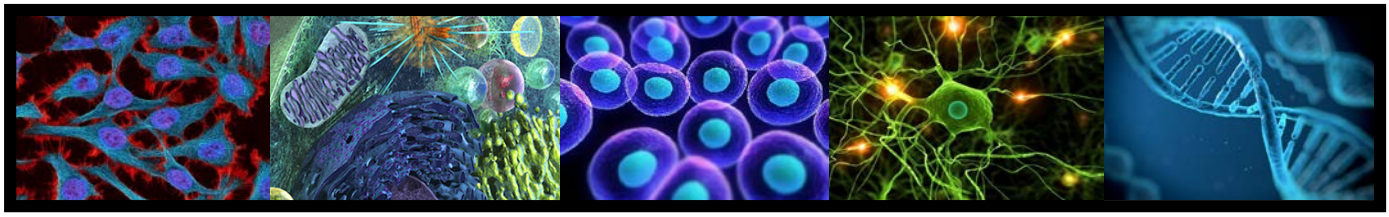


INTRODUCTORY CELL BIOLOGY LECTURE BIOL 4490

Syllabus Spring 2018

Professor: Dr. Danielle Goodspeed
Email: dmg048@shsu.edu
Phone: 936-294-3271
Office Hours: Monday- Friday 12:00 PM – 1:00 PM
Most office hours are completely booked!! Email me in advance to reserve a spot.
Office: LDB 145

CLASS INFORMATION:

Lecture Meeting Times: Tuesdays and Thursdays 8:00 AM – 9:20 AM
Location: Lee Drain Building 214

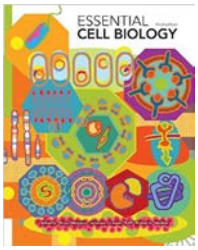
PLEASE READ THE SYLLABUS!!! It is an important document that explains:

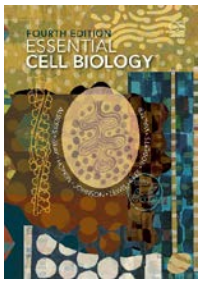
- What I expect from each one of you
- What you can expect from me
- The topics that I will cover
- How you will be assessed to determine your grade in the class

If you have any questions please DO NOT hesitate to ask me. If anything is unclear to you in this syllabus ASK!! I have my contact information listed above. Emailing or coming to see me in person is the best way to get in touch with me.

Required Materials:

Essential Cell Biology 3rd or 4th Editions
ISBN: 9780815344322
By: Bruce Alberts, D. Bray, K. Hopkins, A. Johnson, J. Lewis, M. Raff, K. Roberts, and P. Walter.
Garland Science Publishing

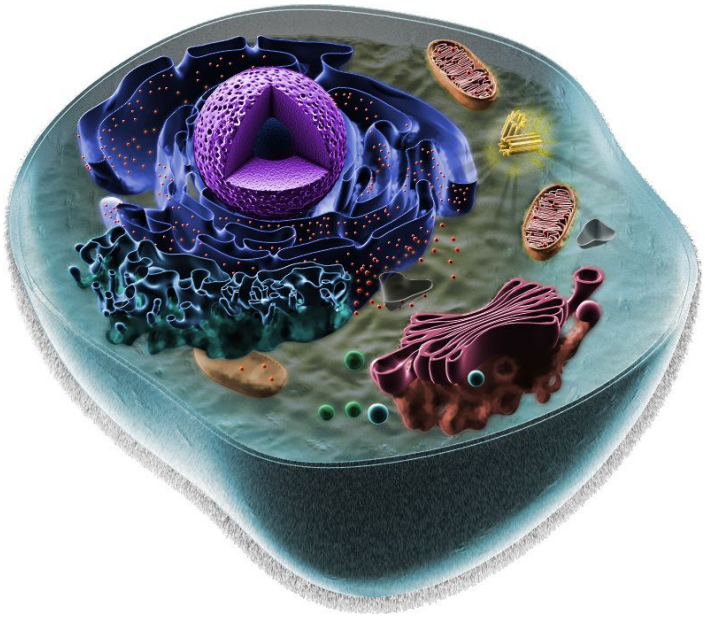




Goals for this Course:
Through this course I hope to:

1. The cell is simply amazing and I hope to teach you how hard working, intricate, and wonderful it truly is.
2. Biology is an ever-evolving field of study, my hope is that by the end of this class you have learned the concepts that drive the field of cell biology, while learning about what it takes to be a scientist.
3. Biology is exciting, and I hope that you end up with an appreciation for the world around you.

Course Description:



Have you ever wondered about what the cells in our body do? How they multiply? How they move? Why we have so many of them? How we study cells? Why we study cells? These are the types of questions we will answer in this course. Cell Biology is a course designed to teach you what the eukaryotic cell is along with it's function. We will cover how our cells replicate DNA, transcribe our RNA, and synthesize proteins. We will delve into the intricacies of the cell, learning about the cell membrane and how it controls what can come into and what can leave the cell. We will also cover intracellular trafficking, cell communication, cell motility, mitosis, and cell cycle control.

I want each and every one of you to do well in this class!! Please come to see me if you are not understanding the material, need help studying, or have any questions about your grade. It is imperative to come to me as soon as you start to need help in the course! **IF YOU WAIT TO THE LAST MINUTE IT WILL BE TOO LATE!!!** On the first page of this syllabus are numerous ways to contact me. USE THEM!!

Some particulars about this course:

I will be setting you up in groups on the first day of class and you will be in these groups for the entire semester. Why? In science your success depends on collaboration. What is collaboration? It is working with others that have the expertise needed to answer a question. What if I am not planning on going into science? Learning to work with others is a very important skill for ANY career you go into.

During the course of the semester we will have several active learning activities where your groups will work together. I hope that during the course you will learn to work well with each other and you will be excited about the group classes we have scheduled. The best part about group study: Everyone will have a different point of view and through discussions you will have a priceless opportunity to learn!!!

Important Dates:

The lecture schedule gives you important dates for this class.

EXAM DATES ARE SET IN STONE, THEY WILL NOT CHANGE AND YOU WILL NOT BE ABLE TO MAKE UP THE EXAM! A missed exam will result in a zero for that exam. If there is an emergency and you need to miss an exam, contact me as soon as possible. All exams will be a mixture of multiple choice, true/false, short answer, and essay questions.

THE FINAL EXAM IS CUMULATIVE, all the material from the course will be on the final.

If you have a documented disability that will impact your work in the class, please contact me to discuss your needs. All discussions are confidential. It will be your responsibility to contact me ahead of time to make sure your needs are met. If you need special accommodations please contact Services for Students with Disabilities in the Lee Drain North Annex building, telephone number: 936-294-3512.

Assignments and Grading Scheme:

Exams: There will be three (3) exams worth 100 points each. Each exam will consist of multiple choice, true/false, short answer, and essay. Each exam will be closed book, and use of any notes is prohibited. During any exam, **ALL** electronic equipment including cell phones must be TURNED OFF and put away. The one exception made is for primary care givers. Before taking the exam, all books, notes, and electronic equipment including cell phones will be stowed in the student's backpack and placed out of sight under the student's desk. **PLEASE NOTE:** *Once the lecture exam begins, a student may not leave the room and be readmitted to the exam room to resume taking the exam.*

In-class group assignments/quizzes: Throughout the semester there will be a variety of in-class group discussions and quizzes. **Please come prepared for class.** If a quiz is given, it will be closed book, and all electronic devices will need to be turned off and out of sight. All quizzes will be group quizzes.

Final Exam: The final exam will be a comprehensive, cumulative final exam worth 150 points. The final exam will be a combination of multiple choice, true/false, short answer, and essay. The exam will be closed book, and use of any notes is prohibited. **ALL** electronic equipment including cell phones must be TURNED OFF and put away. Before taking the exam, all books, notes, and electronic equipment including cell phones will be stowed in the student's backpack and placed out of sight under the student's desk. **PLEASE NOTE:** *Once the lecture exam begins, a student may not leave the room and be readmitted to the exam room to resume taking the exam.*

Your final grade will be a combination of:

Exams 100 pts Each (total of 3)	300 pts
In-Class Group Assignments/quizzes	150 pts
Final Exam	150 pts
Total Possible Points	600 pts

THE LECTURE GRADE IS 75% OF YOUR FINAL GRADE. THE LABORATORY GRADE IS 25% OF YOUR FINAL GRADE. You can calculate your current lecture grade at any time throughout the semester. To do this, total up your points received for each assignment and exam. Then divide by the total number of points possible so far. Multiply by 100 to get the percentage of your grade. This is how your final grade will be determined. The following scale will be used to determine your letter grade:

100-90	A
89-80	B
79-70	C
69-60	D
59 and below	F

Other Important Stuff You Should Know:

Attendance Policy: **You are required to attend every class, attendance is MANDATORY.**

If you miss the lectures you will not do well in this class. Going to class will teach you a lot about yourself, what I expect from you in each class (i.e. listening, note taking, the material), and how to work with others. You can only get credit for the in-class assignments by ATTENDING CLASS. The ONLY way that you have an opportunity to make up an in-class assignment is for a medical or another official excuse. Four or more absences may result in an "F" grade for the course.

Academic Dishonesty: The professor-student relationship is based on trust. You trust that I will do my best to teach you the subject-matter and that I will be available when you need me. I trust that you will put your best effort into your work. This also means that you will be honest in your work.

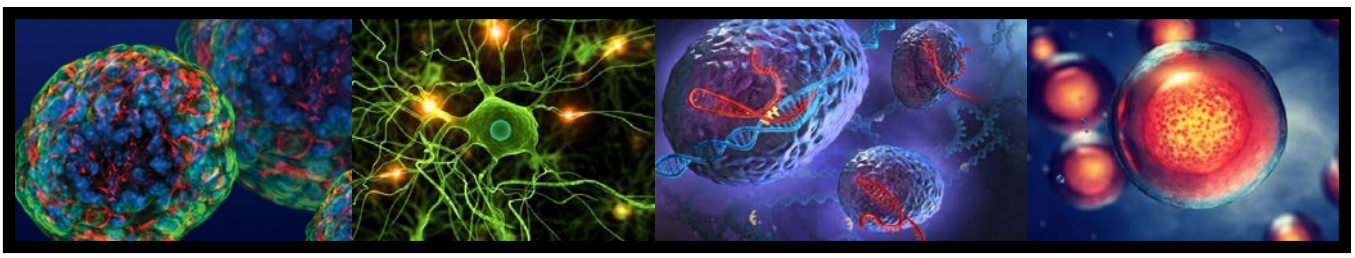
ABSOLUTELY NO FORM OF COPYING, PLAGIARISM OR ANY OTHER TYPE OF ACADEMIC DISHONESTY WILL BE TOLERATED.

Students who turn in plagiarized work or who are caught cheating will receive a zero for that assignment and may even result in an F for the class. Please note that cheating includes copying from your classmates or allowing someone else to copy from you. Plagiarism includes copying directly from sources on the web. If you are unsure if something constitutes cheating or plagiarism, please ASK. Claiming ignorance is not an excuse. **Absolutely NO PHONES OR OTHER ELECTRONIC OR COMMUNICATION EQUIPMENT IS ALLOWED ON YOUR PERSON DURING EXAMS.**

Sam Houston State University's Academic Dishonesty Statement States *"All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom."* Cheating hurts you in many ways. Make the right choice – don't do it!!

Suggestions for doing well in this course (your responsibilities in this class):

- **Come to class!** This is an opportunity to not only learn about the content of the course but also to learn note-taking skills, how to work on a schedule, how to work with others, and how to figure out what is important with the material covered. One of the main aspects of my class is working in groups. Therefore, you missing class means you are not only affecting yourself, but others as well. Please keep this in mind!
- **Participate in class discussions!** Group discussions are very important in my class. This is where you will talk to your classmates and hearing others you will learn about different viewpoints and learn how to organize your thoughts. This is important! We want to know what you think.
- **Take good notes!** You will receive my slides, you do not need to copy everything I say. That being said, you want to take notes on the main points I make. Therefore, ***Listening*** is very important. One of the best ways to study is to rewrite your notes as you study, adding to them as you study in more detail. If you miss class, get a classmate's notes.
- **Read ahead!** In the course schedule I have listed the chapters we will be covering that day. To get the most out of lecture, it is important that you read these chapters BEFORE you get into class.
- **Study!** The rule of thumb is that you spend 2 hours of study time for each hour spent in class but you may need more or less time – only you can determine that. Some topics will require more time, others less. You should get into the habit of studying weekly, not just right before exams. Do not procrastinate. We cover a lot of material and it will get overwhelming quickly if you do not keep up. Studying for exams will be a lot easier if you have reviewed on a weekly basis. Your grade will show it!
- **Draw and write as you study!** Test yourself. Writing and drawing things out is a great way to make sure you really understand the material.
- **Study in groups!** This is one of the best ways to study! It helps to reinforce the concepts, and also to determine what you are lacking understanding in and may need more time studying. If you can explain things to others, it means you have learned them.
- **Get help if you need it!** Ask questions. My class is an informal lecture setting. That means when I am speaking, if you don't understand something, STOP ME! I want to know if I am not being clear on a concept. If this is not something you are comfortable with, then come to me after lecture or during office hours and I can work with you to understand the concepts. Additionally, UST has a Tutorial Services Center that offers a vast array of activities, workshops and information that can help you improve your study, time-management, and test-taking skills. They also offer free peer tutoring in all subjects! Take advantage of these opportunities – they are free and offered to help you succeed.



INTRODUCTORY CELL BIOLOGY
TENTATIVE LECTURE SCHEDULE

Date		Topic	Chapter	Due Dates
1/18/2018	Thurs	Introduction of the Class Introduction to Cells	1	
1/23/2018	Tues	Chemical Components of Cells	2	
1/25/2018	Thurs	Chemical Components of Cells	2	
1/30/2018	Tues	Energy, Catalysis, and Biosynthesis	3	
2/1/2018	Thurs	Energy, Catalysis, and Biosynthesis	3	
2/6/2018	Tues	Protein Structure and Function	4	
2/8/2018	Thurs	Protein Structure and Function	4	
2/13/2018	Tues	Review		
2/15/2018	Thurs	EXAM 1	1, 2, 3, 4	
2/20/2018	Tues	Membrane Structure	11	
2/22/2018	Thurs	Membrane Structure	11	
2/27/2018	Tues	Membrane Transport	12	
3/1/2018	Thurs	Membrane Transport	12	
3/6/2018	Tues	Review		
3/8/2018	Thurs	EXAM 2	11, 12	
3/13/2018	Tues	SPRING RECESS- NO CLASSES		
3/15/2018	Thurs	SPRING RECESS- NO CLASSES		
3/20/2018	Tues	How Cells Obtain Energy from Food	13	
3/22/2018	Thurs	How Cells Obtain Energy from Food	13	
3/27/2018	Tues	Energy Generation in Mitochondria and Chloroplasts	14	
3/29/2018	Thurs	Energy Generation in Mitochondria and Chloroplasts	14	
4/3/2018	Tues	DNA and Chromosomes	5	
4/5/2018	Thurs	DNA and Chromosomes	5	
4/10/2018	Tues	Review		
4/12/2018	Thurs	EXAM 3	13, 14, 5	
4/17/2018	Tues	DNA Replication, Repair and Recombination	6	
4/19/2018	Thurs	From DNA to Protein: How Cells Read the Genome	7, 8	
4/24/2018	Tues	From DNA to Protein: How Cells Read the Genome	7, 8	
4/26/2018	Thurs	The Cell Division Cycle	18	
5/1/2018	Tues	Sex and Genetics	19	
5/3/2018	Thurs	Review		
5/8/2018	Tues	COMPREHENSIVE FINAL EXAM		8:00-10:00 AM

Please note: this schedule is tentative and subject to change by instructors. Topics per date may vary, but **exam and lab practical dates are set and will not change**.