BIO 1320

Home



Start Here - from your Instructor

Syllabus

Course Pacing Guide

Welcome to BIO 1320 - Modern Biology: Molecules, Cells, and Physiology

New to the course?

- Be sure to familiarize yourself with the <u>Syllabus</u> and review the information carefully.
 To succeed in this course, please fill out your <u>Course Pacing Guide</u> and take no more than **7** days from when you enroll to submit it via Modules.
- Click on **Modules** in the left-hand menu to begin your course.



Returning to the course?

• Click on **Modules** in the left-hand menu to resume where you left off.

Important reminders:

- This is a 6-month, online, correspondence self-paced course.
- All submissions, including exams, must be completed by the course expiration date. When you registered for the course, you were sent an email to your Texas State account indicating registration and expiration dates.

At the end of the course, you will be asked to complete a brief course evaluation.

Your input will help improve the course.







Start Here

Welcome & About Your Instructor

Welcome to our Modern Biology (BIO 1320) course!

In this class we'll talk about the scientific method, the molecules and cells that make up our bodies, how we use energy and pass on our traits, how we reproduce, and we'll even talk about some biotechnology.

I know this is a required general-education course and that not all of you will be excited to be here, but I'm glad you are! Over the course of your life you will make important decisions regarding biological issues, such as climate change, vaccines, GMOs, stem cell use, cloning, etc., and you may even serve jury duty where biology-based forensics may make or break a case. Further, the decisions you make for your own life, such as those that are health and medicine related, are all based on an underlying understanding of biology.

This is an online course, which means that your learning will be self-directed. You will need to complete required assignments each week independently, including reading, participating in online discussion forums, taking quizzes and exams, and completing homework.

A Quick "Hello!" from Dr. Dharmasiri

Hello, I am Dr. Sunethra Dharmasiri, but my students call me Dr. Suni. I was born and raised in a very beautiful little tropical island called Sri Lanka, where I got my BS degree. My love for plants had been a childhood interest. Growing up in the proximity of a virgin tropical rain forest which is also a valued UNESCO Global Heritage site known as Sinharaja Forest Reserve, I developed a true passion for learning about how plants function. As a result, I chose to major in plant sciences over all other science majors in college. Soon after completing my BS degree, I was absorbed into the faculty of the University of Peradeniya, Sri Lanka, to teach Biochemistry, Genetics and Physiology. My journey of searching for hidden wonders in plant life thus began, which I still love and cherish many years later! When I was offered a fully funded US Government scholarship through East-West Center in Hawaii to pursue my higher studies in plant sciences, I jumped at the opportunity and earned MS and PhD degrees in Plant Molecular Biology at the beautiful University of Hawaii campus in Honolulu, then returned to Sri Lanka to resume my job.



After serving several more years teaching and doing research back in Sri Lanka while raising two children, my family decided to relocate to US. I got the opportunity to conduct several years of postdoctoral research at Indiana University, Bloomington, and University of Texas, Austin, truly fulfilling me desire to perform advanced plant molecular biology research. Later, my husband and I settled down here at the Texas State University. While enjoying my teaching duties, I still participate in a lot of plant molecular and developmental biology research. I tell everyone including our two boys to follow their passion. Life comes with many challenges and stresses, but dreams can come true if you pour your heart into it.

Both our boys have graduated from college and moved out of Texas to follow their dreams. My husband and I live in San Marcos, close to the university, so that we could go home for lunch and be with our little Lhasa Apso, Teddy, who waits and sleeps by the front door to see us return and to dance around us. In my free time I love to do gardening, making my own dresses (I made my own wedding dress), traveling to far places, and most of all, catching up with my dear friends.









Frequently Asked Questions

- 1. Is there a textbook?
- 2. What are good study tips for exams?
- 3. What if I did poorly on an exam?
- 4. How should I use the exam review?
- 5. Where can I get extra help?
- 6. Can I skip the final?
- 7. How do I calculate my grade?
- 8. How can I raise my grade? Is there any extra credit?

1. Is there a textbook?

Nope! In an effort to keep costs down for students, I will post a free, digital copy of a textbook that students can choose to use only if they want. The content you will need to learn will come from the PowerPoints and videos. The free eBook is only there as a supplement if you want clarification or more reading on a topic. Each chapter PowerPoint will tell you which chapters in the textbook it corresponds with on the very first slide.

Here is the Biology eTextbook by OpenStax: https://openstax.org/details/books/concepts-biology)

https://openstax.org/details/books/concepts-biology)

And here is an offline pdf version if you prefer: Concepts of Biology.pdf



2. What are good study tips for exams?

- 1. Use the exam reviews as intended. See the point below for some advice on how to best use them. (Copying and pasting into them is not useful.)
- 2. Follow Dr. Davenport's recommended flow, including taking the homework with no notes first so that you know what areas to reinforce (see Course Tips under Modules).
- 3. Be sure that you don't just get all of the homework questions correct, but that you understand the questions and how to solve them. Exam questions will be similar, but may

- have the wording changed. You don't want to memorize answers, instead you want to be able to understand *how* to solve the problems so that you always get them correct, even if the wording and answer has changed since you last saw it.
- 4. Never cram, especially not at the expense of sleep students hear this all the time and do it anyway for some reason. There are literally hundreds of research studies showing that cramming doesn't help, and that it actually hurts student performance on exams. Also, sleep is important for memory retention. Don't cram!
- 5. Talk about the material and actively engage with it whenever possible. You learn best by teaching, and you'll remember and understand better by explaining the concepts to others. Maybe this means you join a study group or study with a friend. Maybe you can bribe a friend with dinner in return for letting you teach them biology for a night. Maybe you even talk out loud to your cat. I bet you have a really smart cat that would totally appreciate it.
- 6. Use the videos and PowerPoints in the Modules section and any other materials that may help see the FAQ below for a link to a helpful youtube channel. Also make use of SLAC and my office hours anytime you feel that you may be behind or having trouble.

Here are some extra study tips from a textbook: Study Tips from Book.pdf



3. What if I did poorly on an exam?

Check the study tips below to help bring up your scores on future exams and let's meet on Zoom to look over what you missed. You may find that it was only one chapter that tripped you up, or a certain kind of question that you had trouble with. Knowing these things will help immensely in preparing for the next exam and in taking the final exam where the same questions may appear. Look over your exam within a few days of taking it- the longer you wait, the harder it will be to remember the strategies that you used while taking the exam and the less time you will have to improve for the next exam.

4. How should I use the exam review?

Here is how I make the exam review: First, I make the exam. Then, for every question on the exam I write the corresponding topic on the review sheet. This means that every topic listed on the review corresponds with at least one question on that topic on the exam. You may notice that there are about the same number of topics listed on the review as there are questions per exam.

To make the most of the exam review, summarize what's in the PowerPoint notes and include

any extra notes that you took from videos or the book. Be sure to shorten and rephrase things into your own words to help you retain and understand the information, and make a much more manageable study guide.

If you fill this out for each chapter as you go, you will be spending valuable time with the material on a regular basis, which enhances memory retention and understanding. When it is time for the exam, you will have a perfectly filled-in study sheet.

5. Where can I get extra help?

If you would like some extra tutoring, consider using the Student Learning Assistance Center (SLAC). They have biology tutors available almost every day of the week.

Here's their website, and you can find the hours for Biology by clicking "Lab Tutoring Schedules:" http://www.txstate.edu/slac/ (http://www

There is also a tutoring site that we partner with so that it's free for students. Click on Tutor.com: 24/7 on the left-hand menu.

There are also some really great online resources. I love this youtube channel by CrashCourse. Check out their videos- they make biology way more fun than I ever could: http://www.youtube.com/playlist?list=PL3EED4C1D684D3ADF

Also check out the Amoeba Sisters for great GIFs and videos: https://www.youtube.com/user/AmoebaSisters \Rightarrow

6. Can I skip the final?

Totally! Only the highest exam grades are used and the lowest one is dropped. If you are happy with all of your exam grades throughout the semester, there is no need to take the final exam.

If you are not sure whether to take the final, check the email sent after the last regular exam at the end of the semester. This email will include tips on how to calculate your overall grade and whether it is worthwhile to take the final.

7. How do I calculate my grade?

During the semester: Add up all of the points you've earned (from homeworks, exams, etc.), then divide by the amount of possible points so far to get your percent score.

Check out the syllabus for the breakdown of how many points you need at the end of the semester to be in each grade bracket.

8. How can I raise my grade? Is there any extra credit?

See above for good study tips and how to use the exam review. If you are doing all of the study tips and still having trouble, talk to me. Something strange is going on and we need to figure it out.

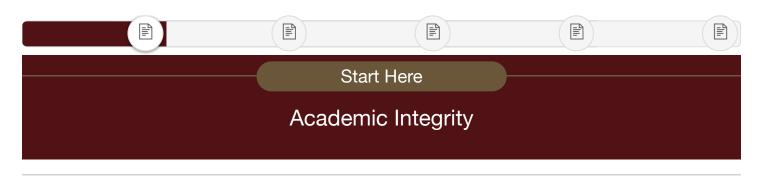
There is no extra credit other than the activities detailed on the syllabus.



Download the full **syllabus**, which includes the schedule/assignment flow here: **BIO1320CorrespondenceSyllabus.docx**. You can also view a read-only file by clicking "Syllabus" on the left-hand navigation menu.

Course Tips

- Overall flow to strive for:
 - go over the PowerPoints in detail making your own notes as you go (I recommend making notes in the exam review)
 - watch the video and add any extra notes from it
 - take the video quiz
 - try homework with no notes first*
 - how did you do? --> go back & study to reinforce weak areas
 - go back to the homework and earn a perfect score
 - study and connect with Dr. Davenport to ask questions or chat about the material
 - take exam
 - *Try the homeworks with no notes first how did you do? Mark the topics you got wrong so you can go back and look over them in your notes and fill in clearer info on your exam review.
 - Homeworks are similar to the exam. So if you fully prepare first, then try the homework without notes and ace it, you know you've prepared properly and will ace that material on the exam.
 - Homeworks can be taken unlimited times, so take them until you earn full points.
 - Be careful with homework questions: be sure you understand the information, not just that you can memorize it. Exam questions may be similar to the homework questions, but are often reworded to have a different answer. Read carefully and be sure you know how to solve each question, not just that you memorized the answer.



Texas State Academic Honor Code

The Texas State Academic Honor Code (https://www.txstate.edu/honorcodecouncil/) applies to all Texas State students, including correspondence students. The Honor Code (https://studenthandbook.txst.edu/rules-and-policies/academic-honor-code.html) serves as an affirmation that the University demands the highest standard of integrity in all actions related to the academic community. As stated in the Texas State Student Handbook (https://studenthandbook.txstate.edu), Violation of the Honor Code (https://studenthandbook.txstate.edu/rules-and-policies/academic-honor-code.html) includes, but is not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials.

Definitions

As stated per <u>Texas State Honor Code, UPPS No. 07.10.01, Issue no. 8</u> (<u>https://policies.txstate.edu/university-policies/07-10-01.html</u>).

*Please note that not all activities that constitute academic misconduct are listed in specific detail in UPPS No. 07.10.10, Honor Code (http://www.txstate.edu/effective/upps/upps-07-10-01.html). It is expected that students will honor the *spirit* of academic integrity and will not place themselves in the position of being charged with academic misconduct.

Please cite all unoriginal material through the use of <u>standard bibliographical practice</u> (http://guides.library.txstate.edu/friendly.php?s=writing-citation-style-guide) explained through the <u>Alkek library site (https://studenthandbook.txstate.edu/rules-and-policies/academic-honorcode.html)</u>.

Incidents of <u>academic dishonesty as outlined by the University</u>
(https://www.txstate.edu/honorcodecouncil/Academic-Integrity.html) will be reported to the administration for disciplinary action. In addition, students will receive a 0 for the assignment or assignments without the opportunity to redo the work.

Academic work signifies outcomes and products such as essays, theses, reports, exams, tests, quizzes, problems, assignments, or other projects submitted for purposes of achieving learning outcomes.

Cheating in general means, but is not limited to, engaging or attempting to engage in any of the following activities:

- Copying from another student's test paper, laboratory report, other report, computer files, data listing, programs, or from any electronic device or equipment;
- Using, during a test, materials not authorized by the person giving the test;
- Collaborating, without authorization, with another person during an examination or in preparing academic work;
- Knowingly, and without authorization, using, buying, selling, stealing, transporting, soliciting, copying, or possessing, in whole or in part, the content of an unadministered test;
- Substituting for another student—or permitting another person to substitute for oneself—in taking an exam or preparing academic work;
- Bribing another person to obtain an unadministered test or information about an unadministered test;
- Purchasing, or otherwise acquiring and submitting as one's own work, any research paper or other writing assignment prepared by an individual or firm. This section does not apply to the typing of the rough or final versions of an assignment by a professional typist;
- Submitting the same essay, thesis, report, or another project, without substantial revision or expansion of the work, in an attempt to obtain credit for work submitted in a previous course;
- Falsifying data.

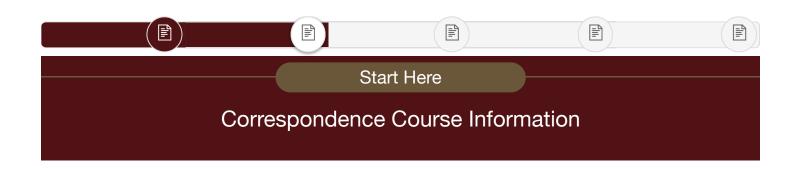
Plagiarism in general means, but is not limited to, the appropriation of another's work and the inadequately or inappropriately acknowledged incorporation of that work in one's own written, oral, visual or the performance of an original act or routine that is offered for credit.

Collusion in general means, but is not limited to, the unauthorized collaboration with another person in preparing any work offered for credit.

Abuse of resource materials in general means, but is not limited to, the mutilation, destruction, concealment, theft or alteration of materials provided to assist students in the mastery of course content.

Notice of Intellectual Property Rights

The text and images on this page and pages linked to it are protected by <u>copyright</u> (https://guides.library.txstate.edu/c.php?g=184026&p=1214336). Lectures and examination questions are also protected by copyright law. You are authorized to take notes in class and to use the online materials provided, thereby creating derivative works from my lectures and other materials. However, this authorization extends only to making one set of notes or answers for your own personal use and no other use. You are not authorized to provide copies, notes or examination questions to anyone else, or to make any commercial use of them without prior written consent.



As a correspondence studies student, it is your responsibility to be familiar with correspondence-related policies and services. To this end, I encourage you to review the Correspondence Course Information page

(http://www.distancelearning.txstate.edu/Correspondence-Course-Information.html) as well as the Correspondence Studies website (http://www.correspondence.txstate.edu/students.html).

Orientation Video

Please view <u>this orientation video (https://mediaflo.txstate.edu/Watch/z8B5Pgb2)</u> to help you get started in this correspondence course. This video addresses many topics such as Bobcat Mail, navigating this course site, test requests, and more.

Online Student Resources

<u>This webpage (https://www.distancelearning.txstate.edu/students/student-support0.html)</u> contains multiple resources for online students at Texas State University. Note: Some resources are only available to students who pay a student service fee.



A variety of <u>free tutoring resources (https://www.correspondence.txstate.edu/students/tutoring.html)</u> are available for students enrolled in Texas State correspondence courses.









FREE TUTORING



University Writing Center

The Texas State University Writing Center's online tutoring service allows

Texas State correspondence, self-paced study students, to work with a writing tutor in real time in an online environment. During the online tutorial, both the student and the tutor are able to see the student's work on screen and can speak to one another via chat and/or microphone. Just as in regular University Writing Center appointments, the tutor can help with any stage of the writing process—from brainstorming to various drafts to polishing the final draft.

Free Tutoring Correspondence Course Web Page

 $\underline{(https://www.correspondence.txstate.edu/students/tutoring.html)} \quad Source: TXST$



Start Here

Students Requiring Accommodation Through the Office of Disability Services

The Office of Distance and Extended Learning is committed to helping students with disabilities achieve their educational goals.

A disability is not a barrier to correspondence study, and we provide reasonable accommodations to individuals in coursework and test taking.

Students who require special accommodations need to provide verification of their disability to the <u>Office of Disability Services (http://www.ods.txstate.edu/)</u>, Suite 5-5.1 LBJ Student Center, 512.245.3451 (voice/TTY).

Students should then notify the Office of Distance and Extended Learning

(http://www.correspondence.txstate.edu/) at corrstudy@txstate.edu

(mailto:corrstudy@txstate.edu) of any disability-related accommodation needs as soon as possible to avoid a delay in accommodations.



This online course requires technical skills and access to certain technology and software that face-to-face courses may not require.

- Learn about <u>skills and technology</u>
 (https://www.distancelearning.txstate.edu/students/Technical-Help.html) you need to be successful in this course.
- Also review these <u>tips (https://www.distancelearning.txstate.edu/students/tips-for-success.html)</u> and <u>interaction guidelines</u>
 (<u>https://www.distancelearning.txstate.edu/students/Interacting-Online.html)</u> to be a successful online learner.

Many users encounter fewer problems when they use Chrome (https://www.google.com/chrome/? brand=CHBD&gclid=EAlalQobChMliPfq45zl6AlV5ZJbCh2GLQtLEAAYASAAEgLjUfD_BwE&gclsrc=aw.ds) to access Canvas courses.

Here's how to **get help with Canvas**:

- 24/7 <u>Live chat</u> ⇒ (https://itac.txst.edu/contact.html)
- 24/7 Phone support: 245.ITAC (4822)
- <u>Tool-specific help</u> ⇒ (https://community.canvaslms.com/docs/DOC-10701-canvas-student-guide-table-of-contents)

If you are new to Canvas, click Student Guide in the left navigation of any course site to learn the basics.

Get Started

Submission 1: Course Pacing Guide/Course Study Schedule

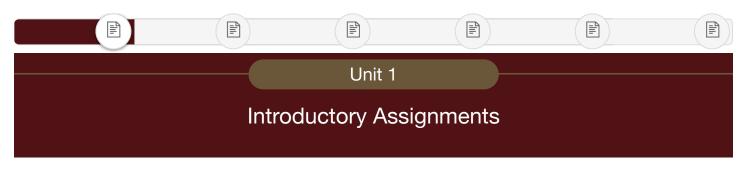


Assignment

Download and add target dates to this **Course Pacing Guide/Course Study Schedule.**

Then click Submit Assignment and attach and submit your completed document.

After you upload your document, click Next to proceed with the course.



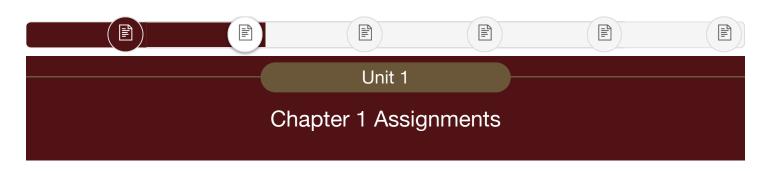
Once you have read through the "Start Here" information, including the syllabus and FAQ, complete the following assignments:

Take the Introductory Quiz

- >Use the syllabus and FAQ to answer the questions
- This quiz is worth 10 points, but in order to earn ANY other points in the course you will need to pass with a perfect score.
- You may take the quiz as many times as you'd like.
- Find it here: <u>Introductory Quiz</u>

Optional Activities

o Set up office hours with Dr. Davenport to introduce yourself or ask any questions you have



Download and carefully go over the PowerPoint notes for Chapter 1

- these contain the most important material from this chapter
- exam and homework questions are based on the material you learn here
- you should be spending the most amount of time in the course going over the PowerPoint notes for each chapter and condensing the material into your own words in shortened notes (I recommend you do this on the exam review)
- optional read chapter 1 in the Biology eTextbook by OpenStax:
 https://openstax.org/books/concepts-biology/pages/1-introduction (https://openstax.org/books/concepts-biology/pages/1-introduction)

Watch the Chapter 1 video

- · covers PowerPoint slides 13-19
- · click on "CC" if you want captions

Complete the Chapter 1 video quiz

- find it here Quiz: Chapter 1 Video worth 5 points
- this quiz is timed (10 minutes) and you only have 1 attempt, so be sure you won't be interrupted
- while taking it
 use the PowerPoint notes and any extra notes you took from the video to help you answer the
- questions

Complete the Chapter 1 homework assignment

- find it here Homework: Chapter 1 worth 10 points
- this is not timed and you have unlimited attempts
- remember my recommendation: try it with no notes first and see how you do these questions are
- very similar to exam questions so this is a great indicator of how you will do on the exam and can boost your confidence (or let you know where your weak areas are so you can spend more time on them)

Recommended Activities

- look over the study tips found in the FAQ ("What are good study tips for the exam?")
- look over the tips on using the exam reviews in the FAQ ("How should I use the exam review?")
- download the Exam 1 Review sheet and start filling it out (found on a Modules page a little further down than this one)

Last tips as you complete your first assignments

- Check your Canvas "Grades" on the left-hand navigation menu
- you should see 10 out of 10 for your Intro Quiz and Homework, plus your video quiz score (out of 5 points)