

STATISTICS 231: An Introduction to Empirical Problem Solving – Spring Term, 2005

Purpose: To introduce and to develop empirical problem solving methods.

Format: Each lecture section involves four contact hours per week, in two 2-hour time slots; five of these slots will be laboratories. You need to select two laboratory partners before Laboratory 1 (in week 3 of term); these people will be your partners for all five laboratories.

A useful way to organize a laboratory team of three people is to think of one person as the *manager* of the other two people.

The laboratories are long and start on time, so you need to come prepared; if you arrive late, you may not be permitted to do the laboratory.

Instructors:

01: S.H. Steiner	MC 6020	ext. 6506	class is at 10.30-12.20 in MC 4059
02: W.H. Cherry	MC 6153	ext. 5507	class is at 8.30-10.20 in MC 4059
03: W.H. Cherry	MC 6153	ext. 5507	class is at 12.30- 2.20 in MC 4059
04: S.H. Steiner	MC 6020	ext. 6506	class is at 2.30- 4.20 in MC 4059
05: B. Giddings	MC 6223	ext. 7086	class is at 2.30- 4.20 in MC 2034

Assessment:	Better of	Assignments (5×2)	10	and	Assignments (5×1)	5
		Laboratory reports (5×2)	10		Laboratory reports (5×1)	5
		Quizzes (10, 10)	20		Quizzes (5, 5)	10
		Final examination	60		Final examination	80;

A passing grade on the final examination is normally needed to pass the course.

Office Hours	(S.H.S.): Tuesday and Wednesday, 1.30 to 2.30 pm.	Please use your <i>own</i> instructor's
	(W.H.C.): Monday, Tuesday and Wednesday, 3 to 4 pm.	office hours, <i>not</i> those of the
	(W.H.C.): Monday, Tuesday and Wednesday, 3 to 4 pm.	instructor for a different lecture
	(S.H.S.): Tuesday and Wednesday, 1.30 to 2.30 pm.	section.
	(B. G.): Tuesday, 1.00 to 2.00 pm, Thursday, 4.30 to 5.30 pm.	

Tutorial Centre: Teaching assistants will be available in the Statistics Tutorial Centre, MC 6095, to help with laboratory reports and studying for quizzes, at times to be announced in class.

Text: Course Notes (**some** revisions from the Winter term) and separate Laboratories (**not** revised from the Winter term) are available for purchase (at about \$20 and about \$6, including PST and GST) at the Pixel Planet, MC 2018; the Notes include expository text and exercises, statistical tables and old final examinations.

Many of the examples and problems discussed in STAT 231 require an understanding of their context; it is *your* responsibility to ask questions if the context is not clear to you.

If you are having difficulty with the material, it is your responsibility to make use of the resources provided (exercise solutions, T.A. Statistics Tutorial Centre hours, instructor office hours).

Course Calendar:		WEEK STARTING	2-HR TIME SLOT		OTHER COURSE ACTIVITIES	
May	02	Chapter 1	Chapter 2	----	----	
	09	Chapter 3	Chapter 4	----	----	
	16	Laboratory 1	Chapter 5	----	Laboratory 1 report	
	23	Chapter 6	Chapter 7	----	Assignment 1	
	30	Laboratory 2	----	Quiz #1	Laboratory 2 report	
June	06	Chapter 8	Chapter 9	----	Assignment 2	
	13	Laboratory 3	Chapter 10	----	Laboratory 3 report	
	20	Chapter 11	Chapter 12	----	Assignment 3	
	27	Laboratory 4	Chapter 13	----	Laboratory 4 report	
July	04	Chapter 14	----	Quiz #2	----	
	11	Chapter 15	Chapter 16	----	Assignment 4	
	18	Laboratory 5	Chapter 17	----	Laboratory 5 report	
	25	Chapter 18	----	----	Assignment 5	

For Prof. Giddings's 2.30 pm lecture Section 5, there will be interchange of:
Laboratory 1 and Chapter 5;
Laboratory 4 and Chapter 13.
The laboratory report is still due at the end of the laboratory period.

(continued overleaf)

Attendance at laboratories is *mandatory* – proper documentation must be provided for reasons (*e.g.*, illness) for missed laboratories.

Each laboratory report is due no later than the *end* of the laboratory (20 minutes after the hour); *one* report is to be done by each team of three (you and your two laboratory partners).

Please make *sure* you are registered in the section whose classes and laboratories you attend.

Quizzes:	Date	Material covered	Locations
	Thursday, June 2	Chapters 1-7, Laboratories 1, 2	Rooms to be announced
	Thursday, July 7	Chapters 1-14, Laboratories 1-4	Rooms to be announced

The quizzes will be up to 1½ hour long and will start at 4.45 pm; please sit in *alternate* seats in your quiz room.

Solutions: Solutions to the laboratories will be posted in a display case, in the hallway outside the Statistics Tutorial Centre, MC 6095, the day after the due date and they will stay up until after the marked reports are returned, typically for three weeks in total. These solutions will *not* be available in any other manner at any other time, so please check your report against its outline solution during the time it is posted.

R Link: http://www.stats.uwaterloo.ca/Stats_Dept/StatSoftware/R/

R Tutorial: Go to the R-Tutorial link and select the appropriate computing environment; before Assignment 1, due in the week of May 23, 2005, do all nine pages of the tutorial.

Practice Problems: These are provided in the Course Notes at the end of the chapters.

Web page: Course information and solutions to the quizzes will be posted in Angel: <http://uwace.uwaterloo.ca>

Final Examination: The final examination will be 2½ hours in duration and will be held in the normal examination period (August 2 to August 13); the permitted aids are a calculator and a dictionary. Copies of statistical tables (Appendix B of the Course Notes) will be provided.

Cheating: **Don't.** Any and all instances of cheating will be severely dealt with; possible penalties include *suspension* and *expulsion from the University*. Cheating includes copying the work of others (including previously published solutions) on laboratories, quizzes or midterms and examinations.

If you get help with laboratory reports, make *sure* you give clear and explicit acknowledgement of this help in your submission.

Your instructor may ask you for an explanation of widely divergent grades between laboratory reports assignments and the quizzes and final examination.