

**BIOL 1050-001 GENERAL BIOLOGY I - Fall 2020**

**Instructor:** Dr. Marina M. Gerson      **Pronouns:** she/her/they

**Office:** N-272

**Office Hours:** M 9-10:30, W 12-1, F 9-9:30, and by appointment

**Contact Information:** my office (*best*) or mgerson@csustan.edu (*good*) or (209) 664-6547 (*worst*)

**About Dr. Gerson:** I really appreciate the respectful, supportive, and collaborative nature of the Biology department at Stan! grew up in Southern California, and I have had a passion for learning about little critters since I was little, myself. I was really lucky to be able to attend UC Santa Cruz for a degree in Environmental Studies and Biology. If you have never visited that beautiful campus, I recommend the trip to walk amongst the redwoods. After college, because of my volunteer work during the previous school year, I had a paid summer internship in S.F. Zoo's Insect Zoo. Then, after a stint doing office temp work (my high school job experience paid off here), I worked as a technician in a cardiovascular development lab at UC San Francisco; the lab used zebrafish as a model organism. Two years later, I moved on to University of Texas at Arlington to earn a Ph.D. in Quantitative Biology. My research centers on the behavior and ecology of lizards, with a focus on desert lizards of the American west. I love traveling and working in Central and South America, bird watching, SCUBA diving, snorkeling, hiking, and reading.

**Texts & Materials:** All required and recommended materials are available in the campus bookstore. You may be able to find the same books (except for the lab manual!) for better prices by shopping online sellers.

**1. Loose-leaf Campbell Biology in Focus, 3rd edition by Urray et al., ISBN 9780134895727**

- **Students who bring the book to class follow along better, have the most important study aid, and earn higher scores in the course. Please purchase a loose-leaf copy of this text.**
- I selected this text as the primary book for this course because it is *comprehensive without excessive detail*, relatively easy to read, has *excellent figures*, is a standard in the field, and has good online resources.
- You will **use this book in General Biology 2**, as well, so you will get a good return on your investment.
- You may also use an older edition of this book. It should be inexpensive to purchase a used copy.
- You do not need the online Mastering Biology access.

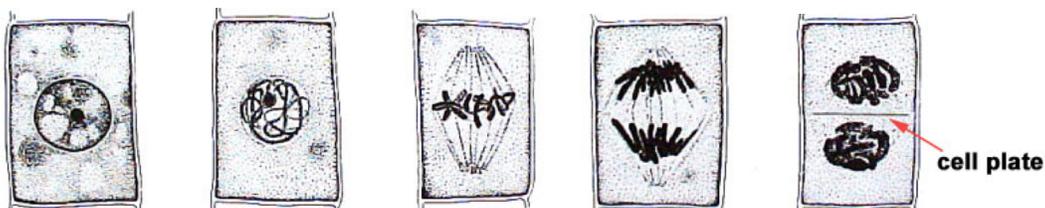
**2. The i>Clicker is required for this course. Any version of i>clicker will work, *except for* the smart app.**

- Using clickers in class helps to make lecture more interactive. It keeps you awake, allows you to earn participation points, and it helps me to gauge how well folks in the class understand the concepts.
- You *can* purchase a **used** iClicker and re-register it under your own name.
- Please do **not pay extra to register** a used clicker. We can do this for free in class.

**3. You will need to use the Blackboard course site for this class.**

- Go to <http://my.csustan.edu> and click on the "Blackboard" link at the bottom of the page.
- Login and enter the Biology 1050-001 course site to find course content. Note that you have a separate course page for your lab class (your lab instructor may or may not use this page).
- There are many student computer labs available on campus; *you do not need to own a computer*.

**4. Biology 1050 Lab Manual available only in the campus bookstore; check with lab instructor.**



## COURSE DESCRIPTION AND OBJECTIVES

### Course Requirements

Prerequisite: Grade of A or B in high school biology, or BIOL 1010. Co-requisite: You must be enrolled in an associated lab section (Tue 9-12, W 9-12, W 2-5, or Thu 9-12).

### Purpose of Course

The purpose of the introductory series is twofold: (1) to introduce students to the breadth of the biological sciences and (2) to help beginning biology majors master the fundamental facts and theories needed for success in subsequent courses.

This course is the first in the two-course series and will focus on cellular and molecular biology, genetics, and microevolution. The learning objectives will be met through a combination of Lecture (LE) & Lab (LA) experiences. **A grade of C- or better is required to move forward into General Biology 2 (BIOL 1150).**

### Course Objectives

Students will be introduced to foundational principles in biology:

1. All living things come from a common ancestor.
2. Biological structures exist at all levels of organization, from molecules to ecosystems.
3. A structure's physical and chemical characteristics influence its interactions with other structures, and therefore its function.
4. Biological molecules, genes, cells, tissues, organs, individuals, and ecosystems interact to form complex systems.
5. Cells/organs/organisms have multiple mechanisms to perceive and respond to changing environmental conditions.
6. Energy and matter flow between organisms and the abiotic environment.
7. Organisms have complex systems that integrate internal and external information, incorporate feedback control, and allow them to respond to changes in the environment.
8. Organisms inherit genetic information that results in their physical and behavioral characteristics.
9. Species evolve over time, and new species can arise, when allele frequencies change due to mutation, natural selection, gene flow, and genetic drift.



### Student Learning Outcomes:

Successful students will be able to:

- Describe the properties that unite the three domains of living things. (LE)
- Identify relationships between structure and function at all levels of biological study. (LE, LA)
- Describe the major groups of biological macromolecules and explain their importance of each to cellular structures and functions. (LE)
- Identify structures of prokaryotic and eukaryotic cells and explain the functions they perform. (LE, LA)
- Describe how the cell integrates into the hierarchical organization of living systems. (LE)
- Explain how and why cells communicate to coordinate their activities. (LE)
- Explain how energy and materials flow within and between cells, and between cells and the environment. (LE, LA)
- Identify the processes by which the cell obtains and produces needed resources. (LE, LA)
- Explain the stages in the cell's life cycle in single celled and multicellular organisms, including growth, cell reproduction, and apoptosis. (LE, LA)
- Describe the process by which cells pass on genetic information to their offspring and explain how sexual reproduction results in genetic diversity. (LE, LA)
- Describe how genes encode information and explain how this results in the structure and function of organisms. (LE)
- Identify the processes that result in changes in genomes, resulting in unique individuals, populations and species. (LE, LA)
- Explain the scientific method and describe specific techniques used to scientifically study living things. (LE, LA)

Students will also:

- Practice self-assessment and reflection while developing the necessary study skills for success in science coursework. (LE, LA)
- Practice using the process of scientific inquiry as a means of understanding the natural world. (LE, LA)
- Make connections between the factual information provided by science and the relevance of biology to broader societal issues. (LE, LA)
- Demonstrate a professional and respectful manner when communicating and working with peers, instructors, and staff, as practice for success in the workplace and community. (LE, LA)

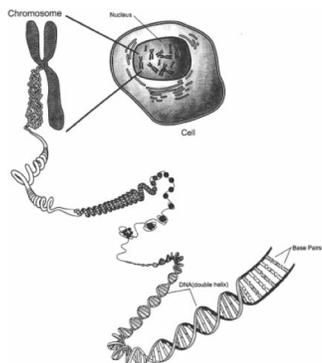


### **Assessment Methods, Grades, and Grading**

The most practical assessment measure for content-heavy courses is the objective exam. Most of your grade for the lecture portion of the course will be based on lecture exams. Participation points will be available daily in lecture, through participation with your iClicker. Questions will include pre-test quiz questions, comprehension questions, and summary/review questions. Thus, you have the opportunity to earn participation points through the entire class period. *There will be regular opportunities to earn extra credit in lecture, but you will need to be present to participate.* Lab points are added to lecture points to calculate your total grade in the course. I do not use a curve. This course is graded plus/minus, and there is a CR/NC (Credit/No Credit) option.

Any homework or extra credit assignment must be turned in on the day and time it is due. Under normal circumstances no extra credit will be accepted after the due date. There are typically no make-up assignments in this course.

The last day to drop a class is September 19. The last day to apply for the CR/NC grading option is Friday, May 1. To change your grading option, you will need my signature on a Registration Options Form (available online from the Enrollment Services website). I do not change grades/options after the semester is complete unless I have made an error.



<u>Course Component</u>	<u>Possible Points</u>	<u>% of Grade</u>
Syllabus exercise	5	0.5%
Exam 1	120	12%
Exam 2	125	12.5%
Exam 3	125	12.5%
Final Exam	125	12.5%
Group Presentation	100	10%
Featured Scientist Profile	50	5%
Class Participation	100	10%
Lab	250	25%
<b>TOTAL POINTS POSSIBLE</b>	<b>1000</b>	<b>100%</b>

<u>Point Range</u>	<u>Grade Earned</u>
930-1000	A
900-929	A-
875-899	B+
830-874	B
800-829	B-
775-799	C+
730-774	C
700-729	C-
675-699	D+
630-674	D
600-629	D-
<600	F

### **Expectations of Students**

- **Be respectful of others** by *arriving on time*, *giving your attention* to whoever is presenting, *listening to the ideas* of your classmates, *turning off cell phones*, and generally being polite. This also means **no text-messaging** (yes, the person at the front of the room *can* tell what you are doing) and **no internet surfing** (it's distracting to those sitting around you).
- **Engage the course material** through participation in class, reading the text, and thinking about biology outside of class.
- Students are expected to **take exams** during the scheduled dates and times. If you have a legitimate excuse to miss a lecture exam, I need to know the reason, in writing, at least a week before the exam date. Arrangements for taking the exam at another time must be made at the time of the written request. If you have an emergency less than a week before an exam, you must let me know of the emergency prior to the exam time if possible. You must provide a valid, written excuse on or before the next class period after the exam date, in order to be able to take the exam at an alternate time. If the emergency lasts beyond the next class period after the exam, you must at least let me know about the situation, and you must bring a valid, written excuse as soon as you return to school. I will determine the appropriateness of taking the missed exam in this case.
- **Maintain your academic integrity.** *Your integrity is your most valuable asset as a student* and in your future career as an educated person. In line with this, it is the policy of the Department of Biological Sciences that anyone caught *cheating* or *plagiarizing* will receive a grade of F for the course. *I reserve the right to request any student suspected of cheating to take a second, different exam on the material.* Please protect yourself by making your integrity obvious.

### **Expectations of the Instructor**

- Same as those for students, in terms of respect for participants and engagement in the course. *Protecting your privacy and maintaining an environment in which you can learn are my top priorities.*
- Be **open to feedback** on the course and be flexible in order to make appropriate changes to meet student needs.
- Be **fair and consistent in assessment** of student learning and provide appropriate feedback to facilitate improvement.
- Be **available to students** outside of class time to answer questions and discuss class material.

**Tentative Course Outline**

DATES	TOPICS	Readings
Jan 27, 29, 31	Introduction to the Course Chemistry of Life	1 2
Feb 3, 5, 7	Carbon and Organic Material	3
Feb 10*, 12, 14	Carbon and Organic Material Membrane Structure and Function	3 5
Feb 17, 19 Feb 21**	Membrane Structure and Function <b>Midterm 1</b>	5 <b>1-3 &amp; 5</b>
Feb, 24 Feb 26*** Feb 28***	Cell Communication <b>A GROUP PRESENTATIONS - BIOTECH TOOLBOX</b> <b>B GROUP PRESENTATIONS - TOUR OF THE CELL</b>	5 pp. 274-279, 336-337 4
Mar 2 Mar 4 Mar 6	Metabolism Cellular Respiration	6 7
Mar 9, 11 Mar 13	Cellular Respiration Catch up and Review	7 4, 5, 6, 7, Biotech
Mar 16 Mar 18, 20	<b>Midterm 2</b> Photosynthesis	4, 5, 6, 7, Biotech
Mar 23, 25, 27	SPRING BREAK - NO CLASSES	--
Mar 30 Apr 1*** Apr 3	Photosynthesis <b>C GROUP PRESENTATIONS - CELL LIFE CYCLE</b> Meiosis and Sexual Life Cycles	8 9 10
Apr 6, 8, 10 <sup>FSP</sup>	Meiosis cont. Mendelian Genetics Chromosomal Inheritance	10 11 12
Apr 13, 15 Apr 17	Molecular Basis of Inheritance (DNA→DNA) Catch up and review	13 8-13
Apr 20 Apr 22, 24	<b>Midterm 3</b> Gene Expression (DNA→RNA→Polypeptide)	<b>8-13</b> 14
Apr 27, 29 May 1*** G	Gene Expression cont. <b>D GROUP PRESENTATIONS - VIRUSES</b>	14 17
May 4, 6 May 8 <sup>FSPSH</sup>	Population Genetics Descent with Modification	21 19
May 11, 13 May 15	Descent with Modification Speciation and Evolution Review	19 22 All chapters
<b>FINAL EXAM</b>	<b>Monday, May 18, 8:30-10:30 am</b>	<b>All chapters</b>

\*Click-days begin

\*\*Drop deadline is Feb. 21

\*\*\* Group Presentation Dates (clicker extra credit!)

<sup>G</sup> Last date to change grading option (must turn in!)<sup>FSP</sup> Featured Scientist Profile due by midnight<sup>FSP</sup> FSP Scavenger Hunt due by midnight

### **Resources for Student Success**

**OFFICE HOURS** – Office hours are for *you*! These are times your professor has specially set aside when they won't be distracted by anything else. You can ask questions about class, your career path or anything else about college life. Drop by and say hello!

**SUPPLEMENTAL INSTRUCTION** – Improve your grade! Students work together with a peer mentor to really grapple with course content!

**TUTORING ON CAMPUS** – Free tutoring and writing help services are available to assist you in most disciplines, including in biology! Library Annex LX14; Phone (209) 667-3642; Web <http://www.csustan.edu/Tutoring>

**CAMPUS COUNSELING SERVICES** – Overwhelmed by the stress of juggling classes and your home life? Our campus offers **excellent** counseling services to help support you! New location near Student Services SSX 1.1; Phone (209) 667-3381; Web <http://www.csustan.edu/Counseling/>

**STUDENT HEALTH CENTER** – You have already paid for access to health care on campus. Services include: birth control, flu shots, immunizations, pharmacy, check-ups, HIV testing, TB tests, and *doctor's notes for when you are sick*! Phone (209) 667-3396; Web <http://healthcenter.csustan.edu>

**LIBRARY** – Even in the temporary buildings, reference librarians enjoy helping you to find out all kinds of things! You can get help in person at the Reference Desk in LX25, or by phone or chat (scan left side of library main webpage). Phone (209) 667-3233; Web <http://library.csustan.edu>

**BASIC NEEDS PROJECT** – Stan State is committed to reducing the barriers to success faced by our students. If you are struggling with housing, food, or health care, check out what Stan can do to help. We are here for you! <https://www.csustan.edu/basic-needs>

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**Special circumstances:** I understand that unusual circumstances can temporarily alter your availability for our class. If you know ahead of time that you will have a conflict on an important day, please get in touch with me as soon as possible. If an unforeseen incident causes you to miss an exam or your presentation, get in touch with me *as soon as your circumstances allow*. If you miss a regular class day, please get the notes from a friend, review the posted lecture notes, and come to my office hours with any questions you may have.

**Learning styles and needs:** As an instructor, I believe that part of my job is to intentionally facilitate the success of students with different learning styles and needs, and I do my best to incorporate multiple ways of learning into my courses and assignments. Please meet with me privately *as soon as possible* if there are particular accommodations that will foster your individual success in this course.

**Lecture Recording Policy:** Photography, audio and video recording (or any other form of recording) of classes at Stanislaus State University is **not permitted unless expressly allowed by the faculty member** as indicated in the course syllabus or as a special accommodation (8/AS/10/FAC--Faculty Policy on Student Recording of Classes). Recordings are taken out of context of the classroom setting, and while they may document the exact words spoken, they do not fully document the exchange of information and understanding that occurred during the class session. **If you have a particular reason why you would like to make photographs or recordings in lectures, please discuss this with me in my office.**

### **How you Earn your Grade in Lecture**

**As I complete grading for each assignment or exam, you will be able to check your score on Blackboard.**

**You have one week following return of any exam or assignment to meet with me to work out any reasonable changes in grading.**

#### **Participation**

You will use your clicker to respond to in-class questions. This helps me gauge your level of comprehension and will help me with the pacing of the material. It also allows me to reward you for being dedicated in your lecture attendance. You earn your highest grade by choosing the correct answers. I know things come up, and you might miss a day or two of class; don't worry, *it will be safe to miss two days without penalty*. Additionally, you can earn bonus participation points for attendance on group presentation days. **Hint: put three spare batteries in your backpack in case your i>Clicker fails.**

**Asking another student to click for you OR clicking for someone else is cheating.**

**Anyone using more than one clicker will receive an F for the course.**

#### **Exams**

There will be three midterms and a required comprehensive final. Midterms will consist of 50 questions to be answered on a Scantron (bring your Scantron and pencil). There will also be one page (front and back) of short answer/identify a picture from the text/label-a-process questions. Questions will cover material that is associated with lecture. **I encourage you to study the material more deeply that we cover in class**, in order to perform well at the level of the test. Scantron questions will be valued at 80% on each exam and short answer at 20%.

The required comprehensive final will consist of 100 multiple choice questions and one page (back and front) of free response questions. Some questions may be the same as those used on the midterms, but others will be different.

**Tips for learning the material**

In my experience, many bright students are simply not challenged during high school. As a result, smart and capable people haven't had the opportunity to develop the study skills needed for success in the university. Don't let my first exam catch you by surprise! This course is content-heavy, and you will **not be able to cram** with much success for my exams. **Make your study time a daily habit.**

- **You need to study the material more deeply in the text than is covered in lecture, in order to be able to readily answer questions on the exams.**
- **Every lab point can count in your favor**, or not. Make sure performing well in lab is part of your plan for success.
- Skim the whole chapter before you come to class. Carefully read and interpret the figures and tables and carefully read each vocabulary term.
- Be early to class for special study tips, sneak previews for lab, and to engage with your Instructor.
- Take notes in class based on what you hear. Do not spend the class period copying every word off my slides. These same words can be found in your text and in the posted lecture slides.
- After class review your notes. Go back and read the textbook to fill in gaps in your understanding. **Some students have been very successful by copying out their notes onto flashcards for study.**
- **After class, write 7-10 exam questions for the material. This will give you a study sheet for before the exam.**
- **The Preview-Review Questions associated with each lecture chapter are your Study Guide.** Be sure you can thoroughly answer each one without referring to the textbook or notes.
- When you study, *don't fool yourself!* When you page through the textbook, everything will look familiar. This doesn't mean that you personally own the knowledge yourself. Make it yours! After each class day, without looking at your notes or the book, write down a list of the topics and subtopics covered. Write down key words and their definitions. Make your best sketch of the figures/illustrations presented. After this, open your text and see how well you did. The parts you missed entirely are the parts you need most to study, the parts you partially remembered also need some attention. The parts you know perfectly are part of your own knowledge set.

**Group Presentation** – Check on Blackboard for the Grading Rubrics for this project.

To foster your confidence in exploring, discussing and sharing scientific information, you will work in a group to prepare one **short, ten-minute** presentation. *Your main objective is to provide a memorable lesson that will help your classmates to master the material.* You will need to meet outside of class times to prepare your presentation.

Group Structure: Groups will consist of students from the same lab section. Dr. Gerson will facilitate group formation.

Presentation Dates and Topics: Four groups will present on different subtopics of the main theme on each presentation day.

**Your individual evaluation of your group is due one class day after your presentation.**

Date	Theme	Group	Subtopic
Feb 26	<b>Our Biotechnology Toolbox</b> Section 003 (Wed 2-5) <i>You should also seek outside resources for these four topics.</i>	A1	Polymerase Chain Reaction – pp 276-278
		A2	Recombinant DNA & Genetically Modified Bacteria – pp 274-276
		A3	DNA Sequencing – pp 278-279
		A4	Cloning Animals: Dolly the Sheep – pp 336-337
Feb 28	<b>A Tour of the Cell</b> Section 005 (Thu 9-12)	B1	Prokaryotic Cells
		B2	A Tour of the Eukaryotic Cell 1 →
		B3	A Tour of the Eukaryotic Cell 2 →
		B4	A Tour of the Eukaryotic Cell 3 →
Apr 1	<b>The Life and Times of a Normal Cell</b> Section 004 (W 9-12)	C1	Function/use/purpose of mitosis
		C2	Importance of Checkpoints in G1 and G2 of Interphase
		C3	Mitosis: Prophase, Metaphase, Anaphase
		C4	Mitosis: Telophase & Cytokinesis & compare in animals & plants
May 1	<b>Living or Not: Viruses</b> Section 002 (Tue 9-12)	D1	Diversity of Viruses: Overview of Structures; & Are viruses alive?
		D2	The Bacteriophage Lysogenic Cycle & Lytic Cycles
		D3	Introduction to Retroviruses (example: HIV)
		D4	Vaccines & Immune Response (hint: see pp. 752-756 on vaccines)

Presentation Guidelines:

- Your goal is to provide your classmates a valuable learning opportunity.
- The presentation can be **no more than ten minutes!** You will lose points if you go over time.
- Stick to your assigned subtopic and be aware of the other subtopics in your session (so you don't waste your time on someone else's project).

- Your group will need to decide on roles for each member and each member **must** take part in the preparation and/or presentation of your project. Some suggested roles are: group chairperson, secretary, textbook research, internet research, illustrations/graphics, presenter, videographer, audio-visual technician. Your assigned roles are due to me one week before your presentation.
- Your presentation can be creative! You are welcome to make use of any resources we have available, including laptop, internet, document camera (overhead projector), and any materials you wish to bring with you. You can provide a straightforward presentation of the information, or you can perform a skit, song, or puppet show, you can show a video or animation produced by your group, or you can use any other creative means you can think of to share information.
- Your classmates will grade you according to the value they receive from your work, so remember that **content delivery is key**.
- Be sure to practice! If you cannot complete your lesson in ten minutes, your score will suffer!

When your group is not presenting:

- Be attentive and polite in support of your peers! This is a big class, and it can be intimidating to present to a large group.
- You earn one bonus participation point for attending class on group presentation days.
- You are responsible for judging the work of your peers. Your main criterion is: **“How well did the presentation help me to learn the material?”**

### **Featured Scientist Profile**

The word *science* is used to describe a process of understanding the natural world and also to refer to the collection of facts, principles, and understandings that are generated by that process. While the natural world would exist without scientists, *science* would not. People are key to our field of study. As you develop your professional expertise, you will find that there are key contributors for your particular focus. There will be famous names known to everyone in your field. However, you might find even more inspiration from the hidden gems, from people whose important contributions are not widely recognized. Sometimes, those people may not have even considered themselves to be scientists. For example, one of Dr. Gerson’s favorite scientists is Annie Montague Alexander, whose vision (and money) was responsible for founding the Museum of Vertebrate Zoology at UC Berkeley. Although she herself contributed to the natural history collections her whole life, she always felt that because she did not do it professionally, she was not a scientist. She was a very unconventional lady living in the 1890s in California.

Taking the opportunity to explore your own interests and passions is an important aspect of college. This assignment will ask you to learn a little bit about someone working in your own area of interest and to organize that information in a way that communicates the core of that scientist’s importance to your classmates. Organizing information also helps you to make sense of it and to commit it to long term memory. You will prepare a **single** Google Slide to summarize what you find out. A grading rubric will be available on Blackboard. Here are the key points you **must include**, but each person is different (*you* and your specific interests plus *the scientist* and what is interesting about them). Include anything else you think folks would like to learn about!

- Full name of the person
- Year of birth (and year of death if deceased)
- Image of the person or image that represents their contribution
- What category of science/discipline you would put that person’s contribution into (e.g., Medicine, Geology, Programming)
- Relate what it is that is interesting about the person (the importance of that person to the field)

Please use this assignment as an opportunity to learn about a person in science with whom you share something in common. Search broadly to find a person who has contributed in an especially meaningful way to *your area of interest in STEM*.

### FAQs

*Do I have to choose a biologist?*

No. This is an opportunity to develop some depth of understanding about someone who is important in *your* area of STEM.

*Does the person need to be historical (i.e., dead)?*

No, the person can still be alive today.

*Does the person need to be famous?*

No. *Most* scientists make important contributions that don’t make the headlines. Their work is critical to progress.

*How do I submit my work?*

The Google Slide show link will be available through Blackboard. You will add your slide to the presentation.

*Do I need to cite my sources on the slide?*

For this assignment, no. Because you are using your resources for one-time class use, it is okay to borrow from a variety of reference sources to create your informative slide.

**Extra Credit? Yes! Regular extra credit opportunities will arise in lecture class.  
You must attend class to earn these points!**

**Performance Indicator Inventory – Please keep this for your use.**

The inventory below lists behaviors that you should exhibit in order to excel in biology (or any university-level course). **Circle each of the following statements describing how you will study in this class.**

1. Before class begins each day, I will always preview the assigned pages from the textbook.
2. I will go over my lecture notes as soon as possible after lecture to rework them and mark problem areas.
3. I will use the Preview/Review questions for each chapter to help me identify and study the most important concepts.
4. I will give assignments my full attention to get the greatest learning experience from them.
5. I will go to office hours, supplemental instruction, or tutoring regularly to discuss confusing material from class and/or problems on the homework or exams that I struggle with.
6. I will give the 50 minutes of lecture class my undivided attention each day.
7. I will spend at least 10 hours a week studying biology outside of class.
8. I will spend some time studying biology at least five days per week.
9. I will “teach” concepts from this class to my friends, myself in the mirror, stuffed animals, my pets, imaginary students, etc.
10. I will make flashcards and use mnemonics for myself to help me remember facts and concepts.
11. I will prepare illustrated (including pictures, diagrams, flow charts) chapter summaries from my notes to help me remember facts and concepts, and make connections between them.
12. I will actively participate in a study group where we will discuss homework problems, class notes, and quiz each other on the course material.
13. I will rework all problems I missed on exams before the exam review session in class.
14. I know it is possible for me to make an A in this class, and I will put forth the honest effort to do so.

My Performance Inventory Total is \_\_\_\_\_ circles.

Based on the Performance Inventory Score, my predicted grade in the class is \_\_\_\_\_ .

Note that you can **plan for excellence** in this course!

You may need to step up your study habits.

The first step is to plan adequate study time in your weekly schedule.

*Please make sure you buy the text book!* An older edition will be okay. You *need* this study aid to support your college-level understanding of the material.