandbook/drug-policy-2019-2020.pdf>

COFC'S STUDENT SEXUAL MISCONDUCT POLICY

<http://deanofstudents.cofc.edu/honor-system/studenthandbook/student-sexual-misconduct-policy-2019-2020.pdf>

COFC'S SUICIDE PREVENTION HELP

<https://www.sprc.org/grantees/college-charleston-2>, <http://counseling.cofc.edu/>

COFC'S TOBACCO FREE CAMPUS POLICY

<http://deanofstudents.cofc.edu/honor-system/studenthandbook/tobacco-free-campus-policy-2019-2020.pdf>

COFC'S GOOD SAMARITAN MEDICAL AMNESTY POLICY

<http://deanofstudents.cofc.edu/honor-system/studenthandbook/good-samaritan-medical-amnesty-policy-2019-2020.pdf>

COFC'S HAZING POLICY

<http://deanofstudents.cofc.edu/honor-system/studenthandbook/hazing-policy-2019-2020.pdf>

CLASS CLIMATE & NETIQUETTE

As stated on page 75 of the Student Handbook: “a college classroom requires a higher level of courtesy than many people exercise in ordinary public space. Everyone in a classroom is there for the purpose of learning, and no one should be able to deprive another person of the chance to learn. Expressions of rudeness and even carelessness degrade the high purpose of learning that should be paramount in a college classroom.” This applies equally to the online classroom. To maintain a respectful and supportive environment, please uphold these rules of netiquette. [Netiquette](https://www.rasmussen.edu/student-experience/college-life/netiquette-guidelines-every-online-student-needs-to-know/) is network etiquette, the do's and don'ts of online communication. <https://www.rasmussen.edu/student-experience/college-life/netiquette-guidelines-every-online-student-needs-to-know/>

- **Be kind and ethical.** Avoid using sexist, racist, and homophobic language in your writing and speaking; it will **not be tolerated**. Ask yourself, "Would I say this to the person's face?" If the answer is no, rewrite. [I'm assuming here that you would not feel comfortable saying rude or harassing things to a person's face. . .]
- **Be aware** of how your communication may be perceived by others. For example, if you use ALL CAPITAL LETTERS, will folks feel like you are angry or shouting? Or, if you have a dry sense of humor, will your sarcasm be evident, or might folks misinterpret your message?
- **Be forgiving.** We all make communication faux pas, so ask **clarifying questions** rather than attacking. But if you experience any questionable or outright inappropriate behavior from your colleagues, please let me know.
- **Respect disagreement.** I expect everyone in the class to respect others' rights to speak, to listen attentively to what is said, and to use discretion and sensitivity when speaking. This does not mean you have to agree with everything said. Debate is a valuable component of a learning community. However, I expect you to be respectful of me and of your colleagues.
- **Share your knowledge.** As Bill Nye says, “everyone you will ever meet knows something you don't.” You are an expert in something (perhaps many things), so if that expertise becomes relevant, share your knowledge!
- **Cite your sources.** When you share opinions, it's important to support your claims with sources. This doesn't mean that you must have a citation for *everything* you post but providing evidence will strengthen your arguments and will also provide additional resources for your colleagues. But whenever you are using the intellectual property of others, you must always cite your sources.
- **Help each other.** If you notice a colleague has asked a question or written about a problem, jump in and help. This is especially true in the Course Lounge discussion board.

<https://victimservices.cofc.edu/>

<http://disabilityservices.cofc.edu/temp/index.php> temporary injury.

the *Student Handbook* at <http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php>