Course Syllabus

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Course Number: BIO 5
Course Title: Life Science
Credits: 3
Faculty Contact Information: Click the **People** link at left for your faculty's information.

Course Materials

Course Textbook Notice: Beginning August 31, MSMU Online Fall 1 Session students will be responsible for purchasing course textbooks. You will be notified of the book you need to purchase, at the time of registration. You will be directed to purchase your book through our online bookstore, but you are also able to purchase your books through third party vendors if you so choose. Almost all of the books can be purchased in an E-book format, which is typically less expensive then purchasing a physical book. Please be aware, if you order a book and DO NOT activate the book code, you can get a refund up to 7 days after purchase, however, if you DO activate the book code, then NO refund can be given. Most E-books have a free trial period of between 24 hours and 7 days.

The main textbook for this course is available in pdf for free. You can access the pdf versions of the textbook below:

OpenStax College. (2013). Biology. **(https://openstaxcollege.org/textbooks/biology/pdf)** OpenStax College.

To access:

1. Click on the format you would like to access.
2. You will go to a screen that asks you to donate to OpenStax. You **do not** need to donate to OpenStax to be able to access the book. There is a link at the bottom to continue without donating.
3. You can then either read the book within your browser (for web view) or download the book to your computer (for either versions of the pdf or the EPUB version).

All study materials are provided within the content of this fully online, interactive course. In order to access the materials, you must have an internet connection and a modern browser. There are no additional materials to purchase for this course.

Technology Requirements

Hardware

- PC running Windows XP Service Pack 2+, Vista, Windows 7 or 8
  OR
- Intel based Mac running OS X 10.6 or later;
- Monitor display resolution of at least 1280x720;
- Broadband connection with bandwidth of at least 768K/384K (downstream/upstream); and
- A microphone, web-cam (at least VGA (640x480) resolution), and speakers/headphones*.

* Hardware must meet the specified requirements of the web-cam.

Software

- **Google Chrome** browser version 26 or greater;
- Adobe Acrobat Reader version 10 or greater; and
- Javascript must be enabled in browser.
- Some functionality will require the following additional plugins:
  - Flash for media recording, streaming and viewing, as well as uploading files to a course or assignment; and
  - Java for screen sharing.
  - Microsoft Office recommended (Open tools OpenOffice or LibreOffice are valid substitutes)

Course Description

This course is an introduction to the biological sciences for non-major students or as a preparation for major students with emphases on cell biology and biodiversity. Topics include biochemistry, cell structure and function, metabolism and energy flow, cell divisions, inheritance and genetics, natural selection and structure and functions of different living forms. The laboratory will illuminate these topics and provide opportunities for hands-on experiences.

Course Learning Outcomes

Student learning is at the core of the MSMU Online mission. The faculty members of the science departments have thus developed student-learning outcomes for this class that will be assessed in order to both uphold this mission and continue ongoing improvements in teaching and learning. These outcomes include:

- Understand and apply modes of investigation and communication in the biological sciences.
- Demonstrate knowledge of the fundamental biochemical processes of life.
- Identify and know the fundamental structures and functions of the cell.
- Demonstrate knowledge of the fundamental concept of molecular biology: that DNA gene sequences specify the amino acid sequences which determine the characteristics of an organism.
- Understand and apply the fundamental concept of genetics: that information within DNA allows for the inheritance of traits from one generation to the next.
- Demonstrate knowledge that biodiversity and natural selection underlies the process of evolution.

Assessment of Student Learning Outcomes

Student learning is at the core of the MSMU mission. MSMU faculty developed a plan to assess the student-learning outcomes that represent the knowledge, skills and attitudes expected of a college student in your major. In this class one or more student learning outcomes will be assessed. Some of our class assignments may be used to evaluate overall student learning and to improve teaching and learning in this class, this department, and throughout the University.

Course Requirements

- Time Requirements. This is a 3-credit-hour course and will require approximately 18 hours of focused effort every week over the 8-week course schedule to be completed successfully. Please schedule time for this course, along with other courses and individual responsibilities you may have accordingly.

- Adaptive & Project-Based. This course uses a combination of individualized, adaptive learning, and project-based learning strategies. As such, you will be expected to actively engage with the content of the course individually and also to collaborate actively with your peers every week.
- Mastery. You are required to demonstrate mastery of the concepts and terms presented within the course. You will demonstrate mastery by completing a series of quizzes and assignments designed to help you improve your proficiency with the terminology, concepts and skills presented in the course content.
- Participation & Engagement. You are expected to fully engage with your classmates, your instructor and the content of the course. Full engagement requires that you log into the online system and communicate meaningfully with your classmates at least five days each week. Doing so will make your learning experience more effective, more enjoyable, and ultimately, more successful.
- Discussions and Groups. A discussion is not a discussion if you only post and reply a couple of times a week, several days apart. Your group can only communicate and function at its best if everyone is present and actively involved. You are expected to take personal responsibility for the success of your discussions and group work. Login, read and post to discussions and group projects at least three to four days per week, depending on the assignment expectations for the week. When the workload becomes more challenging, reach out to your classmates more often.
- Project. The major project for this course is course is to complete and report on lab activities throughout the course.
- Writing expectations. This is a rigorous, college-level course and you are expected to write at the college level in all of your assignments. Failure to proofread submissions for spelling and grammar will result in a significantly lower grade.

Grading Scale

93 - 100% = A	78 - 79% = C+
90 - 92% = A-	73 - 77% = C
88 - 89% = B+	70 - 72% = C-
83 - 87% = B	60 - 69% = D
80 - 82% = B-	50 - 59% = F

Assignment grading expectations.

All assignments are expected to be turned in by midnight of the due dates stated in the syllabus and course calendar. Your instructor will grade and give feedback to assignments within 24 hours of your submission, or the next business day. The exceptions to this timeline are for large group projects, which will be returned within 72 hours.

Schedule of topics and assessments

Click **Assignments** on the left to see a comprehensive list of points and due dates.

Week	Topics	Assessments
1	The Study of Life The Chemistry and Molecules of Life	Syllabus Quiz Discussion Homework Scientific Method Lab assignment
2	Cell Structure and Function Plasma Membrane Structure and Function	Discussion Homework Microscopy and Cell Structure Lab assignment
3	Metabolism	Discussion Homework Enzyme Function Lab assignment Exam #1
4	Cellular Respiration Photosynthesis	Discussion Homework Enzyme Function formal lab report Photosynthesis Lab assignment
5	The Cell Cycle Meiosis	Discussion Homework The Cell Cycle and Cancer Lab

		assignment
6	Mendelian Genetics Chromosomal Inheritance	Discussion Homework Punnett Squares in Genetic Analysis Lab Exam #2
7	Structure and Function of DNA Transcription and Translation	Discussion Homework Using DNA in a Crime Scene Lab
8	Evolution	Homework Final Exam

Program and Course Policies

Discussion Forum Guidelines

This course will require significant online interaction with your classmates. Please remember the following guidelines as you post and reply to your classmates.

- Review the discussion threads thoroughly before entering the discussion. Be a reader, then a respondent.
- Try to maintain threads by using the “Reply” button rather than starting a new topic.
- Do not make insulting or inflammatory statements to other members of the discussion group. Be respectful of others ideas.
- Be polite. Choose your words carefully. Do not use derogatory statements.
- Be patient and read the comments of other group members thoroughly before entering your remarks.
- Be positive and constructive in group discussions.
- Respond in a thoughtful and timely manner.

Late or missing assignments

All assignments and exams listed in the syllabus must be submitted in order to earn a passing grade in the course. Assignments and assessments are due according to the course schedule and syllabus. All students are expected to plan their time and energies so that course work can be completed and submitted on time.

If an emergency, medical or personal obstacle prevents you from meeting assignment expectations, you must contact your instructor as early as possible. At your instructor's discretion, assignments may be accepted after the due date, though late penalties may be assessed to your score. Except in extreme cases (as determined by your instructor), an assignment that is more than one week late will be accepted and will receive feedback, but will earn zero points towards your grade.

Due Dates and Times

Remember to check your time zone in the Canvas system. You can do this by clicking settings in the top right corner, then checking it in the center part of the page. All due date times are 11:59 pm in Pacific Time. This means that if you are in a different time zone, the due date may appear to be later, since 11:59 pm PT on Wednesday is 12:59 am Mountain Time on Thursday, 1:59 Central Time on Thursday, and 2:59 Eastern Time on Thursday.

You may want to set your time zone in the Canvas system to Pacific Time. Then, you will always see the correct due date, and you do not need to worry about converting time zones.

Policy on Incompletes

An incomplete in a course can be granted only when a student has fulfilled the majority of the course requirements, has a passing grade in course work, is prevented from completing the assigned work for serious medical/personal reasons, and can, in the opinion of the instructor, complete the work within one eight-week session.

College Policies

Attendance and Engagement

Attendance and engagement are important for successful study, especially in an online class environment. Although you may not be required to appear in a classroom each week, you are expected to participate regularly in the online environment, to engage actively with the course content, with your classmates and with your instructor. In fact, early and regular participation in online classes is a significant predictor of student success.

Therefore, measures of student engagement and participation may be taken into account in determining academic grades. Students may be expected to explain to the instructor the reason for any absences from class activities and, in some cases, be asked to provide appropriate documentation. For more details, please see the Attendance policy in the Student Handbook.

Academic integrity

The academic environment is predicated on truth and integrity. Acts of dishonesty constitute a serious offense to the Mount Community. Please visit the complete academic integrity policy in the Student Handbook. Acts of academic dishonesty include, but are not limited to:

- Cheating
- Failing to hand in original work
- Plagiarism
- Falsification or misrepresentation
- Theft

Academic freedom

Students and faculty's freedom of speech is constitutionally protected, so they are free to take reasoned exception to the data or views offered in any course of study and to reserve judgment about matters of opinion—and allow the same freedom for others. See the Student Handbook for further discussion.

Accessibility

Disability Statement: Mount Saint Mary's University Los Angeles, in compliance with state and federal laws and regulations, does not discriminate on the basis of disability in administration of its education related programs and activities. We have an institutional commitment to provide equal educational opportunities for disabled students who are otherwise qualified. Students with documented disabilities must contact **Michele Lewis (mailto:mlewis@msmu.edu)** , Director of Chalon Learning Assistance Programs (310) 954-4141), to make arrangements for class accommodations. It is the responsibility of the student to obtain accommodation letters from the director and to make arrangements for the implementation of accommodations with faculty in advance. Students who believe they have been subjected to discrimination on the basis of disability, or have been denied access to services or accommodations required by law, should contact the Disability Services Coordinator Michele Lewis for resolution. For more information regarding disability grievance procedures, go to: **Disability Grievance Procedures website (http://www.msmu.edu/disabilitygrievanceprocedures)** .

Zero Tolerance for Harassment, Discrimination and Retaliation

Mount St. Mary's University does not discriminate in the administration of its admission policies, scholarship and loan programs, educational programs or in its employment opportunity. The College is committed to providing an environment that is free from harassment, discrimination and retaliation on the basis of sex, sexual orientation or preference, gender, gender identity, race, color, religion, national origin, creed, citizenship status, ancestry, age, marital status, pregnancy, childbirth or related medical conditions, medical conditions including genetic characteristics, mental or physical disability, veteran status, or any other characteristic protected by federal, state or local law, ordinance or regulation. Please review the complete zero tolerance policy in the Student Handbook.

Credit Hour Clarification

A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that reasonably approximates not less than:

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester, or the equivalent amount of work over a different amount of time; or
2. At least an equivalent amount of work as required in paragraph (1) for other academic activities, including independent or directed study, laboratory work, internships, practicum, studio work, and other academic work leading to the award of credit hours.

All other college policies are subsumed within this syllabus. For a full description of college policies and procedures, please reference the Mount Saint Mary's Online Student Handbook**.**

Student Services

Mount Saint Mary's Online offers a full suite of student services to all of our online students. All student services begin with your personal Success Coach. Contact your coach first, who will help you get the assistance you need from other college services. Some of the most commonly needed student services include the following:

- Technology Help desk
- Disability Services
- Library Services
- Counseling Services

Specific information about each of these services can be found in the Student Handbook.

Technical Requirements

Technical requirements are listed in the Student Handbook. Before you begin this class, please ensure that your computer is up to date with the proper browser, plugins, microphone and video camera so that you can participate fully with your classmates.

The Athenian Promise

A Commitment to Civility

Mount Saint Mary's University is committed to the advancement of learning and service to society. This is best accomplished in an atmosphere of mutual respect and civility, self-restraint, concern for others, and academic integrity. By choosing to join this community, I accept obligation to live by these common values and commit to the following principles.

As a Mount Saint Mary's University Student:

- I will embrace the concept of civil community which does not tolerate violence, theft, bigotry, or harassment of others in any form.
- I will commit myself to the pursuit of knowledge with personal integrity and academic honesty.
- I will respect the sanctity of the learning environment and avoid disruptive and deceitful behavior toward other members of the college community.
- I will support a culture of diversity by respecting the rights of those who differ from me.
- I will contribute to the development of a caring community where compassion for others and freedom of thought and expression are valued.
- I will honor, challenge and contribute to the scholarly heritage left by those who preceded me and work to leave this a better place for those who follow.

By endorsing these common principles, I pledge to contribute to a civil campus environment and resolve to encourage civil behavior in others. This is my promise to Mount Saint Mary's University and its community of scholars.

-Adapted with permission from the University of Pittsburgh's "Pitt Promise"

Disclaimer

The content of this syllabus may be altered to fit the specific needs of an individual student or group of students.