



Course Syllabus

ATLANTA METROPOLITAN STATE COLLEGE

School of Arts and Sciences

Principles of Biology and Lab I - BIOL 1107K CRN: 80153 (Section 101)

MW 9:30 AM – 10:50 AM, ASB (McMillan Building, #900) Room 136

W 11:00 AM – 2:00 PM, ASB (McMillan Building, #900) Room 119

Main Campus Course

Fall 2025

This is a Core IMPACTS course that is part of the Technology, Mathematics, and Sciences (STEM) area.

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students' broad academic and career goals.

******Please download this document as it may not display accurately in the web browser.***

Instructor Information	Name: Dr. Boniface Okeke
Office location:	McMillan Building (#900), Room 220
Office telephone:	678-623-1282; May also use Microsoft Teams to call or send a chat message
Email Address	bokeke@atlm.edu
Office Hours:	
<ul style="list-style-type: none"> In Person: 	M, 11:00 AM – 12:00 PM
<ul style="list-style-type: none"> Online 	By appointment with the use of Microsoft Teams.
<ul style="list-style-type: none"> By Appointment 	Office hour disclaimer: If you are not able to meet with the instructor during office hours, you may schedule an appointment based on instructor's availability.
Course Information	
Pre-requisites	Exit or exemption from learning support, Mathematics 1101 or 1111, and English 1101
Credit Hours	4
Catalog Description	This lecture course is an introduction to general biological principles, including the physical and chemical nature of protoplasm, biological structure and function, transport of materials, energy transformations, molecular and cellular biology and genetics. This required course is primarily intended for science, computer science, and mathematics majors.
Course Start and End Date	August 18, 2025 – December 3, 2025
Course Textbook	<ul style="list-style-type: none"> Lecture Textbook: Peter Raven, George Johnson, Kenneth Mason, Jonathan Losos, Tod Duncan, (2023). <i>Biology 13th</i> ed. New York, NY: McGraw-Hill. (ISBN10: 1264097859; ISBN13: 9781264097852). Laboratory Textbook: Darrell S. Vodopich, Randy Moore (2023). <i>Biology Laboratory Manual 13th</i> ed. New York, NY: McGraw-Hill. (ISBN:1260200728; ISBN-13: 9781260200720) This course is a Day 1 Ready Inclusive Access course. This means that <u>these books have already been paid with your tuition</u>. Click on the Start Here Module in Brightspace (D2L), then click on McGraw Hill Connect Course to access the registration instructions. If you choose to option out of the Day 1 Ready Access Program for this course, please click on the Textbook (Day One Access) tab (located in the horizontal menu near the top of the course page in Brightspace), then click on the Opt Out option. This option will end after the add and drop period for the current semester. Students must provide their own LAB COAT, LATEX or NITRILE GLOVES, and PROTECTIVE EYEWEAR. These materials must be obtained no later than the second laboratory meeting.
Required Resources	<p>Please see Course Textbook information above. McGraw Hill Connect access is NOT required for this in-person course.</p> <p>This course will use a physical laboratory manual. Each student must visit the AMSC Bookstore website (https://atlm.textbooktech.com/) to request the physical manual to be sent to an address. Once on the website, login</p>

using your AMSC student credentials, scroll down to Textbook Lookup, click on Lookup by Student ID, then choose the mail option located by the textbook.

Textbook Lookup

Find the textbooks for your courses

Lookup by Course Lookup by Student ID

Select School

ATLANTA METRO STATE COLLEGE

Select Term

SUMMER 2025

Student ID ?

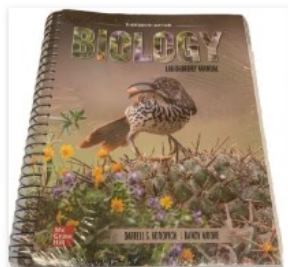
932?????

Lookup Courses by Student ID

Principles of Biology I

ATLANTA METRO STATE COLLEGE - SUMMER 2025 - BIOL - 1107K - 50717 Gurganiusnor

REQUIRED



Biology Connect Access W/Lab Manual

This item is Required

Important Notes: This package contains the Connect Access code and Lab Manual. Connect Access will contain an ebook copy of the textbook.

Additional Information



Author: Raven & Vodopich

Publisher: McGraw Hill

Edition: 13TH

This course material has been paid for in your tuition for the Day 1 Ready program. For more information, please visit the Day 1 Ready FAQ page.

Recommended
Resources

General Education
Learning Outcomes

Apply the steps and tenets of the scientific method.

Core IMPACTS

BIOL 1107K – PRINCIPLES OF BIOLOGY AND LAB I

This is a Core IMPACTS course that is part of the Technology, Mathematics, and Sciences (STEM) area.

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students' broad academic and career goals.

	<p>This course should direct students toward the following broad <u>Orienting Question</u>:</p> <ul style="list-style-type: none"> • How do I ask scientific questions or use data, mathematics, or technology to understand the universe? <p>Completion of this course should enable students to meet the following <u>Learning Outcome</u>:</p> <ul style="list-style-type: none"> • Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena. <p>Course content, activities and exercises in this course should help students develop the following <u>Career-Ready Competencies</u>:</p> <ul style="list-style-type: none"> • Inquiry and Analysis • Problem-Solving • Teamwork
Program Learning objectives	See course objectives.
Course Learning Objectives	<p>Upon successful completion of BIOL 1107, a course requirement for STEM and health professions, students will be able to:</p> <ol style="list-style-type: none"> 1. List and recognize each component of the scientific process. 2. Describe the complexity of cell structure and function. 3. Identify and describe the process and individual reactions of photosynthesis. 4. Identify and describe the process and individual reactions of fermentation/respiration. 5. Mendelian genetic principles with other patterns of inheritance. 6. Compare normal and abnormal patterns of inheritance. 7. Define mitosis and meiosis; identify each step in the processes and compare/contrast the two processes. 8. Describe the basic concepts of biotechnology and its impact on everyday life.
Chapters Covered	<p>The following chapters will be covered in this course:</p> <ul style="list-style-type: none"> • Chapter 1: The Science of Biology • Chapter 2: The Nature of Molecules and the Properties of Water • Chapter 3: The Chemical Building Blocks of Life • Chapter 4: Cell Structure • Chapter 5: Membranes • Chapter 6: Energy and Metabolism

Online Attendance and Participation Policy	Being “Present” in class is determined by the student’s active attendance and participation in an “academically related activity” which includes actual presence in a virtual class, submission of an assignment, group projects, completion of an exam or quiz and discussion forum posting.
Conduct:	Refer to AMSC College Catalog, page 49
Late Policy:	Late assessments (quizzes, assignments, projects, or examinations) will only be accepted with instructor approved documentation of extenuating circumstances. Unapproved documentation will result in a zero for the assessment.
Enrollment Status:	Students are ultimately responsible for ensuring that the course(s) in which they enroll are included in the approved degree plan and program map for their program of study. Students must periodically check their enrollment status in this course during the semester. The student is responsible for determining changes, if any, in enrollment status and taking necessary steps (e.g., pursuing re-instatement in this course) following those outlined in the AMSC catalog.
Attendance Verification (No Show)/Reinstatement	<p>Atlanta Metropolitan State College has a "No-Show" Reporting (Attendance Verification) policy. This policy is to comply with Federal Financial Aid regulations. Financial Aid recipients at Atlanta Metropolitan State College may become ineligible for funds by not attending class session (per enrolled course). Students who do not complete Mandatory Attendance Assignments and attend class sessions are NOT entitled to keep their financial aid award. The Registrar's Office will notify the students and faculty when the Attendance Verification Period has opened. The established "No-Show" Reporting (Attendance Verification) procedure will enable Atlanta Metropolitan State College to adjust financial aid awards before funds are issued to students (thereby eliminating liability for both the College and the student). A student reported as non-attending a course must seek the approval of the instructor in order to be reinstated. Once approved, the student will complete the Reinstatement form and submit it. The Office of Registrar will notify students when course reinstatement process has been completed during Reinstatement Period.</p> <p>The student can demonstrate compelling reason (s) that have prevented attendance and the instructor believes that there is a strong probability that the student can catch up in the class OR The instructor made an error, and the student was in attendance prior to being dropped.</p>
Computer Hardware & Software Requirements:	One of the challenges many encounter with enrolling in and completing an online course is the accessibility to the required and recommended software and hardware. Different institutions, and even different courses within the same institution, have varying technology requirements. Check your hardware and software systems to determine its compatibility with the online course you have selected.
Minimum Hardware Recommendations to take courses:	<p>D2L System Requirement</p> <p>Internet Connection:</p> <ul style="list-style-type: none"> · Ethernet Network Capability required · Wireless Network Capability required <p>Operating System Requirements</p> <ul style="list-style-type: none"> • PC: <ul style="list-style-type: none"> • Compatible Operating System:

	<ul style="list-style-type: none"> • Web Browser: Firefox, Chrome • Mac: <ul style="list-style-type: none"> • Compatible Operating System: • Web Browser: Firefox, Chrome, Safari <p>Hardware requirements:</p> <p>Minimum Technical Specifications for Hardware:</p> <ul style="list-style-type: none"> • A processor of 2GHz or faster • 4GB RAM or greater • 500 GB of Hard Drive space • Monitor and video card with a minimum resolution of 1024x768 • Keyboard and mouse <p>Minimum Technical Specifications for Computer Peripherals:</p> <ul style="list-style-type: none"> • Speakers • Headphones • Microphone • Webcam <p>Software requirements:</p> <p>Browser Requirements/Supported Browsers</p> <p>Compatible Browsers:</p> <ul style="list-style-type: none"> • Apple Safari - https://support.apple.com/downloads/safari (Mac) • Google Chrome - https://www.google.com/chrome/ (Mac or PC) • Mozilla Firefox - https://www.mozilla.org/en-US/firefox/new/ (Mac or PC) <p>Application Software</p> <ul style="list-style-type: none"> • Microsoft Office 2016 (Word, Excel, PowerPoint) (Mac or PC) • Adobe Reader - https://get.adobe.com/reader/ <p>Plug-ins</p> <ul style="list-style-type: none"> • Java - https://www.java.com/en/download/ • Adobe Flash Player - https://get.adobe.com/flashplayer/ • Windows Media Player - https://www.microsoft.com/en-us/download/details.aspx?id=20426 • Apple QuickTime - https://support.apple.com/downloads/%2523quicktime • Microsoft Silverlight - https://www.microsoft.com/getsilverlight/Get-Started/Install/Default <p><u>Accessibility:</u> Wi-Fi is also available for use in the campus parking lots.</p>
Tutoring Services	<p>Students improve their self-confidence and increase their chances of excelling in their courses when they utilize their college/university academic support services. The following tutoring services are available to AMSC students:</p>

	<ul style="list-style-type: none"> ❖ The AMSC Writing Center is open year-round to support students, staff, and faculty at AMSC. It offers virtual and in-person tutoring for various writing projects, assists at any stage of the writing process, and increases improvement in structure, use of sources, style, grammar, and more. The Writing Center is located in Building 100, Room 211. Students can walk in during hours of operation or schedule an appointment at https://calendly.com/amscwritingcenter/30min ❖ Tutor.com is a virtual space for students to access writing tutors outside of AMSC faculty. Access tutor.com in Brightspace by logging into your course. Next, click the 'Free Tutoring' tab and choose Tutor.com from the dropdown options. Students are granted five (5) hours per semester, and registration is not required. Contact the Center for Student Success and Advising at (404) 756-5690 for assistance. ❖ TutorOcean is a tutorial for students enrolled in STEM courses such as Biology, Chemistry, Mathematics, and Computer Science. Access TutorOcean and sign up at https://atlm.tutorocean.com
Americans with Disabilities Act (ADA) Statement	<p>Atlanta Metropolitan College is committed to providing support for all students and making their college experience an enriching opportunity. In compliance with Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990, The Department/Office of Counseling and Accessibility Services, located in the Student Services & Success Center, building 650-Suite 252, oversees the coordination of services for students with documented disabilities. The Coordinator of Disability Services collaborates with faculty and staff to offer provisions for reasonable accommodation to students who meet the requirements.</p> <p>It is the policy and practice of AMSC to make all Web information accessible to students with disabilities. If you, as a student with a disability, have difficulty accessing any part of the course materials for this class, please notify the instructor immediately.</p> <p>Accommodation cannot be provided until a reasonable accommodation plan is in place. To the greatest extent possible, all college representatives shall observe confidentiality.</p>
Office of Counseling and Accessibility Services	<p>The Office of Counseling and Accessibility Services operates under the Americans with Disabilities Act (ADA) laws in order to assist in leveling the playing field for students who have disabilities with those who do not.</p> <p>The amended ADA, otherwise known as ADA, defines "disability" as a physical or mental impairment that substantially limits one or more major life activities. If you feel that you have a disability or impairment that may limit your academic functioning, please contact Dr. Dorothy Williams, the Director of Counseling and Accessibility Services at 404-756-4016 or at https://www.atlm.edu/students/counseling-and-disability-services.aspx.</p>

	<p>The Coordinator of Counseling and Accessibility Services reviews all accommodation requests. In order to receive accommodation, the student's illness or disability must be verified in writing by a physician, psychiatrist, or some other health care provider or specialist. Students choosing to access disability support services should contact the Coordinator as soon as possible after acceptance to AMSC. Please be aware that late notifications may result in complications for establishing accommodation in a timely fashion.</p>
Withdrawal	<p>Withdrawal from a course is solely the responsibility of the student. Instructors will not initiate student withdrawals. A student who wishes to withdraw from a course MUST submit a completed Withdrawal Form (Schedule Reductions Form) to the Registrar's Office before mid-term in order to receive a grade of "W" for the course.</p> <p>A student who withdraws after the Midterm date receives a "WF" unless the Vice President for Academic Affairs determines that it is a hardship case, then a "W" will be recorded. The possibility that a student may fail the course will not be considered a hardship</p>
Incomplete Grade Policy	<p>An incomplete may be awarded at the instructor's discretion for non-academic reasons which prevent the student from completing the course requirements. The student must be passing the course at the time that the Incomplete is awarded and must sign an "Awarding of Incomplete" agreement. Unless otherwise stated, the incomplete should be removed by the end of the following semester; otherwise, the instructor will change the grade to an "F" grade.</p>
Time Commitment	<p>To successfully complete this course it requires discipline, devoted time and commitment. A student must arrange his / her schedule to allow for the required time for this course. Expect to spend a minimum of seven (7) to ten (10) hours per week to thoroughly read each chapter and complete the required chapter assignments. Additional time most likely will be required to complete quizzes and exams.</p>
Student Expectations	<p>Students are expected to be fully invested and engaged in their learning. The following guidelines are included to facilitate your course success.</p> <ul style="list-style-type: none"> • Participate in this course by following the guidelines of this syllabus and any additional information the instructor provides by email, telephone, discussion forums, etc. • Please speak with your instructor <u>in advance</u> if you have extenuating circumstances that prevent you from completing your assignments by the designated due dates. If a medical emergency occurs, you will need to provide a written medical / doctor's notice for the period in which you are unable to participate in class or complete any of the assignments (discussion, case studies, quizzes, exams, etc.). Without a medical / doctor's notice, all assignments missed will be scored as zero. • Sign-in to Brightspace D2L and / or Courseware to complete assignments regularly. • Read, study, and complete all assignments by the due dates. • Monitor Brightspace D2L course calendar.

	<ul style="list-style-type: none"> • Have access to a computer and the Internet. Make certain computer meets the technical requirements for computer course. • Be courteous, polite and respectful to faculty, staff and fellow students. <p>For online courses, the instructor will use Brightspace D2L email for all course related correspondence. Check <u>Brightspace D2L email</u> as well as <u>Ginger email daily</u> to stay abreast of what is going on in class.</p>
Online Discussion Protocol	<ul style="list-style-type: none"> • The purpose of the discussion forum is to have interactive online discussions with our class community about specific topics, assignments, or readings. • Be constructive and positive. You can challenge ideas and course content yet avoid becoming negative online. When you disagree respectfully and politely, you stimulate and encourage great discussion. • You are expected to conduct yourself in a mature, courteous, and mutually respectful manner. • Always sign your name. • Postings should be well written with proper punctuation, spelling and grammar. Avoid the use of all caps or multiple punctuation elements (!!!???). Postings should be a minimum of 3 – 4 sentences. • Check postings for responses from others and respond in kind. • Postings should be evenly distributed throughout the week. Avoid making only weekend postings. • Encourage further discussion by building on current threads. <p>The instructor may not respond to every post but will be monitoring each discussion. A response may be made to contribute to a discussion, clarify a situation or redirect the conversation</p>
Degree Relevance and Enrollment Status	Students are ultimately responsible for ensuring that the course(s) in which they enroll are included in the approved degree plan and program map for their program of study. Students must periodically check their enrollment status in this course during the semester. The student is responsible for determining changes, if any in enrollment status and taking necessary steps (e.g. pursuing re-instatement in this course) following those outlined in the AMSC catalog
Abandoning a Course	Abandoning a course should be avoided at all cost. Abandoning a course instead of following official drop procedures will result in a grade of —F at the end of the course. It is the student's responsibility to initiate and complete the withdrawal process.
Academic Honesty	<p>Only the epitome of professionalism is expected of each student. Cheating or the abetment of cheating is not tolerated.</p> <p>The Academics Standards section of the Atlanta Metropolitan State College Catalog (page 49), the Penalties for Academic Misconduct states:</p> <ul style="list-style-type: none"> • In cases where a student is found guilty of cheating or exhibiting academic misconduct involving an instructor-generated assignment or examination, the instructor may impose a penalty. Types of penalties may include, but are not limited to, the instructor assigning a grade of "F" for the assignment, the instructor not accepting the work, the student being assigned additional work, or the student receiving a grade reduction for the assignment. The maximum penalty the instructor may impose is a grade of "F" for the course.

	<ul style="list-style-type: none">In cases where a student is guilty of cheating or exhibiting academic misconduct during an institutional or System examination or assignment, the results of the examination will be voided. Additionally, depending on the severity of the misconduct, the student may receive additional penalties from the Provost/Vice President for Student Success or designee, not to exceed suspension for one semester from Atlanta Metropolitan State College.									
Class Cancellation	<p>Procedure regarding long-term emergency closure of the college (attendance policy): In the event of an emergency that forces the college to close for an extended period, students MUST contact the instructor of this class within 48 hours using the contact information (e.g., email address in BrightSpace/D2L) on the syllabus to obtain directions for continuing the course. The instructor will provide directions for the transmission and submission of course assignments and course assessments, including due dates.</p> <p>The student is responsible for submitting valid, accurate contact information, including an active AMSC email address to the instructor by the end of the first week of the course. Students can obtain an Atlanta Metropolitan State College Student email address in the Academic Support Center on the third floor of the Library Building.</p> <p>If the instructor for the course cannot be reached within the specified period (within 48 hours), the Dean of the School responsible for the course can be reached at the email address posted on the college’s website</p>									
Class Schedule	Please view schedule table at the end of the document.									
Grading Scale	<p>100% - 90% of maximum points awarded = A 89% - 80% of maximum points awarded = B 79% - 70% of maximum points awarded = C 69% - 60% of maximum points awarded = D Below 60% of maximum points awarded = F</p>									
Grade Distribution	<table><tr><th colspan="3">Grade Evaluation</th></tr><tr><th>Category</th><th>Weight/Points</th><th>Assignment & Due Date</th></tr><tr><td>Exams</td><td>30%</td><td><ul style="list-style-type: none">Exam 1 (Chapters 1-4) TBAExam 2 (Chapters 5,6,7 & 9) TBAExam 3 (Chapters 8, 10,11,12) TBA</td></tr></table>	Grade Evaluation			Category	Weight/Points	Assignment & Due Date	Exams	30%	<ul style="list-style-type: none">Exam 1 (Chapters 1-4) TBAExam 2 (Chapters 5,6,7 & 9) TBAExam 3 (Chapters 8, 10,11,12) TBA
Grade Evaluation										
Category	Weight/Points	Assignment & Due Date								
Exams	30%	<ul style="list-style-type: none">Exam 1 (Chapters 1-4) TBAExam 2 (Chapters 5,6,7 & 9) TBAExam 3 (Chapters 8, 10,11,12) TBA								

	(1 exam (one with the lowest grade) will be dropped at the end of the semester.)		<ul style="list-style-type: none"> Exam 4 (Chapters 13,14,15) TBA
	Weekly/Biweekly Assignments	15%	<ul style="list-style-type: none"> Assignment 1 Assignment 2 Assignment 3 Assignment 4 Assignment 5 Assignment 6 Assignment 7 Assignment 8
	Lab Activities	10%	<ul style="list-style-type: none"> In-person/Online lab activities/attendance
	Syllabus Quiz	5%	<ul style="list-style-type: none"> Must be completed in the first week of class.
	Class Attendance	5%	<ul style="list-style-type: none"> Discussion 1: 8/25 Discussion 2: 8/25 Discussion 3: 10/14 Discussion 4: 10/28 Discussion 5: 11/4 Discussion 6: 11/18
	Final Lab Exam	10%	<ul style="list-style-type: none"> To be announced
	Final Exam (Comprehensive)	25%	<ul style="list-style-type: none"> 12/10/2025
	Unannounced Quizzes and extra credit activities	0%	<ul style="list-style-type: none"> Will not count against you but will be used to upgrade you.
	Total	100%	
	<p>Each student's final grade is based on points earned during the semester on examinations, assignments, class and lab participation, etc.</p>		

Grade Appeals and Student Complaint Policy and Process	<p>Please follow the Grade Appeals Process outlined in the AMSC Student Catalog, Page 53.</p> <p>You can also refer to the Grade Appeal brochure at: https://www.atlm.edu/downloads/advisement/CAAS%20Grade%20Appeal%20Brochure.pdf</p> <p>For student complaint policy and process, refer to AMSC student catalog page 42.</p>
Frequently Asked Questions and Helpful Links	
I need:	LINK
What is Brightspace (D2L) and how can I access it?	<p>Brightspace(D2L) is the virtual space where students access their online courses and some Face2Face class resources, quizzes, assignments, etc.</p> <p>You can access Brightspace (D2L) from https://atlm.view.usg.edu/</p> <p>You can also access Brightspace (D2L) from the College's webpage and click on Brightspace (D2L) on top.</p>
Who is my Advisor? Where can I receive Advisement and Tutoring assistance?	Center for Academic Advising and Success (CAAS)
What do I do if I face technical issues while taking a quiz or turning in an assignment in Brightspace	<p>https://d2lhelp.view.usg.edu/ You can reach the Brightspace Helpdesk 24/7/365 days at 18887720325</p> <p>If you are unable to submit a quiz or assignment or face a technical glitch, please contact the University System of Georgia's Brightspace Helpdesk at 18887720325. The Helpdesk is open 24/7 all 365 days. If your issue cannot be resolved right away, the Helpdesk will issue a ticket to your ATLM Ginger email address. That ticket needs to be forwarded to your instructor to prove that you faced a technical issue that forced you to miss a deadline.</p>
I can't download Respondus Lockdown Browser. What do I do?	<p>If you are unable to download Respondus to your computer, please email the Office of Testing at Testing@atlm.edu at least 24 hours in advance requesting a testing appointment at the Testing Lab.</p> <p>For Respondus issues, please contact https://web.respondus.com/contact/.</p>

Where do I go for ADA Accommodations	https://www.atlm.edu/students/counseling-and-disability-services.aspx
I have a complaint. Where do I go?	Fill out and submit the Student Complaint form
I have an issue with my grade. How may I appeal my grade.	Read the brochure and follow the instructions to appeal your grade .
How do I Withdraw from a Course	Follow the Course Withdrawal Process here
I have a Hardship. How do I do a Hardship Withdrawal?	Follow the Hardship Withdrawal Process here
To Know the Campus Carry/HB 280 Policy	House Bill 280 Guidelines
Disclaimer	<i>Information contained in this syllabus and schedule was, to the best knowledge of the instructor, considered correct and complete when distributed for use at the beginning of the semester. This syllabus should be considered only a guide for instructor and students, not a formal contract between Atlanta Metropolitan State College and any student. The instructor reserves the right, acting within the policies and procedures of AMSC, to make changes in course content or instructional techniques.</i>

How to Survive Principles of Biology I

- 1. Come to class ready to participate.** Read assigned material before each respective laboratory. Completing the procedures in class will make better sense after you have read about it at least once. Reading the material before class, coming to class with questions or answers, and showing up with an open mind is an excellent way to learn. Especially since you will have a quiz every week.
- 2. Seek assistance with difficult concepts early.** See your instructor for an explanation of terms, principles or techniques you don't understand EARLY. Don't play it off and just keep going. This causes a "snowball effect." Ask questions during class and/or use the office hours!
- 3. Remember, biology is a comprehensive course.** It is not a course that you can pass by just memorizing the facts. Engage your mind in active thought about the words and ideas. There is a "method to the madness." All of the labs are linked together and require knowledge from the previous week to continue. Use office hours!!!

4. **Regularly attending laboratory class is MANDATORY.** Information will be presented and concepts will be developed in class that will not be effectively communicated by reading the notes of another.
5. **Don't wait until the day before an exam to prepare for it.** Learning is an ongoing, full-time job. Read and take notes before class. Take notes during class. Re-read after class and consolidate notes. Review your notes frequently. Answer the questions at the end of the chapter. Ask questions. Get feedback. Don't wait until it's too late to get help.
6. **Use study aids.** (1) Try dividing notebook paper with a line down the center. Keep class notes on one half and corresponding book notes on the other half. (2) After each lecture, write down 3-5 questions that reflect the essence of the lecture material. (3) Find other members of the class who will agree to write questions for each lecture, and share them. Study together. (4) Check Brightspace regularly for tips, websites, virtual labs, and updates that will help you succeed in class. (5) You can also visit the Center for Academic Advising and Success (CAAS) on the third floor of the library for additional assistance and resources.
7. Like everything else, "practice makes perfect."!