Biology 134 (Section 09): Concepts in Biology

Fall 2007 – Sam Houston State University

Course Description:

Life is everywhere! No matter your major, or what you plan to do with your life, you live on a planet that is *biological*. This course seeks to give you a basic understanding of biology

so that you can understand not only the life around you, but yourself. It should build a good scientific foundation for those of you who are going into non-science fields. With all of the important issues in biology in the news today (just think – stem cell research, global warming, cloning, genetically engineered crops, organic foods, pesticides and herbicides, cancer, heart disease, obesity, and the list goes on and on!) we all need to have a basic understanding of general biology. Not to mention, it will make you a much more informed voter! An even larger goal of education in general, and this class in particular, is to encourage your critical thinking. I hope this class stimulates *questions* continually in your head and invokes a sense of curiosity. Hopefully, you will become more aware of your natural world, and start waking up in the middle of the night and think – "Wow, life is amazing!".

Goals:

The goals of this class are to:

- 1) To understand basic biological concepts at the level of a non-science major.
- 2) To learn the importance of the life that surrounds you everyday.
- 3) To gain an appreciation of biology and the ecosystem in which we live.
- 4) To understand how general biological theories and concepts affect you everyday.

Instructor:

Dr. P. Raelynn Deaton, Department of Biological Sciences, Sam Houston State Univ.

Contact:

Office: LBD 142 Lab: LBD 102 Office Phone: 294-1550 Email: rdeaton@shsu.edu

Office Hours:

Office Hours: I will be in my office most Mondays from Noon-4pm. If you can't see me during this time, then you are welcome to schedule an appointment. There may be some weeks when I can't be around on a Monday, but, if this is the case, I will let you know and you can schedule an appointment.

Official Office Hours: BY APPOINTMENT

Contacting the **Professor:**

The best way to reach me is via email at rdeaton@shsu.edu

You can contact me directly from your SHSU (or other) email account, or you can use Black Board's email function. Any email you send from Black Board will automatically be sent to my SHSU account. I teach A LOT of students; therefore, it is important for you to be sure to sign your emails (I don't know who "prd002" is when that comes up in an email (that's me, by the way!) AND make sure you put your class, section, and subject heading in your email. I am very good about checking email, and responding quickly. But, if I don't know who you are, I can't help you AND your email will likely be deleted. I will use email and *BlackBoard* to communicate with the class. So, it is very important that you check your email and *BlackBoard* regularly. Remember, you MUST check your email, read all emails from me, and follow any instructions given by me via email. This is a requirement for this course.

You may also call my office phone to reach me (see number above), but you are much more likely to get a response via email because I work in my lab quite a bit where there is no phone.

Time Table:

We will meet every Mon and Wed from 6-7:30 pm in LDB 213. Tardiness is NOT tolerated. If you have excess tardies, I reserve the right to reduce your grade accordingly.

Text: Campbell, Reece and Simon, Essential Biology with Physiology 1st or 2nd Edition

*Please note that the course syllbus is based on the 2nd edition

Lab: Lab and Lecture are NOT corresponding for this class. They are two separate classes, thus, your

lab and lecture grades will be independent from one another. Labs begin the second week of class

(August 27th).

Grading:

Attendance Policy: In accordance with University Policy, I expect regular and punctual attendance from each of you.

I have very low tolerance for tardiness. If you drive, you need to leave ample time for parking, etc. If I have to be on time and come to class prepared every day, so do you! If I notice that you are coming in late, you will hear from me. When you come in late, is not only a distraction to me, but also to your fellow classmates, especially in a large class such as this. If you come in late, I will notice, and I do reserve the right to dock points for tardiness. Attendance will be taken in class each lecture. If you miss more than three class periods, I reserve the right to drop you one letter grade per absence after the third absence. If you are an athlete and/or will be gone for official SHSU business, it is your responsibility to tell me which days you will miss and provide a written excuse for your absence. I expect these dates in writing

by the second week of class.

Your course grade is based on 500 total points. These points are distributed between four unit exams (you may drop your lowest), the final exam, unannounced pop quizzes, and lab. These

distributions are summarized below:

Grade Component	Point Value
Unit Exams (3 * 100 pts) - drop one	200
Final Exam	200
Homework Assignments (4 * 25 pts each)	100
Total	500

Semester grades will be assigned based on the following point scale:

A = 90% and above; B = 80-89%;; C = 70-79%; D = 60-69%; F = 59% and below.

Please note that these cut-offs are guidelines and are subject to adjustment if necessary. Do NOT expect a grade curve at the end of the semester. I normally do not curve grades. I usually grade on

a straight point scale, which means that an 85.5% is a B.

Extra Credit: Generally, I do not give much extra credit. However, on occasion, I may give an in-class writing or brainstorming assignment, or a fun out of class assignment, all for extra points. However, do

not count on extra credit points to boost your grade in this course.

Exam Structure: We will have three regular exams this semester, and one final exam. Each of the regular exams

will be worth 100 points, and composed of scantron-graded (quantitative comparisons, multiple choice, matching, true/false) questions. Each unit exam will have between 30-50 questions worth two-three points each. The comprehensive <u>final</u> exam will be worth 200 points. The final will

cover all material relevant to the four unit exams, and is required for all students.

Make-up Policy: No make-up examinations will be given. You must attend all examinations to receive credit. If for some unforeseen reason you are unable to attend a unit exam, a "0" will be marked in the

grade book for that exam. Because everyone has a bad day once in a while, or because sometimes we can't foresee getting sick and missing an exam, **I will drop your lowest of the three unit exams**. The drop policy, however, does NOT include the final exam. All students in the class must take the final. This policy applies for only one missed exam; a grade of <u>zero</u> will be recorded for any additional missed exams. If you are an athlete or have to miss more than one exam due to university-related activities, you MUST provide a written and signed document to me within the first two weeks of class, and you MUST schedule your exam to be made up AHEAD of time. I will deal with these cases on an individual basis. No make-up exams will be given after the class has taken the exam. No Exceptions! It is your responsibility to schedule these

exams, and to let me know ahead of time that you will be absent from an exam.

Grade Checks:

Point totals will be updated after each exam on the *Blackboard* web-based course management system (discussed below). We will discuss how to access and use *Blackboard* during the first week of class.

Blackboard:

I will use the course management system, *Blackboard* to reiterate announcements, post course documents, give test keys, and post points. *Blackboard* also allows me to e-mail the whole class at once; I may use it occasionally to make important announcements, send reminders, etc. But *Blackboard* only knows what you tell the University's e-mail system. So if you use an e-mail system other than SHSU's, please have your SHSU account forwarded to the account that you normally use. If you need help doing this, you can contact computer services at 4-1950.

Log in to SHSU's *Blackboard* by going to (http://blackboard.shsu.edu/webapps/login/) and using your SHSU ID and password. If you haven't used this system before, your default password for this site will be your birthdate in mmddyy format. For example, if your birthday is August 24, 1984, your default password will be 082484. You will be prompted to change your password upon initial login. I will send out class announcements via email, so please have your SHSU email account accessible.

Course Compass:

Course compass is a computer program that comes with your book, if you purchased a new copy of the 3rd edition. Course compass works similarly to Black Board, and has built in quizzes and study guides to help you better understand biological concepts. This is a study tool that I recommed using on a regular basis.

Important Dates:

Exam I – Wednesday Sept. 26 Exam II – Wednesday Oct. 24 Exam III – Wednesday Dec. 5

Final Exam - Wednesday December 12th, 8pm



Please note that if you withdraw after the date for an automatic W, I will assign you a W for the class if you are passing at the time of withdrawal; if you are failing, academic standards require that you receive an F.

Review Sessions: I reserve the class period before each exam as a review for that exam.

Academic Misconduct:

Academic misconduct includes cheating, plagiarism, falsification of records, unauthorized possession of examinations, intimidation, and any other action that may improperly affect the evaluation of your performance. It also includes assisting others in any such act or attempts to engage in such acts. Penalties may include grade penalties and disciplinary action from the University's Academic Misconduct Board.

Reasonable Accommodation:

SHSU is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with me as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course. It is your responsibility to let the instructor know if you have special needs.

One More Thing:

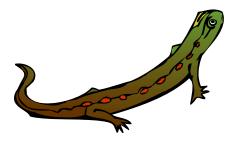
Universities expect you to spend 2–3 hours of study time OUTSIDE OF CLASS for each credit hour (that's why 12 credit hours is considered "full time")! This is a very challenging class, mainly due to the vast amount of material covered, and because science is generally difficult by nature. This is one of those classes where you will have to spend the extra time and put forth the extra effort to receive a good grade. There is a lot of material to cover in this course, but you can do very well in any class if you decide to study efficiently and commit the necessary time

to your education. What should you do during that time? Some suggestions: read your text and review your lecture notes, make sure you understand the material, be sure and ask questions as they arise, re-write your notes and incorporate important information from the text, develop study aids, etc. Come to class! Take good notes in lecture! Ask questions! The investment will be worth it as you approach your exams. It is really not that difficult to make a good grade in my class, so long as you apply yourself.

Visitors:

Visitors are welcome to come to our class, as long as you contact the instructor ahead of time.

*Note: This syllabus is subject to change. Any changes or revisions to this syllabus will be announced and posted on Black Board.



BIO 134, Lecture Topic Outline Fall 2007

Date	Lecture Topic	Readings	Homework and Notes
M 08/20	Introduction to Class: Course Policy		
W 08/22	Introduction to Life: Requirements for Life	Chapter 1	
M 08/27	Introduction to Life: Evolution, Ecology and Diversity	Chapter 1, 13, 14, 15, 18, 19 (selections)	
W 08/29	Introduction to Life : Scientific Method	Chapter 1	
M 09/03	NO CLASS! LABOR DAY HOLIDAY		
W 09/05	Essential Chemistry for Biology	Chapter 2	Homework 1 due (25 pts)
M 00/10	Water and Life	Charten 2	
M 09/10 W 09/12	Water and Life Molecules of Life	Chapter 2 Chapter 3	
W 09/12	Molecules of Life	Chapter 3	
M 09/17	Tour of the Cell	Chapter 4	Homework 2 due (25 pts)
W 09/19	The working cell, Cellular Respiration, Photosynthesis	Chapter 5, 6, 7	1 /
M 09/24	Review Exam I		
W 09/26	EXAM I (100pts)	Chapters 1-7 and selections	
	(· · · · · · · · · · · · · · · · · · ·	from Chapters 13, 14, 15,	
		18, 19	
M 10/01	Cellular Reproduction: Mitosis and Meiosis	Chapter 8	
W 10/01	Patterns of Inheritance: Genetics	Chapter 9	
W 10/03	ratterns of finicitance. Genetics	Chapter 9	
M 10/08	Patterns of Inheritance: Genetics	Chapter 9	
W 10/10	Structure and Function of DNA	Chapter 10	Homework 3 due (25 pts)
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M 10/15	How Genes are Controlled: Transcription and	Chapter 11	
W 10/17	Translation Cancer, Cloning and DNA Technology	Chapter 11, 12	
** 10/17	Cancer, Cronning and Drive Technology	Chapter 11, 12	
M 10/22	Review Exam II		
W 10/24	EXAM II (100pts)	Chapters 8-12	
M 10/29	How Populations Evolve: Microevolution Happy Halloween! ☺	Chapter 13	Dress up as something related to Biology for extra points!
W 10/31	How Biological Diversity Evolves: Macroevolution	Chapter 14	
M 11/05	Microbial Life	Chapter 15	
W 11/07	Plants, Fungi, and the Move onto Land	Chapter 16	Homework 4 Due (25 pts)
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M 11/12 W 11/14	Evoltuion of Animals Evoltuion of Animals	Chapter 17 Chapter 17	
VV 11/14	Evolution of Annhais	Chapter 17	
M 11/19	Organisms and Populations	Chapter 18	
W 11/21-F 11/2			
M 11/26	Communities and Ecosystems	Chapter 19	Guest Lecture: C. Hargrave
W 11/28	Human Impact on the Environment; Global Warming	Chapter 20	
M 12/03	Review Exam III		
W 12/05	EXAM III (100pts)	Chapters 13-20	
W/ 12/12	EINAL EVAM (200 mts). 9 10mm	Comprehensive	
W 12/12	FINAL EXAM (200 pts): 8-10pm	Comprehensive	1