

Mr. Ancinec

email: <u>dancinec@sdccd.edu</u> Text: Hoefnagels: *Biology: The Essentials*

Website: http://homework.sdmesa.edu/dancinec/

Three lecture hours per week, divided into two one hour and fifteen minute periods and one three-hour laboratory. Course content consists of series of lectures stressing the life processes common to all organisms. These include the chemical basis of life, cell organelles and their function, cellular respiration, photosynthesis, mitosis, meiosis, genetics, evolution and ecology. The laboratory stresses "hands on" experiences meant to explore topics covered in the lecture.

Lecture reading assignments are given in advance, please refer to the lecture schedule. Students are expected to be prepared by reading in advance of the lecture assignment. A lecture outline will be made available stressing the major areas of emphasis for testing. Refer to the laboratory syllabus for more information on laboratory requirements.

Participation.

- 1. Your participation is required. Participation will be taken at the beginning of the lecture hour.
- 2. If you come in late, it is your responsibility to check yourself in at the end of that period (*the next meeting is too late*). Three lates will be recorded as a single 1.5 hour absence.



- 3. Students absent from lecture more than five lecture meetings (greater than six hours) may be dropped. An absence is an absence whether it is due to illness or sleeping in.
- 4. Enter the lecture hall by the back door it you must come in late to avoid disturbing the class or the instructor. If you are unable to attend, please notify the instructor in advance by directly or email.

- It is the **student's** responsibility to drop all classes in which he or she is no longer attending.
- It is the instructor's discretion to withdraw a student after the add/drop deadline due to excessive absences.
- Students who remain enrolled in a class beyond the published withdrawal deadline, as stated in the class schedule, will receive an evaluative letter grade in this class.
- 5. Lecture participation points are determined by your records of absences and tardies, to be equal to 0.025% of the total achieved points.
- 6. If absences exceed the maximum and the drop period has passed then the points are **subtracted** from the total.
- 7. If it is necessary for you to leave class early, please notify the instructor before the period starts. Leaving early counts toward your accumulated absences.

STUDENT LEARNING OUTCOMES:

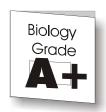
Upon successful completion of the course the student will be able to:

- 1. Apply the process of science to problem solving situations and formulate procedural steps necessary for a scientific investigation.
- 2. Explain, employ, and evaluate basic ecological concepts.
- 3. Describe the process of evolution and speciation by employing the concepts upon which modern evolutionary theory is based and recognize examples of each.
- 4. Define and distinguish atoms, molecules, compounds, chemical bonds, mechanisms of chemical bond formation, and name and recognize the components of biological molecules.
- 5. State the cell theory and describe the structure and function of prokaryotes and the organelles in a eukaryotic cell.
- 6. Interpret and compare processes of cellular metabolism including enzymes, cellular respiration and photosynthesis.
- 7. Compare and contrast mechanisms of reproduction, growth, and development in the natural world.
- 8. Describe, apply, and distinguish Mendel's principles of genetics and their exceptions.

9. Describe the process of DNA replication, protein synthesis, mutation, and methods used in DNA technology, and demonstrate an ability to predict outcomes when given a particular nucleotide or amino acid sequence.

Grades and Exams

Lecture exams are given several times during the semester. See the lecture schedule for dates. Each exam covers just the untested material, no comprehensive final. The exams are multiple choice, matching, true and false. Each exam is approximately 100 questions worth one point a piece. 2. The following is the grading scale used to convert your total points into a letter grade.



A = 88.6 % - 100 %

B = 77.6 % - 88.5 %

C = 62.6 % - 77.5 %

D = 50.0 % - 62.5 %

F = 49.9 % or less

Exams <u>MAY NOT</u> be made up without prior arrangement with the instructor in writing. If you cannot make contact me directly, then email me at <u>dancinec@sdccd.edu</u>. You will be expected to make up the exam at the next class meeting, unless other arrangements with the instructor have been made. You may make up no more than <u>one</u> exam. The lecture grade will be determined by the total number of points you have accumulated during the semester. When you take all five exams, the lowest score is dropped. That score is divided by the total of the highest achieved for four exams. If you miss an exam, you have missed those points (a zero 0, is recorded). If you miss an exam the total of the five highest achieved score is divided into your score. Lecture accounts for 75% of your total points.

Extra credit lectures may be attended off campusAlso Check the class website for a list of appropriate lectures. *You may do two extra credit exercises*. These lectures should be abstracted and the reports typed. One and one-half to two pages are generally appropriate.

These are due at the second class meeting past the outside lecture. One meeting past the due date is considered late and the assignment is worth $\frac{1}{2}$ (eight points).



Original work is expected on the extra credit. Two identical reports are both worth "0" points.

Attach proof from the outside lecture that you attended. This might a handout or if sponsored by a group such as the American Cetacean Society, you can sign in.

On the fourth class meeting past the due date, and the assignments are no longer accepted. *No extra assignments are accepted the last week of classes*.

Your progress on each test plus an estimated position in the class will be posted by the last four digits of a randomly generated I.D. number. It will not be related to your student id number.

Behavior

You are expected to behave in an adult manner in accordance with Policy 3100 (see College Catalog for full text). These behaviors include but are not limited to: Cheating or plagiarism, physical or verbal disruption of class, disorderly, lewd, obscene conduct or sexual harassment either written or verbal against another student or the instructor, assault or threat of assault against other students or instructor will result in the Policy 3100 procedure disciplinary process. For your rights and responsibilities see section 1.0 of Policy 3100.

Disabilities

Students with disabilities who may need academic accommodations and should discuss options available to them with the instructor during the first two weeks of class.

Office Hours

Monday I313 (Lecture Hall) 6:30 AM- 7:29 AM

Wednesday I313 (Lecture Hall) 6:30 AM - 7:29 AM

BIOLOGY 107

Spring 2016

Ancinec

Text : Hoefnagels: Biology- The Essentials

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Class Website http://homework.sdmesa.edu/dancinec/

<u>Week</u>	<u>Date</u>	<u>Topic</u>	Reading
1	Jan 25	Registration	
	Jan 27	Intro to Science/Chemistry	Chap. <u>1-2</u>
2	Feb 01	Atoms-Compounds	
	Feb 03	Organic Chemistry	
3	Feb 08	Intro to the Cell	Chap. <u>3</u>
	Feb 10	Osmoregulation, cell transport	
4	Feb 15	Washington Birthday	
	Feb 17	Exam #1 (Introduction - Osmosis)	
			Chap. <u>4.</u> <u>6</u>
5	Feb 22	Cell Respiration	
	Feb 24	Cell Respiration/Plant Nutrition	Chap. <u>6, 5</u>
6	Feb 29	Photosynthesis	Chap. <u>5</u>
	Mar 02	Review	
7	Mar 07	Exam #2 (Respiration-Photosynthesis)	
	Mar 09	Cell Division	Chap. <u>8</u>
8	Mar 14	Cell Division/Genetics	Chap. <u>9</u>
	Mar 16	Genetics	Chap. <u>10</u>
9	Mar 21	Genetics	Chap. <u>11</u>
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	Mar 28 - Apr 2	Spring Break	
			Chap. <u>12</u>
10	Apr 04	Evolution	
	Apr 06	Evolution/Review	

Week	<u>Date</u>	<u>Topic</u>	Reading
11	Apr 11 Apr 13	Exam #3 (Cell Division-evolution) Classification Archaea, Eubacteria	Chap. <u>15,</u>
12	Apr 18 Apr 20	Classification Fungi Classification Plantae	Chap. <u>16</u>
13	Apr 25 Apr 27	Classification Plantae Classification Animalia	Chap. <u>17</u>
14	May 02 May 04	Classification/Review Exam #4 (Classification)	
15	May 09 May 11	Introduction to Ecology Principles of Ecology	Chap. <u>34</u> , 35
16	May 16 May 18	Population Ecology/ Symbiosis Final Exam (Ecology)	Chap. <u>36, 37</u>