BIOLOGY 111 SYLLABUS SPRING 2020

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BIOLOGY 111 – GENERAL BIOLOGY COURSE SYLLABUS

Dr. Dennis Gervin Sections: 9274, 9275, 9276

Instructor

Dr. Dennis B. Gervin

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Check website or by Arrangement

This is my Faculty Website: http://gervind.faculty.mjc.edu/default.html

Course Description: Introduction to biology through the study of the principles of life, including, biological chemistry; cell structure & function; DNA, genetics, & heredity; reproduction; evolution & ecology; and a survey of living organisms from bacteria to animals. Laboratory activities are designed to enhance student learning of the lecture component of this course.

We will explore the science of living things and apply what is learned to our everyday lives. We will also examine how the application of science has changed the course of our history and world, and how it will likely change the world of our future. My hope is that you will learn to see applications of science and biology in your normal life's activities as well as those that are not so normal and can sometimes carry a huge impact.

About the Website: You will need to have internet access to utilize my Biology 111 website. Important information on my site changes weekly – *you need to check this site regularly* or you will miss important information. You will find the current Class Activity Schedule there that will keep you informed as to what is happening in lecture and lab each week. Assignments and quizzes are also often posted to this site. In addition, I also post lecture notes, helpful videos, and news articles on this site. Warning: while this site has much of the course content, if you want to do well in the course you will need to attend the lectures. There is a profound difference between simply gathering Information, and gaining knowledge that leads to learning. My job (which I greatly enjoy) is to align, deliver and connect the information in a way that tells the story of Biology. I love doing this and strive to make your attendance enjoyable and worthwhile. You can access the internet from most locations on campus and in the Library if needed.

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Required Course Materials:

Please refer to the **Text and Lab Manual Information** Document on my webpage for a current description for required reading materials.

Scantrons: Form 882-E (available at the Pirate's Bookstore or from vending machines downstairs) will be required for the 4 Lecture Exams and Final Exam. You are responsible for bringing your own Scantron form and #2 pencil for lecture exams. Check the Bio 111 Class Activity Schedule for these dates. Treat your Scantron forms with care. Wrinkled or damaged forms do not always scan correctly. It is your responsibility to have an appropriate form that is in good condition. Purposely altering Scantron data fields or the integrity of the form is a violation of the student code of conduct and will be treated as such. You are required to include your section #, full name and exam color on your Scantron. Scantrons without this information cannot be scored and entered.

Class Activity Schedule: You will need to consult the Class Activities Schedule to keep up-to-date with text reading assignments, lab assignments, quizzes and exams. In order to effectively meet the learning objectives for this course, this schedule will likely be modified as the semester progresses. It is your responsibility to keep up-to-date on any changes to the schedule. You can always access a current version of the Class Activities Schedule at the following link. http://gervind.faculty.mjc.edu/biology 111/bio 111 home.html (link is at the bottom left corner of the page)

Recommended Course Materials: Aside from the required texts, the following materials are recommended. Notebook/Binder: A notebook with sleeves or a ring binder to contain your lecture notes & materials as well as your lab notes, drawings, & materials. Colored pencils are also helpful for drawing components in the lab.

<u>Assigned Reading</u>: You are responsible for the material in each chapter covered on the Class Activity Schedule. Always make sure cover the figures, charts and tables within each of the assigned reading chapters. Be sure to cover any "Review" sections at the end of each chapter as well. The lectures are structured around your textbook and I draw heavily from it for lecture, quizzes and exams.

<u>Lecture Exams</u>: There will be 4 Lecture Exams. These exams will cover lecture material, concepts from lab and assigned reading. Your lowest Lecture Exam Score will be automatically dropped from your total course score. **Any use of the internet, cell phones, Bluetooth or headphones will result in no score for the exam**. <u>Do not come late to exams</u>. After the first person has left the room you will not be able to start the exam.

Final Exam: On the last day of the class, during finals week, there will be a cumulative final exam.

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<u>Lecture Quizzes</u>: There will be about **10** (short) lecture quizzes given during the semester. These short quizzes will be given during lecture and will cover material from previous lectures or assigned reading. These quizzes will help you prepare for the exams. The lowest lecture quiz score will automatically be dropped.

<u>Lab Tests</u>: There will be 2 lab tests that will be given during specified lab sessions. These tests will cover material from lab assignments for the class. Bring past and current lab assignments to these exams, as I sometimes allow you to use them as reference during the exam (no guarantees – just a possibility).

<u>Lab Worksheets</u>: Lab Worksheets (exercises) are carried out during the lab sessions. There will be approximately **14** lab exercises with the lowest score of these being - dropped. See the lab manual for more information regarding lab worksheets and how the lab will operate. <u>NOTE</u>: To earn credit it is your responsibility to see that the instructor signs off on your lab worksheet. I will do my best to work with you on this. Just make it a practice to check-in with me before you leave lab. <u>Only Lab Worksheets from the published workbook (see above) will be accepted</u>. No exceptions. To receive full credit, labs must be complete – including your first and last name and a list of your lab partners

<u>Lecture Exam Follow-up Assignments</u>: This assignment is scored and is <u>not optional</u> - It is important that you understand and can apply the concepts presented in each exam (even after you have taken the exams). You will be expected to recall and apply previous material throughout the course. After each of the first 3 Lecture Exams, you will be given an assignment that is designed to improve your understanding of the material presented in the exams. In addition to reinforcing critical content, these assignments will help you to develop skills to improve performance on future exams. If you do not turn in the assignment, you will not receive any points

Attendance Policy: Regular attendance is critical for success in this course. Be active in your education! You will not likely meet the learning objectives, keep up with course content (or earn an acceptable grade in the class) if you are not attending lectures or labs. There is a great deal of content associated with the breadth of information we will be covering. Attending lectures will help you to focus on important concepts and information. It will also help you to understand what is expected from you to successfully complete the course. Whether you are present or not, you are responsible for all assigned reading and information presented during lecture. This includes additional assignments or changes to the Class Activity Schedule.

- Late work will not be accepted unless you have made arrangements with me prior to the due date. I must specifically sign off on any late work, so don't just slip it in a pile, as it will not be scored. Accepted late work will have a reduced score
- Please note that excessive absences without prior notification will result in your being dropped from the course. Four consecutive absences without contacting me will likely result in you being dropped from the class. The same is true for 6 non-consecutive meetings.

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<u>Lab Attendance</u>: All lab meetings are required. If you miss a lab, you will not be able to perform essential activities and earn the points associated with the lab exercise. To earn credit for each lab exercise you must attend to participate in the specified activities and discussions. Additionally, you will need to work with unique materials, specimens and experimental outcomes that are only made available during lab meeting times. While it is sometimes possible to complete the assigned activities prior to the scheduled end of the lab, be very cautious about rushing through the assignments. Individuals that rush through the assignments do not do well in the class.

How to be successful in this class:

Attend all lectures and lab sessions, read all materials in advance, find others to study with as a small group, and take advantage of my office hours or contact me by email if you have questions, concerns or are struggling in the class. There are also exceptional tutors in the West Campus Learning Center (Library). Pay particular attention to material that is brought up multiple times in lecture, and to figures that I spend considerable time on or point out as critical to concepts for the course. Also, be sure to go over the Review sections at the end of each chapter in your text. If you attend lecture and labs, you should have a very good understanding of what will be expected from you on quizzes and exams. Finally, one of the most important ways for you to succeed is to invest your time and become engaged in the course material and topics. In addition, do not forget to enjoy yourself in this class — it really does make a difference!

I Need Your Feedback!

Tell me what is working well in lecture and lab, and possibly more important – let me know if something I am doing or a way I am presenting material could be more helpful. I appreciate receiving this kind of feedback because adjusting my teaching style and approaches helps to keep my material fresh and more enjoyable to present.

Code of Academic Integrity:

Standards of Conduct: Modesto Junior College under the Yosemite Community College District Board Policy has specified those standards of student behavior, which it considers essential to its educational mission and its campus life. These regulations are designed to represent reasonable standards of conduct. The Standards of Conduct governs the behavior of students and guests on campus and at college-sponsored activities. Violations of the codes may subject individuals to disciplinary action, which is consistent with the requirements of due process. Academic dishonesty or other violations of the Code of Conduct in any form will result in no score for the given assignment. Additionally, any students participating in acts of academic dishonesty will be removed from class for the maximum days allowable and all incidents will be reported to the Dean of Science, Mathematics and Engineering and the Vice President of Student Services.

For more information, reference the Student Handbook at the following web link: http://www.mjc.edu/studentservices/enrollment/documents/14-15 student handbook.pdf

Points and Grades:

SUMMARY OF TOTAL POSSIBLE POINTS

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Lecture Exams	2	Lecture Quizzes		Lab Exams		WK eets	Exam Correction	
1 150	1	15	1	25	1	25	1	20
2 150	2	15	2	25	2	25	2	20
3 150	3	15	50. 31	-	3	25	3	20
4 150	4	15			4	25	96	
	5	15			5	25		
Final Exar	n 6	15			6	25		
1 200	7	15			7	25		
40	8	15			8	25		
	9	15			9	25		
	10	15			10	25		
	0.07 (500)				11	25		
					12	25		
					13	25		
					14	25		

Total Points

1410	800	150	50	350	60	LEC 71.6%
	56.7%	10.6%	3.5%	24.8%	4.3%	LAB 28.4%

Total Points (After dropped scores)

1220	650	135	50	325	60	LEC 69.3%
	53.3%	11.1%	4.1%	26.6%	4.9%	LAB 30.7%

The table to the right indicates the percentage of the Total Points that you will need to earn to receive a specific letter grade in the class. The Maximum Possible Points for the class is subject to change as deemed appropriate. If such a change occurs you will be notified in lecture, but the percentages below will remain constant.

Earned Grade	Percentage		
А	≥ 90%		
В	≥ 80%		
С	≥ 70%		
D	≥ 60%		
F	Below 60%		

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Special Needs:

Students who need special accommodation or services should contact the instructor as soon as possible to the start of semester. There is a disabilities resource center on campus that disabled students are encouraged to contact as well.

http://www.mjc.edu/studentservices/disability/

Notification of Objectionable Materials and Classroom Behavior

Please turn your cell phones and pagers to vibrate or silent during class. It disturbs not only the instructor, but also your fellow students. If you use a laptop or other device to transcribe lecture information, **do not surf the web**. This disturbs the class and will not be allowed.

Subject to Change Statement:

Please note that this syllabus is subject to change as deemed appropriate. If this occurs, you will be notified of such changes. If changes are made an updated syllabus (with revision date) will be posted on my website.

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COURSE OBJECTIVES

Course Objectives: The student will be able to:

- Explain the concepts, facts, & evidence that form the foundations of general biology & their significance to humans.
- Improve their basic study skills.

COURSE STUDENT LEARNING OUTCOMES

Course Student Learning Outcomes: The student will be able to:

- a. Describe biology and its role in society and culture.
- **b**. Explain the fundamental principles and generalizations of biology.
- c. Use the scientific method in problem solving.
- **d.** Interpret data from a scientific experiment and formulate conclusions.
- e. Review the historical background and relate this to modern biology.
- f. Describe chemical and physical reactions as they relate to biology and life's processes
- g. Use appropriate tools to study biological principles.
- h. Analyze and propose solutions for current topics, such as bioethics in biology.
- i. Use the laboratory to formulate ideas relating to a scientific experiment.
- j. Use the laboratory as a reinforcement of the principles described in the lectures.
- k. Describe adaptation and natural selection as evidenced in various aspects of biology.
- **I**. Cite the interactions of organisms with the biotic and abiotic environment in an ecosystem.
- **m**. Review the hierarchical structure and function as it relates to the organization of life from the atom to the biosphere.
- **n**. Cite the various types of reproduction and development in plants and animals.
- o. Diagram the principles of genetics and the various common types of inheritance.
- **p**. Describe the important energy forming and releasing processes of organisms.
- **q**. Compare and contrast eukaryotic and prokaryotic cells and life forms.
- r. Describe the principles of classification and phylogenetic systems.