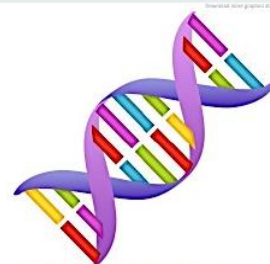




VALENCIA

Fall 2020



Section 501 (3Crd)
CRN# 66764
Mon. 10:30-11:45 a.m. &
Remote VAHS Rm. 101

Biology 1140 Syllabus

COURSE INFORMATION

This introductory biology course for students interested in health science careers focuses on the concepts of chemistry, cell biology, metabolism, genetics, and regulation of gene expression.

TAMMI'S COURSE DESCRIPTION

I love teaching Biology - the study of life. In this class we will start by learning about the molecules that are part of all cells. Yes - your cells and everything we eat are composed of molecules. Most of the semester we will spend learning about the cell - such wonderful little machines that do all the work within an organism. First, we will have to learn about all the cell components - think of them as little organs (organelles). Then, we will learn about how our cells obtain energy from food we eat. Next we will discuss DNA - our chromosomes; they are the ones that determine what we look like and everything about us. Have you ever thought about cell division? Why do cells divide? Why do we need to make more cells? These questions will be answered during our discussion on Mitosis and Meiosis. We also will discuss how traits are passed from generation to generation. Look at your family and see what traits you share. The last part of the semester we briefly study anatomy & physiology of the human body. How amazing is this? Now do you know why I love teaching Biology - we learn about our body and how it works.

Bring the knowledge that you have and take the journey with me as you continue your educational goals.



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Instructors Information

Tammi R. Duncan, Ph.D.

Office: Rm 132, Arts & Sciences Building

Phone: 505-925-8726

Email: tammid31@unm.edu

Drop-in Hours: Mon 3-4pm (F2F); Tues 10am-2pm (F2F); Thurs 10-11am; Fri 8-10am (Online via zoom) or by appointment.



I am Navajo and raised in Sanostee, NM that is located on the Navajo Reservation. I grew up riding horses and found my passion studying bacteria at Diné College in Shiprock, NM in my first microbiology course.

STUDENT LEARNING OUTCOMES

The course is divided into five modules and at the completion of this course, student will be able to:

1. Introduction to biology

Explain the central ideas and process of biology

Explain the role of science and critical thinking in society.

2. Introduction to chemistry

Apply basic chemistry to the biology of cells

3. Cells

Describe the structures and functions associated with eukaryotic cells and compare/contrast to prokaryotic cells.

Describe the components and mechanisms of cellular metabolism.

4. Genetics

Describe the DNA structure and replication, including mutation and DNA repair.

Explain the central dogma of genetic flow; explain gene expression and how it's regulated.

Explain the relationships between sexual reproduction, genetic diversity and inheritance.

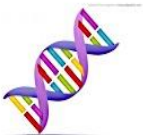
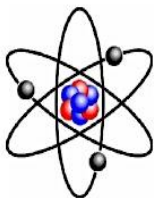
Describe and contrast the processes of mitosis and meiosis.

Describe patterns of inheritance and human genetic disorders.

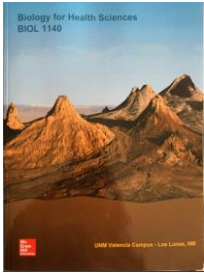
5. Human physiology

Explain homeostasis and identify major tissues, organs and organ systems and their function.

The overall goal of the course is to help you become literate in these scientific concepts and be able to apply them in your life as you move forward in reaching your educational goal.



REQUIRED LEARNING RESOURCES



Textbook: Inquiry into Life by S. Mader and M. Windelspecht, 16th edition, 2020, McGraw Hill Publisher. **REQUIRED.** The bookstore has a special edition of the book - Biology for Health Sciences-University of New Mexico-Valencia.



UNM Learn: <https://learn.unm.edu/>. The webpage contains resources you need to succeed in the course. Login using your UNM user name and password. ***You are responsible for all announcements, assignments, quizzes, tests and/or any changes to the syllabus will be posted on the webpage. Please check regularly.***

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"If you can dream it, you can do it" — Walt Disney  
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TIPS FOR SUCCESS

PowerPoint Slides. Use the PowerPoint slides for each chapter to guide your reading for the chapter. The Learning objectives should be used to make sure that you understand the material for each chapter.

Study habits. Look at figures and read the chapter. It may take more than one reading to understand the material presented. Learn the vocabulary.

Drop-in hours. I am available to help you succeed in the class; stop by my office for face to face Drop-in hours or online via zoom and I can clarify information or help you with homework.

Learning Center. The learning center has tutors ready to help Biology 1140 students. To register and set up an appointment, go to the following link: <https://valencia.unm.edu/campus-resources/the-learning-center/learning-center.html>

Study groups. Form study groups via online or using the 6ft guidelines at the UNM Valencia library.

COURSE POLICIES

I will always be early to class (via face to face) so we can begin on time (and you can ask questions before we begin). I expect that you will contribute to a respectful atmosphere for learning.

This is a three credit-hour hybrid (remote and face to face) course. Class meets face to face for one 75-minute session of direct instruction for fifteen weeks during the Fall 2020 semester. Students are expected to complete a *minimum* of six hours of out-of-class work (readings, homework, study, assignment completion, and class preparation) each week.

Attendance. You must be in the class on time to get the most out of this course, participate in class discussions, and to get a good grade. You are responsible for "signing-in" to document your attendance in class. If you are missing more than 15 min. of class, it will count as an absence. The student will be held responsible for all material and information regardless of whether the student was in class. Exception will be made per student basis dependent on emergency.

Make-up Exams. Make-up exams will be given to students with a documented emergency. You must notify the instructor prior to the day of the missed exam.

Quizzes. Make-up quizzes will be given weekly to students with a valid excuse.

Homework. These will be assigned weekly to help you master the concepts presented.



Review Assignments. There will be three assignments. These will help you apply the knowledge that you have gained. One will be due before each regular exam.

Late assignment/homework. Late assignments/homework will only be accepted within the first week following the due date. There will be a 50% reduction in grade. I will not accept assignments after the first week.

Withdrawal. If a student drops the course after the drop deadline, a "W" will be issued.

Cell phones. As a courtesy to the class, please turn off any cell phones. Please do not text message during class. Any sight of a cell phone during exams or quizzes will result in an automatic fail for that assignment.

Disruptive behavior. Please avoid any disruptive behaviors in the classroom and online communications. For class, this includes going in and out of the class, texting, talking. For online communication and interactions follow netiquette and dress for the meeting like you are attending class.

Plagiarism. Only submit work that is yours. Always cite any work used using APA format. <https://libguides.unm.edu/c.php?g=326014&p=2187071>

Netiquette. The rationale of providing **Rules of Netiquette** for students is to provide guidelines for online behavior and communication between you and your classmates. We (myself included) are all held to the following guidelines that will provide a safe and respectful online classroom space for constructive critiques, discussion, and scholarly reports between you and your classmates. These guidelines are expected to be upheld in any online communications (Email, Discussion Board Forums, Messaging, and Blogs) between all of us.

Rules of Netiquette continue.

1. Your online behavior and communication should be similar to how you would treat and speak to a person in standing in front of you.
2. Be mindful of different backgrounds, which include cultural, linguistic, political, and religious differences.
3. Be respectful of other's views and opinions and try to remain open minded. You can have respectful disagreements. Avoid flaming, which is publicly attacking or insulting another person's view.
4. Provide constructive and concise responses to the subject of the posts in Discussion Forums and Blogs. Stay on topic, read all comments/viewpoints in discussion before contributing to discussion, avoid slang and profanity, be prepared to correct information if your comment is misunderstood or misinterpreted, and avoid using personal identifying information.
5. Practice good grammar and spelling skills. Use 12 pt. font Times New Roman or Calibri, avoid text shortcuts, define acronyms, use correct spelling, limit use of emoticons, and use clear and concise language.
6. Avoid the use of all CAPITAL LETTERS. It suggests shouting, impoliteness, or can be aggressive. Reread you post, checking for sarcasm, slang or anger, before submitting it. Avoid sending a message out of anger or written if you are angry.
7. Call your instructor if you are in conflict with them or another student.
8. In relation to security, protect your passwords and don't send confidential information through email. If you suspect your password has been used, change your password.
9. There are specific listings of practices for email netiquette and message board netiquette below.

Email Netiquette

Write a concise email to @unm.edu accounts.

Include "Bio 1140" in your subject line to me.

Ask for permission of author before forwarding an email to classmate.

Include a formal salutation to your recipient.

Discussion Forum and Journal Netiquette

Include "topic-your name" in subject line.

Write concise paragraph on the topic.

Paraphrase and cite your references with APA and credit classmates work if appropriate.

Read all messages in thread before replying.

Don't repeat another person's post.

THINGS TO KEEP IN MIND

Accommodations:

If you have a documented disability and you need a reasonable accommodation made for you in this course, please consult with me immediately or the campus tutoring center as soon as possible so we can meet your needs suitably and quickly.

Academic Dishonesty: Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or otherwise fails to meet the standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others, hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

Equal Opportunity and Non-discrimination In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered “responsible employees” by the Department of Education (see page 15--[offices/list/ocr/docs/qa-201404-title-ix.pdf](#)). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct, and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: <https://oeo.unm.edu/title-ix/index.html>

COVID-19

Respect the UNM Community by Preserving Health

You have the ability to prevent the spread of COVID-19 and to preserve the health of fellow students, your instructor, staff and the community by following UNM health protocols. The UNM Provost Administrative Directive on Mandatory Student Face Covering and Symptom Reporting of July 9, 2020 requires that all students on UNM-Main and UNM branch campuses wear face masks in the face-to-face classroom and on campus unless they have a specific mask accommodation (confidentially documented with the Accessibility Resource Center). UNM Provost Administrative Directive is consistent with Governor Lujan Grisham’s [Public Health Emergency Order](#) as amended, and the [Public Health Order of the New Mexico Health Secretary](#). It also requires daily participation in symptom screening through covidscreen, which will be sent via UNM e-mail.

Acceptable masks and mask wearing in class: A two-layer mask that covers the nose and mouth and that is cleaned regularly is acceptable. A face shield is not sufficient protection. It is vital that you wear your mask correctly, covering your nose and mouth. Removing your mask for an extended period to eat or drink in class violates the Provost Administrative Directive and endangers others.

Mask Wearing Accommodation: Individuals with a documented disability or diagnosis may seek accommodation with the UNM Accessibility Resource Center (ARC) (<https://arc.unm.edu/>). Individuals do not need to reveal private information to an instructor. ARC will require documentation of health requirements, which will be kept confidential. The instructor will be informed only of any need for accommodation.

Consequences of not wearing a mask properly: Unless you have an ARC-approved accommodation, if you don’t wear a mask, or if you do not wear a mask properly by covering your nose and mouth, you will be asked to leave class. If you fail to wear a mask properly on more than one occasion, you can expect to be dropped from the class. If you insist on remaining in the classroom while not wearing a mask (without an ARC-determined accommodation), class will be dismissed for the day to protect others and you will be dropped from the class immediately.

This class may move to remote delivery at any time to preserve the health and safety of the students, instructor and community. Please check [UNM Learn for updates](#) about our class and please check <https://bringbackthepack.unm.edu> regularly for general UNM updates.

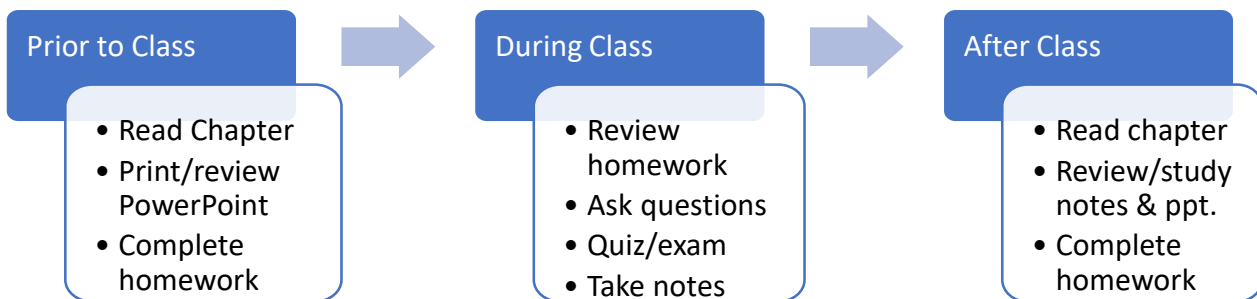
Citizenship and/or Immigration Status: All students are welcome in this class regardless of citizenship, residency, or immigration status. Your professor will respect your privacy if you choose to disclose your status. As for all students in the class, family emergency-related absences are normally excused with reasonable notice to the professor, as noted in the attendance guidelines above. UNM as an institution has made a core commitment to the success of all our students, including members of our undocumented community. The Administration's welcome is found on our website: <http://undocumented.unm.edu/>.

Support in Receiving Help and in Doing What is Right: I encourage students to be familiar with services and policies that can help them navigate UNM successfully. Many services exist to help you succeed academically and to find your place at UNM, see students.unm.edu or ask me for information about the right resource center or person to contact. UNM has important policies to preserve and protect the academic community, especially policies on student grievances (Faculty Handbook D175 and D176), academic dishonesty (FH D100), and respectful campus (FH CO9). These are in the *Student Pathfinder* (<https://pathfinder.unm.edu>) and the *Faculty Handbook* (<https://handbook.unm.edu>) Please ask for help in understanding and avoiding plagiarism or academic dishonesty, which can both have very serious disciplinary consequences.

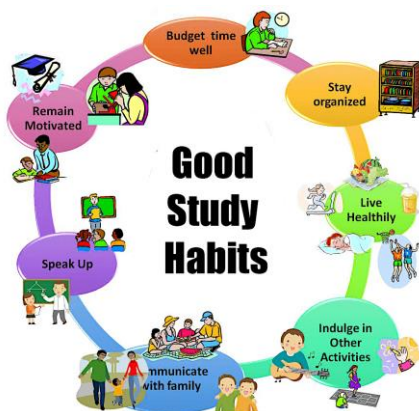
Land Acknowledgement: (see <https://diverse.unm.edu> on appropriate use) Founded in 1889, the University of New Mexico sits on the traditional homelands of the Pueblo of Sandia. The original peoples of New Mexico Pueblo, Navajo, and Apache since time immemorial, have deep connections to the land and have made significant contributions to the broader community statewide. We honor the land itself and those who remain stewards of this land throughout the generations and also acknowledge our committed relationship to Indigenous peoples. We gratefully recognize our history.

DEVELOP GOOD STUDY HABITS. DON'T WAIT UNTIL THE LAST MINUTE.

For class: Review notes and readings everyday.



In general:



GRADING CRITERIA

Quizzes: Every week you will take a quiz. Each of these quizzes are worth 10pts and their total is 100pts with dropping the two lowest scores. Quizzes are timed (15min). You will not be able to use your online notes, textbook or online resources. Quizzes will cover the chapters that are covered the same week of the quiz.


Exams: There are three exams. Each of these exams is worth 100 pts and their total is 200 pts. You will be given one hour to complete this exam. You will not be able to use your notes, textbook, or online resources. The lowest score will be dropped.

Homework: Homework are practice question sets that are each worth 10 pts. To get the points you must demonstrate that you are attempting to understand the information. The goal of the homework is to give you more experience and hopefully a better understanding of current material.

Assignments (Reviews): There are three Assignments. Each of these Assignments are worth 20 pts each and their total is 60pts. Assignments are due at midnight before the class of the Review.

Attendance: You must be in the class on time to get the most out of this course, participate in class discussions, and to get a good grade. You are responsible for "signing-in" to document your attendance in class. If you are missing more than 15 min. of class, it will count as an absence.

Final: The Final is a 115 pts exam at the end of the semester. The Final will be cumulative. You will have two hours to take this exam online.

	Points per assignment:	Total Points:	Percentage of overall grade:
Quizzes (10 of 11)	10 pts each	100 pts	~17%
Exams (2 of 3)	100 pts each	200 pts	~34%
Homework (9 of 11)	10 pts each	90 pts	~15%
Assignments (3)	20 pts each	60 pts	10%
Participation/Discussion	2 pts per week	30 pts	5%
Final (Cumulative)	115 pts	115 pts	19%
TOTAL		595 pts	100 %
A+ 100% or higher (> 593 pts)	B+ 87-89% (515-532 pts)	C+ 77-79% (456-473 pts)	D 60-69% (357-408 pts)
A 94-99% (557-592pts)	B 83-86% (491-514pts)	C 73-76% (432-455 pts)	F Below 60% (<356 pts)
A- 90-93% (533-556pts)	B- 80-82% (474-490 pts)	C- 70-72% (409-431 pts)	

COURSE SCHEDULE

Week	Date	Chapter: Topic
1	M: 8/17	Overview of Biology 1: Study of Life
	W: 8/19	1: Scientific Method
2	M: 8/24	Homework 1 due Quiz 1 2: Basic Chemistry
	W: 8/26	2: Molecules of Life 2: Organic chemistry
3	M: 8/31	Homework 2 due Quiz 2 3: Cells Biology
	W: 9/2	3: Cells structure
4	M: 9/7	Labor Day- no class Homework 3 due (remote) Quiz 3 (remote)
	W: 9/9	Assignment 1 & Review
5	M: 9/14	Exam 1 (Chapters 1-3)
	W: 9/16	4: Cell membrane
6	M: 9/21	Homework 4 due Quiz 4 6: Energy & Enzymes
	W: 9/23	7: Cellular Respiration I
7	M: 9/28	Homework 5 due Quiz 5 7: Cellular Respiration II
	W: 9/30	Assignment 2 & Review
8	M: 10/5	Exam 2 (Chapters 4,6,7)
	W: 10/7	25: DNA Structure & Function
9	M: 10/12	Homework 6 due Quiz 6 25: DNA Structure & Function
	W: 10/14	25: Gene Expression
10	M: 10/19	Homework 7 due Quiz 7 25: Gene Regulation
	W: 10/21	5: Cell Cycle
11	M: 10/26	Homework 8 due Quiz 8 5: Cell Division
	W: 10/28	23: Genetic Inheritance I
12	M: 11/2	Homework 9 due Quiz 9 23: Genetic Inheritance II
	W: 11/4	Assignment 3 & Review
13	M: 11/9	Exam 3 (Chapters 25, 5, 23)
	W: 11/11	24: Chromosomal Inheritance I

Week	Date	Chapter: Topic
14	M: 11/16 W: 11/18	Homework 10 due Quiz 10 24: Chromosomal Inheritance II 26: Biotechnology & Genomics I
15	M: 11/23 W: 11/25	Homework 11 Quiz 11 26: Biotechnology II & Genomics II 11: Human Organization I
16 (REMOTE)	M: 11/30 W: 12/1	11: Human Organization II Review for Final Exam
(REMOTE)	Monday, December 7	Final Exam at 10:30am

***I reserve the right to make necessary changes.**