

BIOLOGY 215 - GENERAL COURSE INFORMATION

Course	Biol 215, Biostatistics (3 Units)																										
Instructors	Dr. Douglas Deutschman		Dr. Helen Regan																								
Contact Info	PS 150A (Physical Sciences Bldg) 594-5391 ddeutschman@sciences.sdsu.edu		PS 255-257 (Physical Sciences Bldg) 594-2738 hregan@sciences.sdsu.edu																								
Office Hours	Mon: 11am – 12pm, Wed: 1pm – 2pm		Mon: 3pm – 4pm, Wed: 12 – 1pm																								
Prerequisites	Math 121 or 141 and Bio 201A or 201B																										
Web Site	Until 9/8: Bio215 Website on College of Sciences Server (until the end of the 2 nd week of class) http://www.sci.sdsu.edu/class/bio215 After 9/8: Blackboard Course Supplement (remainder of semester)																										
Lecture	M/W, 14:00-14:50 in HH-130																										
Lab	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">All Sections Meet in LS-126</th> <th style="text-align: left;">Schedule #</th> <th style="text-align: left;">Lab</th> <th style="text-align: left;">Instructor</th> </tr> </thead> <tbody> <tr> <td>Sec 1</td> <td>Tue 0800-1040</td> <td>04152</td> <td>Joelle Fournier</td> </tr> <tr> <td>Sec 2</td> <td>Tue 1400-1640</td> <td>04163</td> <td>Laura Carney</td> </tr> <tr> <td>Sec 3</td> <td>Wed 0800-1040</td> <td>04174</td> <td>Carey Galst</td> </tr> <tr> <td>Sec 4</td> <td>Wed 1700-1940</td> <td>04185</td> <td>Carey Galst</td> </tr> <tr> <td>Sec 5</td> <td>Thu 0800-1040</td> <td>04196</td> <td>Joelle Fournier</td> </tr> </tbody> </table>			All Sections Meet in LS-126	Schedule #	Lab	Instructor	Sec 1	Tue 0800-1040	04152	Joelle Fournier	Sec 2	Tue 1400-1640	04163	Laura Carney	Sec 3	Wed 0800-1040	04174	Carey Galst	Sec 4	Wed 1700-1940	04185	Carey Galst	Sec 5	Thu 0800-1040	04196	Joelle Fournier
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	<i>Starts AFTER LABOR DAY On Sept 5th</i>																										
Exams	Exam 1	Mon, Sep 25 th In Class	Exam 2	Mon, Oct 23 rd In Class																							
	Exam 3	Mon, Nov 20 th In Class	Exam 4	Wed, Dec 13 th During Finals																							
Textbooks and Materials	(Required - Lecture) <u>Statistics: The Exploration and Analysis of Data</u> by Devore and Peck. Fifth Edition. Duxbury Press, 2004. (Required – Lab) <u>Biology 215 Lab Manual</u> Details about Availability will be announced in class and posted on the course website.																										

COURSE GOALS AND LEARNING OBJECTIVES

This course is an introduction to biostatistics that develops and illustrates fundamental ideas in statistics with examples and applications from biology and the health sciences. Through the lectures, readings, assignments, and computer labs you will get experience in applying concepts and using statistical methods to collect, analyze, and interpret data from a diverse set of topics in biology.

At the end of the course students will be able to:

- Understand why biologists need a background in statistics
- Understand statistical analyses in the context of the scientific method
- Read and interpret biological research presented in the scientific literature and popular publications
- Learn, use, and apply statistical software to enter data, graph and analyze data, test hypotheses, and interpret results from simple samples and experiments
- Write about, explain, and communicate statistical concepts and results

Over the course of the semester, students will learn:

- how to produce data through observational studies and experiments,
- how to visualize biological data,
- how to describe the distribution of single variables,
- how to examine and describe relationships between variables,
- how to draw inferences from a sample to a population,
- how test statistical hypotheses.

OTHER COURSE INFORMATION

Grading Policy and Exams

The majority of students will receive grades in the B- to C- range. Please remember that long-standing University policy considers a grade of A to be indicative of "outstanding achievement; available only for the highest accomplishment," while a grade of B indicates a "praiseworthy performance; definitely above average." We don't use particular numerical scores that must be achieved to get a particular letter grade. Instead, letter grades will be assigned to scores after each exam on the basis of the class average and our judgment regarding class performance.

There will be four 1-hour exams and many smaller assessments including writing assignments, homework, and quizzes. The exams are scheduled for Sep 25th, Oct 23rd, Nov 20th, and Dec 13th (during finals). Any changes in the schedule for exams will be announced a minimum of two weeks before the date of the examination.

Final Grades will be calculated using the following:

Lecture (475 pts – 60%)	Laboratory (325 pts – 40%)
Assignments (75)	Quizzes and Hmwrk (75)
Exam 1 (100)	Lab Practical 1 (100)
Exam 2 (100)	Lab Practical 2 (100)
Exam 3 (100)	Participation (50)
Exam 4 (100)	

Note: You must pass both the lecture and lab portion of the class in order to receive a grade of C or higher for the class.

Other Notes on Grading

Please check the grade for each assignment for errors. We require that any concerns (errors, disputes) be brought to our attention in writing within 2 weeks. Please double check your grade against the posted grades recorded in the Blackboard gradebook. Finally, we keep students materials for 1 year after the completion of the class.

Academic Misconduct

Academic misconduct has rarely been a problem in Bio 215, and warning you about the consequences may seem unnecessary and perhaps even offensive. The University takes standards of integrity very seriously. Please review the information on students' rights and responsibilities. The guidelines are on the website of the Center for Student Rights and Responsibilities (<http://www.sa.sdsu.edu/srr/index.html>) and the Judicial Procedures Office (<http://www.sa.sdsu.edu/srr/judicial/index.html>).

Missed Exams

If illness or other serious problem beyond your control prevents you from taking an exam, you are expected to provide some kind of verification of the reason, such as a note from student health services. Missing an exam because your employer wants you to work is not an adequate justification. Arrangements will be made so that you are not penalized for missing a midterm if you have a bona fide reason for having done so, but no makeups will be given for missed writing assignments, activities, and quizzes. However, your points will be adjusted so that you are not penalized for missing an assignment provided that you present good evidence that your absence was the result of a serious, unavoidable problem.

Labs

Lab is an integral part of the course (and 40% of the final grade). An important part of the lab will consist of written assignments. Your grade will depend not only on the accuracy and appropriateness of the statistical analysis that you carry out, but also on your writing. Assignments that are poorly organized or sloppy (including grammatical mistakes and misspellings) will be severely graded down or rejected as unacceptable.

Dropping

The last day to drop classes is September 18th. Unfortunately, the last day to drop without the risk of penalty comes very early in the semester. If you are unsure what to do, please feel free to talk with us (or your lab instructor) about your concerns. Drop/Add procedures are listed on the SDSU website.

Any changes to this Syllabus will be announced in class and Posted on Blackboard