Michael Clark

Office: 320H

**BIOLOGY 100 (Spring 2004)**

**Description:** Biology 100 is a 3-unit lecture class used by most students to satisfy their General Education Natural Science requirement. Also, this class will satisfy your laboratory science requirement when taken concurrently with the corequisite Biology 101 lab. These two courses are prerequisites for some of the other biology courses at Southwestern College. This class, however, is not intended for the Biology Major. The biology major includes a different series of biology classes (Biology 210,211, and 212). The biology major student does not get credit for Biology 100 when transferring to the upper division colleges.

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| Corequisite: | Biology 101. |
| Recommended Preparation: | Satisfactory completion of Engl 56; or the equivalent skill level as determined by the Southwestern College Reading Assessment. |
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| Course Objectives: There is an official course outline and objectives summary available in the Math/Science Office. However, you will receive a detailed set of objectives for each section of the course that is tested. |

**Textbooks:**You need two books for this class*. Biology: The World of Life,* by Robert A. Wallace, 7th edition, 1997. This book is also available at the library under limited loan, and at the Learning Resource Center.

*Laboratory Investigations*, by Clark and Riddle, 2011). This is the book you will be using in Biology 101 Lab. In this lecture class we will cover twelve chapters from the lab book.

**Study Guide:** Use the Study Guide to focus your study time for exams. This guide summarizes everything that will be tested.

**Special Needs:** I will create a seating chart at the second class meeting. Talk with me if you have hearing or vision problems that I should consider before making that chart. If you have any other special needs related to classroom instruction, talk to me during the first week of school. Southwestern College recommends that students with disabilities discuss academic accommodations with their professors during the first two weeks of class. An alternate media of this syllabus and course handouts is available upon request. Contact the Disability Support Services (x5301) for further information.

**Attendance:** I drop students for excessive absences if they aren’t averaging a “C” or better. The overall responsibility for attendance is yours. The average “A” student misses only ½ class during the semester, while the average “C” student misses 3 classes. Of all factors necessary for achieving high grades, attendance has the highest correlation.

**Classroom Behavior:** Be on time, do all work, be cooperative, and don’t copy work of fellow students. Please don’t use a cell phone in class, or any other personal electronic equipment without talking to me first. There is a college policy on classroom behavior that you can read in the college catalog that pertains to all rights and responsibilities of students including all procedures in effect at SWC.

**Dropping This Class:** The most common cause for students dropping this class is an unrealistic workload. If you work 20 hours per week, your class load should not be over 12 units; if you work 30 hours, your class load should not be over 8 units. If you decide to drop this class, be sure to do so at the Admissions Office. If you don’t *officially drop* classes at SWC*,* you will automatically receive an “F” grade from the Admissions Office.

**IMPORTANT DATES**

 **“W” Grade on Transcript**—There is a deadline date each semester for withdrawing from a course without a “W” grade put on your grade records. (February 12)

**A, B, C, D, F Grade on Transcript**—There is a deadline date each semester beyond which you cannot drop the class without receiving some grade on your grade records. (April 16) It is *your responsibility* to drop classes if you find you must do so.

Course Format

**Lecture:** Lecture is the arena for introduction and review of topics. Ask questions when you don’t understand something that I have said, or when you are curious about a topic. Be prepared for lecture by reading ahead in the textbook and keeping up with other assignments. Take fast notes and make note cards later.

**Textbook:** Reading the textbook is important in two ways for this course. First, the textbook will give you another point of view on topics covered during lecture or in the lab book chapter assignments. Read the textbook chapters related to each topic covered in this course. Also, some textbook assignments will not be covered in the lecture but will be tested. These chapters are exclusively your responsibility. Use the *Study Guide* to focus your reading.

Textbook Reading Assignments

 Test #1

Chapter 2 “Scientists and Their Science”

Chapter 4 “The Cell and Its Structure”

Chapter 3 “The Chemistry of Life”

 Test #2

Chapter 5 “Energy: The Dance of Life”

 Test #3

Chapter 9 “The First Life”

Chapter 8 “Advances in Genetics”

Chapter 6 “The Cell and Its Cycles”

 Test #4

Chapter 7 “Inheritance”

Chapter 1 “A Brief History and the Enchanted Isles”

Chapter 10 “The Processes of Evolution”

 Test #5 (Final Exam)

All information “Natural History of San Diego”

is covered only

during lecture.

**Films:** We will view several films during the semester. These films are intended to be learning tools, and are also available in the LRC. Most of the content in the films is review. Be sure to answer any *Study Guide Questions* related to the films that are designated as “on the test”.

**Lab Book Chapters:** Several chapters from *Laboratory Investigations* will be assigned during the course. You must be able to answer all study guide questions related to these assignments.

Tests

There are five exams during the semester. Each exam covers only the course information presented since the previous exam. The tests usually contain 50-75 objective-type questions (multiple choice, true/false, or matching).

# Feb. 18 or 19 Science Statistics 200 points

# Mar.8 or 9 Photosynthesis Intuition 200 points

# Apr. 12 or 13 Evolution of First Life Sameness and Variety 200 points

# Apr. 28 or 29 Mendel’s Laws Evolution 200 points

Final Exam Natural History of San Diego 200 points

**Missed Tests:** If you know a week or more in advance that you cannot be in class on test day, you can arrange an alternate test date. My policy on make-up tests is intended to encourage everyone to be prepared on the test day, and also to allow a chance to save your semester grade if you miss an exam. **Only one exam can be made up.** The make-up exam will consist of *essay questions*. March 18 is the make-up date for Test #1 or #2. The Final Exam is the make-up date for the other exams.

**Grades:** Your grade will be based on an accumulated percentage of earned points according to the following scale:

A = 90% C = 70%

B = 80% D = 60%

Study Habits

**1.** Attend all lectures.

**2.** Read textbook assignments ahead of schedule.

**3.** Make note cards daily.

**4.** Ask questions.

**5.** Take notes quickly and rewrite them later that day.

**6.** Keep up with the assignments.

**7.** Review week’s work on the weekend.

**8.** Study at least six hours specifically for the exam.

**9.** Practice taking the test using your note cards.

1. Use the practice tests to see how well you understand the material.

**OFFICE HOURS**

320H

Monday 12:30-1:20

Tuesday 12:30-1:20

Wednesday 12:30-1:20

Thursday 11:30-1:10

There are four easy ways to contact me:

1. Talk to me at the end of lecture.
2. Put a note in my mailbox at the Math/Science Office.
3. Stop by my biology lab in Room 311. Mon.3-6, Tue.3-6, Wed. 3-6, or Th. 8-11.
4. Come to an office hour. Room 320H
5. email

Topics Covered on Exams

*TEST #1*

Lab Book (chapter 1) “Science and Human Perception”

Textbook (chapter 4) “The Cell and Its Structure”

Film (not on test) *Architecture of Cells* (vc bio 90)

Textbook (chapter 3) “The Chemistry of Life”

Lab Book (chapter 7) “Chemistry Concepts”

Film (not on test) *Chemistry*

Lab Book (chapter 4) “Statistics” (Exercise #1 and #2)

***TEST #2***

Lab Book (chapter 10) “Photosynthesis and Respiration”

Film (not on test) *Photosynthesis*

Film (not on test) *The Cell and Energy*

Lab Book (chapter 2) “Are Humans Doomed to Intuition?”

 (Exercise #2, #3, and #6)

***TEST #3***

Film (not on test) *Life from the Seas*

Textbook (chapter 9) “Evolution of the First life”

Lab Book (chapter 13) “Genes and Protein Synthesis”

Textbook (chapter 8) “DNA Fingerprinting”

Lab Book (chapter 14) “Sameness and Variety”

Film (not on test) *Cell Division* (vc bio 91)

***TEST #4***

Film (not on test) *Mendel’s Laws*

Lab Book (chapter 15) “Genetics”

Textbook (chapter 1) “History of Evolutionary Theory”

Lab Book (chapter 16) “Evolution”

***FINAL EXAM***

Lecture Natural History of San Diego

Film (not on test) *Plate Tectonics*

Film (not on test) *Plant Communities*