Course Code & No. – Section (CRN):	BIOL 101/105 - Sections 1 (80254 and 80255)
Course Title (Credits):	Biology I (3) and Lab (1)
Term & Year:	Fall / 2017
Instructor:	Dr. Suzanne Gollery
Phone(s):	Office: 775-881-7456 or Cell: 775-813-4215 (8 a.m. – 9 p.m.)
Email:	sgollery@sierranevada.edu
Office:	TCES, room 223
Office Hours:	Mon 1:00-2:30, Tues 2:30-3:45 PM, Wed 10:00-11:15 AM or by appointment
Class Meeting Time:	BIOL 101 MW 11:30 AM – 12:45 PM BIOL 105 W 1:00 – 3:45 PM
Location:	TCES 204 (no food or drinks permitted)
Prerequisites:	None
Corequisites:	BIOL 101 and BIOL 105 are co-requisites

Course Descriptions:
BIOL 101: Biology I: A study of biological principles including life chemistry, cell structure, respiration, photosynthesis, Mendelian genetics, DNA structure and function, protein synthesis, and regulation of gene expression.
BIOL 105: Biology Lab I Laboratory and field exercises to accompany BIOL 101

Required Texts and Materials:

1. Hillis DM, Sadava D, Hill RW, and Price MV. (2014) *Principles of Life, 2nd edition*, Sunderland, MA: MacMillan/WHFreeman/Sinauer Associates. ISBN-13: 9781464189821. This $107 subscription gives you access to online materials (Launchpad) and an eText for 24 months. The same text and Launchpad access will also be required for BIOL 102 in Spring semester 2018, so this averages to $53.50 per semester for the BIOL 101/BIOL 102 series. IF you decide you want a physical book, I recommend finding a good used copy, because it will be a useful reference for upper division courses and for studying for pre-professional exams, such as the MCAT or GRE.

2. 3-ring binder (available at the bookstore) to hold notes, handouts and work returned with feedback.

3. Spiral-bound one-subject notebook (ruled or blank) that you will leave in TCES 204 for use as a laboratory notebook. You cannot use a section from the same notebook you take to other classes, because you will usually leave this in the classroom.

4. A set of colored pencils, 8 or more colors.

5. A laptop computer (one that meets the published SNC Computer Requirements) and access to the internet and BIOL 101/105 course Moodle site.

6. You MUST regularly check emails related to BIOL 101 and 105. If needed, forward your SNC email to an email or message service that you actually use.

Attendance
Success in Biology I and Lab is significantly influenced by participation in class and lab activities. You must attend class to receive credit for that day's CPA and you must do laboratory activities to get credit for lab assignments. Grades will be calculated based on the 19 best CPA scores and 13 best regular lab assignments. If you are too ill to attend class, are competing with an SNC sport team, or have a family emergency or military duty that takes you away from campus, I may elect to excuse your absence and allow you to turn in work. However, I will NOT excuse absences because you overslept, had to work, gave transportation to someone else in your car, or went on an SNC-sponsored extracurricular trip.

Grading Policy

Since BIOL 101 and 105 are co-requisites, and the material of each is so integral to the other, assignments from each will contribute to an overall point total and the same letter grade will be awarded to both courses. The grading curve is based on a 1000-point scale, with 75% of points from BIOL 101 and 25% from BIOL 105. Sierra Nevada College awards half grades (e.g., A– or B+), so a student with a point total within 1.5% of the cutoff for the letter grade will earn the appropriate half grade.

Grading Curve

A	90 – 100%	900 – 1000 points
B	80 – 89.9 %	800 – 899 points
C	70 – 79.9%	700 – 799 points
D	60 – 67.9%	600 – 699 points
F	<60%	<600 points

BIOL 101 (75%):	
CPAs – 19 best at 15 points each	285 points
Exams – 4 at 100 points each	400 points
Quizzes – 1 at 65 points each	65 points
BIOL 105 (26%):	
Most lab assignments – 13 at 18 points each	234 points
Research poster – 1 at 16 points	16 points
Total	1,000 points

Assignment details:

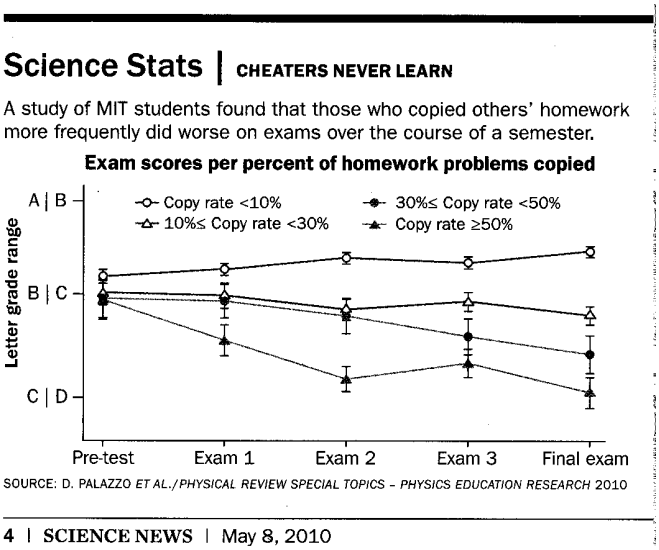
Class preparation assignment: Students will read the text and complete the CPA BEFORE content is discussed in class, in order to prepare to USE the content during class activities.

Learning goals for the assignment: Scientific studies on how people learn have shown repeatedly that we learn and remember more when we are active learners. This means that you will remember and be able to apply more facts and concepts about biology for a much longer time if you read for comprehension and the write or answer questions about what you have read, communicate about course concepts with other people, and apply concepts to solve problems in different contexts, than if you come to class and passively listen to me lecture. The CPAs give you a chance to learn actively by reading a text and summarizing it in and outline or answering online questions related to the reading assignment. Class activities will provide time to address your questions, work in pairs or small groups to communicate about course content, and apply challenging and important concepts and facts to new situations. You will gain much more from class activities if you come to class prepared. You will be confused about what you need to know if you do not complete the CPAs, because I will not list facts that you need to learn to pass the exams. I teach by asking you questions and designing assignments to help you learn. If you can answer my questions and complete assignments, then you will pass the exams. Instead of telling you what you need to know, I have set up CPAs and assignments to help YOU learn and REMEMBER more of what you have learned.

How to do the assignment: Because people learn in different ways, there are two options for CPAs. You can stick to your favorite option or switch freely between them during the semester. 1) Read the assigned material and then answer assigned LearningCurve questions online at Launchpad. LearningCurve is kind of like a computer game, in that you earn points for answering questions. You earn points faster if you make fewer errors, but you can keep trying more questions until you have earned the threshold number of points. You get full credit for the CPA once you reach the threshold. You may take a break and return to finish at a later time. 2) Read and outline the assigned material IN YOUR OWN WORDS. Less credit will be given for outlines that merely restate subtopic headings used in the text. Type or scan your legible hand-written outline and email it to Suzanne at sgollery@sierranevada.edu. You should expect to spend two-to-three hours outside of class reading the text and doing your CPA for each hour you spend in class. CPA due dates are given on the schedule of classes (right hand column) and on Launchpad. You CAN do CPA assignments late for partial credit. This is a good idea, as they will help you prepare for the exams.

Scoring and feedback from the assignment: CPAs will be scored for completeness (effort), that is, you will receive full credit for making a good-faith attempt to complete the assignment. It doesn't matter how many wrong answers you get on the LearningCurve as long as you earn enough points and any outline demonstrating a good effort will receive full points.

Collaboration and individual work: You are ENCOURAGED to work with your learning team and other students in BIOL 101 because people learn more when it is a social experience. **However, every BIOL 101 student must write outlines and answer lab questions in his/her own words.** Students with identical or very similar CPA outlines or lab question answers will receive a ZERO GRADE for the assignment and consequences for violating the academic honesty policy may apply. As this graph shows, cheaters never learn!



Exams and quizzes: You will have four 100-point exams and one shorter 65-point quiz testing your understanding of material since the previous exam. Keep in mind, though, that material builds, so you will be asked to apply concepts and information from previous exams when these also apply to the new content. Exams and quizzes include multiple choice questions, since this format is used on standardized exams, such the GRE and MCAT. Other questions may include short answer, essay, or true-false formats. Exam questions will often ask you to apply concepts and facts. You will have hard copy exams.

Lab Assignments: All lab activities will have associated assignments and most have pre-lab assignments. Most lab assignments will be downloaded from the BIOL 101 Moodle site BEFORE CLASS. Most lab assignments will be written in your lab notebook, which should stay in the classroom. You may take your lab notebook to complete answers, but RETURN TO THE CLASS ROOM BEFORE FRIDAY, which is when I will score them. Most labs are due at the beginning of lab class a week after we finish the lab work and will be scored the following Friday. Lab assignment due dates are given on the schedule of classes. All students will turn separate lab notebooks written in their own words, even when lab work is done as a team.

Pre-lab Assignments: Pre-lab assignment help you review content that you need to know to understand the lab activity and help you organize your time so you can finish during the class period. You won't learn nearly as much from the lab if you haven't done the pre-lab work before lab class. Thus, students who haven't finished the pre-lab will NOT be allowed to stay for the lab class. I will quickly check to see that you have answered pre-lab questions before the lab starts.

Midterm grades: Midterm grades will be calculated using all work due through Wednesday, October 11, 2017. There will not be a comprehensive midterm exam, per se, although Exam 2 is scheduled for Monday, October 9.

Class policies:

1) **No food and drinks in TCES 204 Biology Lab:**
   Food and beverages, even drinking water, are FORBIDEN by state and federal safety regulations in TCES 204, the biology lab. Students must leave food and beverages on the table outside of the lab room door.

2) **Protective clothing in TCES 204 Biology Lab:**
   Everyone is REQUIRED BY LAW to wear long pants, closed shoes (heals and toes covered, hard soles), and pull back long hair in TCES 204. Students who arrive without protective clothing will not be allowed in the lab room and will incur an unexcused absence if they cannot obtain appropriate clothing promptly. Lab coats, gloves, and safety glasses will be worn when working with chemicals; these are provided by SNC.

3) **Electronic devices:**
   - No MP3 players may be used in class at any time, including during exams
   - It is extremely RUDE to use any devices for NON-CLASS PURPOSES. You MAY use devices to take notes and to look up information related to class. Repeat offenders of random device use will lose points and may be asked to stow their devices near the classroom door. If you must text or call someone during class time in an emergency, please leave the room.

4) **Late work policy:**
The late work penalty is 10% per calendar day, up to 50% off. That is, half of the possible points will be deducted from student scores on CPAs and lab assignments that are 5 or more days late. Extra credit will NOT be accepted late. Work is due at the beginning of the class period on the due date and will be counted one day late more than 5 minutes after the start of class. Students are welcome to turn in online work early through Launchpad or by email. Lab notebooks will remain in the classroom and are checked each Friday.

5) **Students are expected to write answers in their own words**
It requires less understanding of biology to recognize a correct answer than to write one in your own words. You know that you understand something completely when you can explain it orally or in writing in your own words. The purpose of short answer questions on lab and other assignments is to have you practice how well you understand biology by writing answers in your own words. You cheat yourself if you copy the text, other sources, or other students.

It is easy for professors to notice copying. Usually professors grade an assignment in one sitting and recognize similar wording from multiple students. Published science writers choose very different words and phrases than most undergraduate students, so it is obvious to professors when students copy internet sources. Most students don't sound like 50-year-old white male scientists unless they are plagiarizing.

In short, you will learn more and you won't be penalized by SNC for academic dishonesty if you always write answers in your own words. It's ok to make mistakes – this is how we learn. When you write in your own words and it isn't quite right, then I can give you feedback to help you learn.

6) **CPAs and Launchpad -** Students have two options for CPAs: 1) doing the online LearningCurve assignment on Launchpad or 2) outlining the assigned reading for the day in your own words. Students will practice using Launchpad in class before the first CPA is due. Chapter outlines must be typed or written in clearly legible hand writing and emailed to Suzanne before the start of class. Outlines must be at least two pages long. It is my personal experience that Launchpad is MUCH FASTER when accessed before 2 PM, so if you want fewer frustrations with slow internet, do you CPAs in the morning. Students get full credit for completing Launchpad CPAs, no matter how many tries it takes to get the right answers. Any good effort on an outline that is at least 2 pages long earns full credit.

7) **E-mailed work:**
CPA outlines and digital work must be emailed to Suzanne at sgollery@sierranevada.edu . You may e-mail MS Office or pdf files. In a pinch, I will accept clearly readable picture files (jpg, for example). I will always reply to verify that I received your e-mailed work. If I haven't replied within 48 hours, you should follow up to make sure that I got your email. If you suspect that I missed your email, please speak up, because this does happen when the SNC server is down for a few seconds. (Faculty email is housed on the SNC server; student email is housed at Microsoft, so they aren't "down" at the same time.)

8) **Citing sources:**
Cite sources using the CSE citation sequence (number) system. Scientists routinely cite original sources for factual information that is not widely known. For example, one would not have to cite a source when one states that mutations introduce new genetic variability into the human genome, but one would cite a source when stating that mutations accumulate in human DNA at an average rate of 175 mutations per diploid genome per generation[1]. When you are writing a scientific argument in response to a CPA question or as part of a lab or class assignment, get in the habit of citing facts when you find them in a source. This web site has information about citing sources using CSE (Council of Science Educators) citation sequence system, which is similar to that used by most scientific journals: ***http://library.austincc.edu/help/CSE/CSE-cs.php*** **.**

9) **Extra credit:**
I will offer extra credit for additional work with instructional value regularly throughout the semester. Much of the extra credit is available through Launchpad. Most reading assignments have multiple small extra credit assignments – these are green on the Launchpad calendar, but NOT named CPA. A student may earn up to 50 extra credit points, 5% of the total number of points possible for the class, enough to raise your grade one letter (e.g., C → B).

[1] Nachman M W, Crowell S L. Estimate of the mutation rate per nucleotide in humans. Genetics 2000; 156: 297-304

10) Modifications to the BIOL 101/105 course syllabus:
This syllabus and schedule is intended to provide students with a clear and accurate outline of course content, student outcomes, class topics, assignments and due dates, and exam dates. You should keep and refer to the syllabus regularly, and learn how to access it on the course Moodle page. I reserve the right to make announced changes to the syllabus and class schedule at my discretion if it is in the best interest of the students to do so.

11) How to learn the most and feel the best about this class:
Biology I is a challenging class and there will be times that you wish it was easier. However, if you focus on how much you are learning and how it will help you succeed in future biology and environmental science courses, then you will find it easier to do the work. I have carefully selected reading assignments and class activities to teach you content and skills that you will need for a career in science, environmental policy, or a health field. I am glad to give you extra help if you need it, so please take advantage of office hours or ask for another time to meet with me if the office hours don't work in your schedule. I am better at paying attention to email than to my phone, but you will usually get a response from me by text.

Please treat me, your classmates, and yourself with respect. We are all working toward the same goal, helping everyone in the class learn enough biology to be successful. You will learn more if you help each other out. You will learn the most if you are a leader, more if you are a contributor, and enough if you are a participant. Observers and will not learn as much. I will ask detractors to leave the class that day and may drop students who detract repeatedly.

Leader –
does all that is asked
plus extra
plus helps someone else

Contributor –
does all that is asked
plus extra

Participant –
does all that is asked
nothing more

Observer –
does something,
but less than is asked

Detractor –
does less than is asked
keeps someone else from doing what they are supposed to do

Student Outcomes for BIOL 101/105: Upon completion of Biology I and Lab, students will

1. Understand and recall facts and concepts of basic biochemistry and metabolism, cell structure and function, Mendelian and molecular genetics well enough to be successful in upper division biology and environmental science courses.
2. Demonstrate ability to answer questions about biology like those on standardized exams (such as the GRE, MCAT, or senior exit exams).
3. Demonstrate skill at critical analysis, logic, and problem solving involving facts and concepts of molecular and cell biology and inheritance. For example, name a real protein and explain how it exemplifies these properties of proteins: 1) structure is important for protein function, 2) proteins often change shape as they function.
4. Demonstrate competence in basic compound (brightfield) microscopy techniques: 1) prepare a wet mount or stained specimen slide for viewing, 2) locate a specimen and focus on it using the objective specified, 3) clean the microscope, carry, and store it properly.
5. Decide whether or not they have enough interest in science to continue to pursue a rigorous science major.

Methods of Assessing Student Outcomes Student outcomes will be assessed using the following:

1. Online class preparation assignments coordinated with assigned reading and due at the start of class
2. Laboratory assignments (lab notebook, short answer questions or problems, research poster)
3. Written in-class, closed-book exams
4. Instructor observations of student participation

Instructional Strategies
Biology I and Lab is a foundational science course, which means that you will learn facts and concepts about a wide range of biology subjects to gain a basic overview of our current understanding of how living organisms "work". There is a lot of content to remember, including a large amount of discipline-specific vocabulary. This class will use the flipped classroom approach. This means that I will ask you to learn much of the easier content outside of class by reading the text or other articles posted on Moodle, accessing assigned websites for information, and discussing course material with your learning team. Class preparation assignments (CPAs) will prompt you to make time for learning easy material BEFORE class, preparing you to apply the concepts and learn the most difficult information in class. If you make a good faith effort to prepare for class, then you will have no trouble learning enough content to pass the class, but if you ignore the responsibility to prepare for class, you will find that you cannot understand the in-class activities or get enough from class alone to be successful on in-class exams. I teach by asking questions. You will get a lot out of this class if you do your own work on the assignments that I have prepared to help you learn. I will not just lecture, in other words, tell you everything you need to know in class.

Sanctions for Cheating and/or Plagiarism

The Honor Code
The faculty of SNC believes students must be held to high standards of integrity in all aspects of college life in order to promote the educational mission of the College and to encourage respect for the rights of others. Each student brings to the SNC community unique skills, talents, values and experiences which, when expressed within the community, contribute to the quality of the educational environment and the growth and development of the individual. Students share with members of the faculty, administration and staff the responsibility for creating and maintaining an environment conducive to learning and personal development, where actions are guided by mutual respect, integrity, responsibility and trust. The faculty and students alike must make diligent efforts to ensure high standards are upheld by their colleagues and peers as well as themselves. Therefore, faculty and students accept responsibility for maintaining these standards at Sierra Nevada College and are obligated to comply with its regulations and procedures, which they are expected to read and understand.

Consequences of Violating the Student Honor Code
SNC students and faculty share the responsibility for maintaining an environment of academic honesty. Thus, all are responsible for knowing and abiding by the SNC Faculty/Student Honor Code published in the current SNC Catalog. Faculty are responsible for presenting the Honor Code and the consequences of violating it to students at the start of their classes AND for reporting all incidences of academic dishonesty to the Provost. Students are responsible for knowing what constitutes CHEATING, PLAGIARISM and FABRICATION and for refraining from these and other forms of academic dishonesty. Violations of the Honor Code become part of a student's academic record.

1st Offense: Student receives a zero for assignment/exam and counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.

2nd Offense: Student fails course and receives counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.

3rd Offense: Student is expelled.

Cutting and pasting or copying phrases or sentences from internet sources, books, articles, or other students is a violation of the student honor code. If you consistently write using your own words, you will avoid plagiarizing or cheating.

Prim Library Resources
Using the library's resources effectively (not just internet resources) contributes to developing each of SNC's core themes by exposing students to high quality academic resources, diverse opinions, new ideas, and a future that includes building on a liberal arts education. In this course, you will be expected to utilize the library's resources (either on-site or remotely) as you complete your assignments.

Prim Library Resources for BIOL 101 and BIOL 105: Biology and Lab include, but are not limited to:

1. Books (can be checked out):
    a. In general, books related to biology have Library of Congress Classification numbers ranging from QH through RC. Books about biotechnology have LCC numbers beginning with TP. However, you will find books related to our course with other LCC numbers, so search the Prim Library Catalog using key words related to the topic that you are researching.
    b. Pechenik JA. A short guide to writing about biology. 7th ed. New York: Longman; 2010. LCC number QH 304. P43 2010
    c. Lipson C. Cite Right: a Quick Guide to Citation Styles. Chicago: University of Chicago Press; 2006. LCC number PN171. F56L55 2006. Includes a section on CSE style.
2. Electronic databases (for peer-reviewed primary source research articles, secondary source reviews, newspaper magazine articles, and online books): Electronic databases most likely to include articles on biology topics are EBSCO: Academic Search Premier, Environment Complete, General Science Collection, GreenFILE, Health Source, Newspaper Source, and TOPICsearch; BioOne; and GREENR.
3. Hardcopy periodicals: Prim Library has current subscriptions for Science, New Scientist, Science News, Scientific American, and National Geographic Magazine. Any of these are likely to have secondary source articles about biology topics written for educated people who are not necessarily scientists. You will find these easy to read and articles will include references to primary source articles. Full-text articles from many more periodicals are available through the electronic databases.
4. Lib Guides: http://Libguides.sierranevada.edu These web pages contain instructions about how to use resources available at Prim Library, Prim Library resources for biology topics, how to evaluation the appropriateness of information from the internet for a research paper, how to cite sources, and other topics related to finding and using information.

The SNC Email System
The SNC email system is the official communication vehicle among students, faculty members and administrative staff and is designed to protect the confidentiality of student information as required by the Family Educational Rights and Privacy Act of 1974 Act (FERPA). Students should check their college email accounts daily during the school year.

Students have a right to forward their SNC e-mail to another e-mail account (for example, @hotmail or @gmail). However, confidentiality of student information protected by FERPA cannot be guaranteed for SNC e-mail forwarded to an outside vendor. Having email redirected does not absolve a student from the responsibilities associated with official communication sent to his or her SNC email account.

ADA Accommodations
In accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, students with a documented disability are eligible for support services and accommodations. If a student wishes to request an accommodation, please contact the Director of Academic Support Services, Henry Conover, at (775) 831-1314 x7534, hconover@sierranevada.edu, office in Prim Library: PL-304.

The Sierra Nevada College Mission Statement:

Sierra Nevada College graduates will be educated to be scholars of and contributors to a sustainable world. Sierra Nevada College combines the liberal arts and professional preparedness through an interdisciplinary curriculum that emphasizes entrepreneurial thinking and environmental, social, economic and educational sustainability.

The Core Themes: Four core themes from the SNC mission are woven through all courses and the life of the community at SNC.

Liberal Arts **Professional Preparedness** **Entrepreneurial Thinking** **Sustainability**

Biology I and Lab Schedule – Fall 2017

Week	Date	Day	Class preparation assignments	Class Topic	[2]Work Due
1	21-Aug	M	Bring laptop or tablet and Hillis Principles of Biology text to class	1. How to succeed in Biology I and Lab at SNC 2. Pre-trip meeting for Wed lab	
	23-Aug	W	Read Hillis Chapter 1 Class Preparation Assignment 1 (Learningcurve or outline)	Big themes in biology	CPA 1
	Lab	W	Complete Participant Agreement and email to Suzanne Prelab assignment (on Moodle)	How scientists think: observations, questions, hypotheses, predictions	Lab notebooks on shelf
2	28-Aug	M	Read Hillis Ch 2, concepts 2.1 & 2.2 CPA 2 (Learningcurve or outline)	Atom structure & chemical bonds	CPA 2
	30-Aug	W	Read Hillis Ch 2, concepts 2.3, 2.4, & 2.5 CPA 3	Carbohydrate and lipid structures	CPA 3
	Lab	W	Download and print lab Prelab assignment (on Moodle)	Molecular structures, water, and pH	Lab notebooks on shelf
3	*4-Sep*	*M*	*Labor Day Holiday*	*No SNC classes*	
	6-Sep	W	Read Hillis Ch 3, concepts 3.1 & 3.2 CPA 4	Nucleic acid and protein structures	CPA 4
	Lab	W	Bring computers to lab Prelab assignment (on Moodle)	What is science? (Mystery boxes)	Lab notebooks on shelf
4	11-Sep	M	Read Hillis Ch 3, concepts 3.3 & 3.4 CPA 5	Protein structure and function, Enzymes	CPA 5
	13-Sep	W	Skim main points and notes for Hillis Chapters 1, 2, & 3 CPA 6	Review for Exam 1	
	Lab	W	Download and print lab instructions Prelab assignment (on Moodle)	Microscopy	Lab notebooks on shelf
5	18-Sep	M	Study for Exam 1 with your learning team and others in the class	**Exam 1: Biology themes, chemical bonds, structures & functions of carbs, lipids, nucleic acids, and proteins, enzymes**	

[2] All work is DUE at the beginning of class and late work penalties apply thereafter. Late work is accepted for at least 50% credit as long as you attended class when it was due. Much of the online EXTRA CREDIT will have grace periods in which work can be turned in for full credit until a day or two before the NEXT exam.

Week	Date	Day	Class preparation assignments	Class Topic	Work Due
5	18-Sep	M	Study for Exam 1 with your learning team and others in the class	**Exam 1: Biology themes, chemical bonds, structures & functions of carbs, lipids, nucleic acids, and proteins, enzymes**	
	20-Sep	W	Read Hillis Ch 4 (all) CPA 6	Cells and cell specialization	CPA 6
	Lab	W	Download and print lab instructions Prelab assignment (on Moodle)	Cell structure and function	Lab notebooks on shelf
6	25-Sep	M	Review cell structures and functions with your learning team CPA 7 is a quiz scored for correct answers	Cell Jeopardy (with prizes)	CPA 7
	27-Sep	W	Read Hillis Ch 5, concepts 5.1, 5.2, 5.3, and 5.4 CPA 8	Cell membrane structure and transport	CPA 8
	Lab	W	Download and print lab instructions Prelab assignment (on Moodle)	Osmosis and potential energy gradients	Lab notebooks on shelf
7	2-Oct	M	Read Hillis Ch 5, concepts 5.5 & 5.6 CPA 9	Cell signaling and cell response to stimuli	CPA 9
	4-Oct	W	Skim main points and notes for Hillis Chapters 4 & 5	Review for Exam 2	
	Lab	W	Download and print lab instructions Prelab assignment (on Moodle)	Scientific posters	Lab notebooks on shelf
8	*Midterm exam week*				
	9-Oct	M	Study for Exam 2 with your learning team and others in the class	**Exam 2: Cell structure and function, cell membranes, transport, and cell signaling**	
	11-Oct	W	Read Hillis Ch 6, concepts 6.1, 6.2, & 6.3 without trying to understand everything CPA 10: outline reading	Oxidation-reduction, potential energy gradients, and ATP synthase	CPA 10
	Lab	W	Download and print lab instructions Prelab assignment (on Moodle)	Respiration Part I	Lab notebooks on shelf

Week	Date	Day	Class preparation assignments	Class Topic	Work Due
9	16-Oct	M	Read Hillis Ch 6, concepts 6.1, 6.2, & 6.3 for deeper understanding CPA 11	How energy is captured for ATP synthesis by catabolizing food molecules	CPA 11
	18-Oct	W	Read Hillis Ch 6, concepts 6.4, 6.5, & 6.6 CPA 12	How sunlight energy is captured to build food in photosynthesis	CPA 12
	Lab	W	Download and complete prelab assignment (on Moodle)	Respiration Part 2	Lab notebooks on shelf
	18-Oct	*W*	*Midterm grades are due by midnight*		
10	23-Oct	M	Read Hillis Ch 7 (all) CPA 13	Cell division, asexual and sexual reproduction, mitosis, meiosis	CPA 13
	25-Oct	W	Skim main points and notes for Hillis Chapters 6 & 7	Review for Exam 3	
	Lab	W	Download and print lab instructions Prelab assignment (on Moodle)	Cell Division	Lab notebooks
	27-Oct	*F*	*Nevada Day Holiday*	*No SNC classes*	
11	*30-Oct*	*M*	*Last day to withdraw from any SNC*	*class with a W grade!!!*	
	30-Oct	M	Study for Exam 3 with your learning team and others in the class	**Exam 3: Respiration, fermentation, photosynthesis, and cell division**	
	30-Oct to 9-Nov		*Advising for spring 2018 classes*	*Make an appointment with your academic advisor*	
	1-Nov	W	Read Hillis Ch 8, Concepts 8.1 & 8.3 CPA 14	Simple Mendelian inheritance	CPA 14
	Lab	W	Download and print lab instructions Prelab assignment (on Moodle)	Inheritance, probability, and the forked line method	Lab notebooks on shelf
12	6-Nov	M	Read Hillis Ch 8, Concepts 8.2 & 8.4 CPA 15	Inheritance got more complicated after Mendel	CPA 15
	8-Nov	W	Review Hillis Ch 8, Concepts 8.1, 8.2, & 8.3 CPA 16 – Download from Moodle, complete, bring to class	Jack-O-Lantern inheritance in-class assignment	CPA 16
	Lab	W	Download and print lab instructions Prelab assignment (on Moodle)	Interactions between genes and linkage	
	10-Nov	*F*	*Veteran's Day Holiday (observed)*	*No SNC classes*	

Week	Date	Day	Class preparation assignments	Class Topic	Work Due
13	13-Nov	M	Skim main points and notes for Hillis Chapter 8 Study for inheritance quiz with your team, classmates, and by practicing inheritance problems	**Inheritance Quiz: Ch 8**	
	14-Nov to 16-Nov	*T-R*	*Early registration week -*	*Register for spring 2017 courses*	
	15-Nov	W	Read Hillis Ch 9, concepts 9.1 & 9.2 CPA 17	DNA structure and replication	CPA 17
	Lab	W	Download and print lab instructions Prelab assignment (on Moodle)	DNA forensics, Part 1	Lab Notebooks on Shelf
	20 – 24 Nov	*M-F*	*Thanksgiving week (finally, a break!!) No SNC classes*		
14	27-Nov	M	Read Hillis Ch 10, concepts 10.1, 10.2, & 10.3 CPA 18	Transcription and the genetic code	CPA 18
	29-Nov	W	Read Hillis Ch 10, concepts 10.4 & 10.5 CPA 19	Translation - protein synthesis	CPA 19
	Lab	W	Prelab assignment (on Moodle)	DNA forensics, Part 2	Lab Notebooks on Shelf
15	4-Dec	M	Read Hillis Ch 11, concepts 11.1 & 11.2 CPA 20	Proteins bind to DNA to regulate transcription	CPA 20
	6-Dec	W	Read Hillis Ch 11, concepts 11.3 & 11.4 CPA 21	Regulation of gene expression after transcription or by modifying chromatin (epigenetic control)	CPA 21
	Lab	W	Download and print lab instructions Prelab assignment (on Moodle)	Epigenetic control of gene expression	Lab Notebooks on Shelf
Finals	11-Dec	M	Reading Day – no classes; study for final exams and finish final projects	Exam 4: Gene Expression review session on reading day	
	12-Dec	**T**	**8:00 AM to 11:00 AM**	**Exam 4: Gene Expression, Chs 9 – 11**	