BIEB 100: Biometry Lecture & Lab

Course Information
Winter Quarter 2010
Lecture: Tues/Thurs 3:30-4:50pm, Center 115

Lab A01: Tues 1:00-1:50pm, Galbraith Hall 263
Lab A02: Tues 2:00-2:50pm, Galbraith Hall 263
Lab A03: Mon 2:00-2:50pm, Galbraith Hall 263
Lab A04: Wed 5:00-5:50pm, Galbraith Hall 263
Lab A05: Wed 2:00-2:50pm, Galbraith Hall 263
Lab A06: Wed 3:00-3:50pm, Galbraith Hall 263

Final exam: Tues 16 March 3:00-5:59am, TBA

Please note: information in this syllabus is subject to change. Any schedule changes will be announced in class and posted on the web site. Make sure to frequently check the web site to keep updated about the weekly readings, assignments, and exam schedule.

Important dates

28 January 2009	Mid-term exam I
18 February 2009	Mid-term exam II
16 March 2009	Final exam

Grading

· Mid-terms = 30% (total)
· Lab attendance & assignments = 30% (total)
· Final exam = 40%

Textbook

Whitlock & Schluter (2008) *The Analysis of Biological Data*, Roberts & Company Publishers.

Contact Information

Instructor:
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Teaching Assistants:
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Department of Biology

Office Hours Please see WebCT site for details.

Labs
Labs are not optional. Lab attendance accounts for 10% of your final grade. Missing more than 4 labs results in a FAIL for the whole course. The labs will take place in a computer room and will be a combination of problem solving, computer assignments, and projects. The teaching assistants will be responsible for the labs. There will be some graded lab assignments that will count toward the final grade. After week one basic working knowledge of the SPPS package is assumed. It is your responsibility to spend the time and to make use of the online tools suggested by your instructors to learn SPSS (e.g. http://www.ats.ucla.edu/stat/spss/)

Regrades
If an error has been made in the grading of your exam, you may submit it to the instructor within *one week* of distribution for a regrade. The cut-off date for final exam regrades will be announced later in the quarter. Do not go to a TA for a regrade. **Your mid-term or final exam must first be submitted to the instructor with a written description of the grading error**. Regrade requests will not be processed without a written description of the grading error. **No regrades will be given for exams written in non-permanent ink.**

Missed exams (Mid-terms, Final)
There are no make-up exams. If you must miss an exam, you will be required to provide official documentation of an unavoidable emergency (e.g. serious illness, etc.). Without such documentation, you will receive a failing grade for that exam. With valid documentation, the proportion of your grade that is based upon your other exams will be increased to cover the exam that was missed. Not more than one of the mid-terms can be missed. A missed final exam cannot be taken at a later date. If you are able to provide official documentation of an unavoidable emergency, you will receive an incomplete for the course. You will then need to make arrangements to complete the course in the following year.

Excused absences Final Exam
If you cannot be present in the classroom for an exam and can present a valid excuse (such as a note from your coach for a sporting event), then a sealed copy of the exam will be given to the coach, musical director, etc. who will administer the exam **at the class exam time**. **You must present the documentation at least 1 week in advance of the exam.** If no UCSD official can be found to administer the exam, then it will count as a missed exam. If the exam cannot be taken on the class exam day, then it will count as a missed exam. **No exam can be taken before or after the scheduled exam date.**

Cheating
Students are expected to do their own work, as outlined in the UCSD Policy on Academic Integrity. Cheating will not be tolerated, and we will fail any student caught engaging in academic dishonesty. All exams will be closed-book and closed-notes, so all personal materials must be stowed under your seat. Students will be spaced in alternating seats. Only exams written in non-erasable pen will be considered for regrades. Because both exams are required for satisfactory completion of this course, any student caught cheating on an exam will receive a failing grade for the course. He or she may also be suspended from UCSD.

WebCT
The course will be using web learning software called "WebCT". Our course website is http://webct.ucsd.edu. Your USERID and Password for your UCSD email account should work. However, if you are a recent transfer student or do not yet have a UCSD email account, we will need to issue you a password. If you experience problems accessing WebCT, please contact Sally Witucky at (858) 534-4061 (switucky@ucsd.edu). **IF YOU CANNOT ACCESS WEBCT, YOU ARE UNLIKELY TO PASS THIS COURSE!**

BIEB 100 – Winter 2010
Course schedule

Week 1			**Readings**
5-Jan	Lecture 1	Overview; Intro to sampling and data types	Chapter 1
7-Jan	Lecture 2	Data presentation and faithful displays	Chapter 2
Week 2			
11-13 Jan	*Lab 1*	*Functions in Excel; first steps in SPSS*	
12-Jan	Lecture 3	Summarizing data / descriptive statistics	Chapter 3
14-Jan	Lecture 4	Introduction to probability I	Chapters 4 & 5
Week 3			
18-20 Jan	*Lab 2*	*Generating & discussing data*	
19-Jan	Lecture 5	Introduction to probability II	Chapters 4 & 5
21-Jan	Lecture 6	Asking questions with data / Hypotheses	Chapter 6
Week 4			
25-27 Jan	*Lab 3*	*Discussion; Q&A*	
26-Jan	Lecture 7	Independence vs. dependence	
28-Jan	Lecture 8	Introduction to proportions / MID-TERM I	
Week 5			
1-3 Feb	*Lab 4*	*Simulations & distributions*	
2-Feb	Lecture 9	Frequency data	Chapters 7 & 8
4-Feb	Lecture 10	Binomial (and other) distributions	Chapters 7 & 8
Week 6			
8-10 Feb	*Lab 5*	*Working with data I*	
9-Feb	Lecture 11	Contingency analysis	Chapter 9
11-Feb	Lecture 12	Continuous data & the normal distribution	Chapters 10 & 11
Week 7			
15-17 Feb	*Lab 6*	*Discussion; Q&A (group assignment)*	
16-Feb	Lecture 13	What's bigger? Comparing means	Chapter 11 & 12
18-Feb	Lecture 14	MID-TERM II	
Week 8			
22-24 Feb	*Lab 7*	*Group project discussion*	
23-Feb	Lecture 15	Data transformations	Chapter 13
25-Feb	Lecture 16	Bias and error in statistics	Chapter 14
Week 9			
1-3 Mar	*Lab 8*	*Group project presentations*	
2-Mar	Lecture 17	Are any different? Comparing many means	Chapter 15
4-Mar	Lecture 18	Post-hoc testing / Correlation	Chapters 14 & 16
Week 10			
8-10 Mar	*Lab 9*	*Working with data II*	
9-Mar	Lecture 19	Regression	Chapters 16 & 17
11-Mar	Lecture 20	Linear models	Chapter 18
Week 11			
16-Mar		FINAL EXAM	