

BIO 120-July Term Biological Concepts: Cells, Metabolism, and Genetics

Biol 120 Homepage: <http://blackboard.wku.edu> - Login required

Dr. Michael E. Smith

Office: 2109 SH

Office Phone: 270-745-2405

Biology Dept. Office Phone: 270-745-3696

e-mail: michael.smith1@wku.edu

Required Textbook: Biological Science, 7th Edition by Scott Freeman; Note that registration for this course provides you access to the e-text and the Mastering Biology online assignment software.

Required Student Access Kit: Comes with e-text as a bundle

Required Classroom Response System: None.

Class Hours: None. Completely on-line.

COURSE OVERVIEW:

This online summer term course covers all the same basic material and uses the same textbook that would be found in a regular semester Bio 120 course, only it does so in less than three weeks. As the lab for this course (Bio 121) is a co-requirement, you will be required to take Bio 121 if you have not already done so.

All of the assignments and exams will be done online. To keep up with the material, students will need to read approximately one chapter of the textbook (about 15-20 pages) per day (see suggested reading schedule in Blackboard). PowerPoint lecture notes will be provided as an outline of the most important points and to help you in your reading and studying. Assignments and exams are due in blocks. That is, assignments are due approximately every other day and tests are due two at a time. This is to allow some flexibility in student's schedules. Assignments and exams can be done any time before their due dates and it is recommended that they are done early so that assignments/exams are not accidentally missed.

SCHEDULE:

A suggested reading schedule and the due dates for assignments and tests have been placed in the "Course Information" folder on our Blackboard course website.

GENERAL EDUCATION COURSE CONTENT AND GOALS:

This course fulfills the D.1. (Science /Mathematics) general education requirement. It will help you attain this general education goal and its corresponding objectives: An understanding of the scientific method and knowledge of natural science and its relevance in our lives, specifically to help students:

- develop a conceptual framework for modern biology, and
- to gain an appreciation of science as a process

Course content and goals: This course is designed for Biology and science majors and will emphasize: cellular organization and processes, metabolism, DNA structure and replication, and Mendelian and population genetics. This course requires that Biol 121 be taken as a co-requisite. After a student completes this course they will have a foundational knowledge in the fields of biochemistry, cell biology, molecular biology and genetics. Specifically, they will be able to:

- Recognize and describe the structure and function of biological molecules
- Outline and compare cellular energetics, cellular metabolism, and photosynthesis.
- Recognize and describe the structure and function of prokaryotic and eukaryotic cells, as whole entities and in terms of their subcellular organization and processes.
- Describe and explain the synthesis, structure, and function of nucleic acids and proteins in prokaryotes and eukaryotes.
- Understand and apply the principles of inheritance from molecular mechanisms to population consequences (diversity).
- Appraise and evaluate biological knowledge in an ethical and social context.

ASSIGNMENTS:

All the due dates for tests and assignments are posted well ahead of time (see the **Course Information**). If you find the course incomprehensible or need extra help, be sure to email me before the assignment is due. The Mastering Biology assignment grades should be automatically uploaded into Blackboard. If you completed the assignment and you still do not have a grade posted in Blackboard, please contact me but wait until the following day to allow Blackboard to update itself first.

Some assignments are case studies (Scientific Method and Genetics Case Study). If you follow instructions and do your best to answer the questions at the end of the assignments, you should get full credit (20 points). As a result, they should help your grade as long as you get them completed in time. Most of the assignments will be completed in Mastering Biology, the software that comes with the textbook. These assignments give you credit according to how well you answer the questions. It is an interactive software that lets you restudy sections if you miss one of the assignment questions. More information on Mastering Biology will be provided on the Assignment page in Blackboard. Late assignments will NOT be accepted so complete them early! Each assignment will be due at midnight of the due date. Grades will be posted the following day.

CLASSROOM DISCUSSION BOARD: The discussion board feature of Blackboard will be available for students to ask each other questions. I encourage you to use it to help

each other with assignments or questions with difficult to understand concepts. I will look at the Discussion board often to make sure that your concerns are being addressed appropriately.

EXAM FORMAT: The lecture exams will be done at your convenience with two due dates (Exams I & II are due May 22 and Exams III & IV are due May 31). **Exams** may include true/false, multiple choice, matching, diagrams, and other types of questions. The final exam is comprehensive. It covers all the material in BIOL 120 and **all** students will be required to take the final exam. Make-up exams will be given only for approved University excuses for the duration of the week of the exam (illness with a doctor's written excuse or death of a close relative) and will be administered during finals week. You must give Dr. Smith your excuse note within a week of missing the exam or other assignment.

The first three exams will have ~40 questions and the final exam will have ~80 questions. You will be given 1 hour to take each of the exams except the final (2 hours). You will be given a score as soon as you complete each exam and you will only have a single opportunity to take the exam although you can schedule the time that you take it any time that the test is open.

GRADING: There will be a total of 700 points possible in this course, consisting of some variation of.....

- 200 pts. - Ten 20-point Assignments
- 300 pts. - Three 100-point On-line Exams
- 200 pts. - One 200-point Cumulative On-line Final Exam (100 pts. material SINCE Exam III + 100 pts. on Exam I-III material)
- **Total = 700 pts.**

Final course grades will be determined on the following percentage scale (to determine your final grade divide your total points achieved for the entire semester by 740, then multiple by 100):

Grading Scale :		
90-100%	A	Outstanding
80-89%	B	Above average
70-79%	C	Average
60-69%	D	Below Average
Below 60%	F	Failing

Withdrawal by the deadline will get you a grade of "W"

LEARNING - Learning takes effort, and research on college students has shown that students who invest more time in learning get better results! Many times students feel helpless when they experience difficulty in class. ... However, it is important that you **take responsibility** for your learning and build partnerships with your professors.

Success is a choice. Your choice. To get what you want, it helps to know what you want and know how to go about it. ... Becoming a master student is a lifelong process. The final destination is up to you!

To do well in this class, either prior knowledge of how to use a typical web site, or a willingness to learn on your own during the first week of class, is required. **This is because course announcements, assignments and exams, lecture notes, reading assignments, and details explaining the policies for this course are found on the Internet.** Most problems students have with this class result from their failure to READ instructions, deadlines, and course materials.

COMPUTER-BASED LEARNING: Having access to a computer with an internet connection **IS REQUIRED** for successful completion of this course. Although most of you will be taking this course from home, there are also several computer labs located throughout the campus: at the Library, DUC, TCCW, etc. Click here for a link to WKU's computer lab locations and hours of operation: [WKU Computer Labs](#). However, most students find that it is more convenient to have his/her own computer with access to the Internet (located in his/her own room). Since a computer can be the most valuable tool you can have while in college, it is strongly suggested that you purchase one. The course looks, and works, much better with Internet Explorer.

Study Strategies: Click on this link for study strategies, such as a method called SQ5R, Notetaking, and Concept Mapping. These strategies will help you study for any class.

MANY ADDITIONAL FREE TUTORING RESOURCES AT WKU!

<http://www.wku.edu/teaching/tutoringhandout.html>

COURSE POLICIES:

ACADEMIC INTEGRITY: Students are expected to do their own work throughout this course and demonstrate academic integrity. Academic dishonesty in the form of cheating or plagiarism will not be tolerated. Please refer to the WKU Student handbook for policies and definitions regarding academic integrity at:

<http://www.wku.edu/Dept/Support/StuAffairs/StuLife/handbook/academicOffenses.htm>

ACADEMIC MISCONDUCT: Dishonesty on quizzes, exams, or written assignments (see WKU's plagiarism statement below) will result in a failing grade for the class. Cheating (completing an assignment for someone else, allowing someone else to copy your assignment, copying and pasting from internet sources or elsewhere when you have not been instructed that this is acceptable, etc.) on online assignments will be tracked by computer. Cheating will not be tolerated.

WKU'S PLAGIARISM DEFINITION: "To represent written work taken from another source as one's own is plagiarism. Plagiarism is a serious offense. The academic work

of a student must be his/her own. Once must give any author credit for source material borrowed from him/her. To lift content directly from a source without giving credit is a flagrant act. To present a borrowed passage without reference to the source after having changed a few words is also plagiarism."

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT:

Due to the Family Educational Rights and Privacy Act ([FERPA](#)), if you are 18 years old or older, I cannot discuss your grades, etc. with your parents.

WITHDRAWALS AND AUDITS: If you wish to audit or withdraw from the course you should do so by the dates mandated by the University. Be sure you are aware of these dates because credit for the course will not be changed to an audit after the university designated time. You also cannot drop the class or change to Audit or Withdraw after the designated time. Be aware that IT IS YOUR RESPONSIBILITY TO DROP THE CLASS. Do not assume that I will do this for you. University policy states, "Students who, without previous arrangement with the instructor or department, fail to attend the first two class meetings of a course meeting multiple times per week or the first meeting of a class that meets one time per week MAY be dropped from the course; however, students are responsible for officially dropping any course for which they have enrolled."

Ceasing to complete assignments for a class does not activate the drop, withdrawal, or incomplete grade processes. You must submit the appropriate forms for each by the published deadlines to end your enrollment in this class. Failure to complete the appropriate forms may result in a failing grade for this course.

DISABILITY ACCOMODATIONS: "Students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services, Room 101, [Garrett Conference Center](#). The OFSDS telephone number is (270) 745-5004 V/TDD. Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services." Note that if you require accommodations, you may be required to take exams at another location. I typically refer students to the Office of Correspondence Study, 105 Garrett Conference Center (745-4158) because this office is set up to make accommodations as specified by the Office for Student Disability Services. You will need to make arrangements with me at the beginning of the semester to take your exams at a location, such as the Office of Correspondence Study, in order to receive your accommodations. If at any time during the semester you want to change your testing arrangements, you must see me at least 3 days prior to the upcoming exam date.

If you need extra time on assignments, you must make arrangements with me PRIOR TO THE DUE DATE of the assignment.

This syllabus is subject to change at my discretion but I will notify you of any changes made.