

**Econ 3640**  
**Probability and Statistical Inference for Economists**  
**Fall 2008**

**Instructor:** Michael Hogue

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**Office Address:** BUC 1

**Class Address:** BUC 106

**Office Hours:** MW 12:45-1:25, or by appt.

**Days/Times:** MW 1:25-2:45

**Required Text:** Thomas H. Wonnacott and Ronald J. Wonnacott. *Introductory Statistics for Business and Economics*. John Wiley and Sons, Inc., 4th edition, 1990. ISBN: 978-0-471-61517-0

**Recommended [but optional] Text:** Thomas H. Wonnacott and Ronald J. Wonnacott. *Student Workbook to accompany Introductory Statistics for Business and Economics*. John Wiley and Sons, Inc., 1990. ISBN: 0-471-50899-3. The first part of this text contains detailed solutions to the odd-numbered exercises from the main text and the second half has additional practice questions with solutions.

**Course Description:** This course is an introduction to statistics with two main goals: Like most introductory statistics classes, one aim is to enable the student to make more effective judgements concerning data-based evidence in everyday situations. The other is to prepare the student for further statistical training, ECON 4650 (econometrics) in particular. The course will thoroughly cover chapters 1-9. Time permitting, we will pick up a few topics from Part IV (e.g. Ch. 16 Maximum Likelihood Estimation, Ch 23 Sampling Designs, or Ch. 22 Index Numbers).

**How our Classes will be Organized:** At the beginning of class on most Wednesdays (see schedule in this syllabus) we will have a quiz. Time permitting, after the quiz we can discuss the solutions. Then I will take questions concerning the homework assigned from the previous class. The time remaining will be devoted to discussion of new topics.

**Preparation:** The official prerequisite for ECON 3640 is MATH 1090. This means that the student should have a solid understanding of the topics typically covered in that course (see <http://www.acs.utah.edu/GenCatalog/crsdesc/math.html#1090>). If you have questions or concerns regarding your preparation for ECON 3640, see or email me as soon as possible.

**Homework:** Homework from each section is assigned when we finish discussing that section. But the homework is not collected. Instead, quizzes are given that cover the same material as the homework.

**Grade Components:** The overall course grade is based on the following:

- (1) **Quizzes:** We will have 11 quizzes. I will drop the lowest 2 scores and the average of the 9 remaining scores will constitute 60% of the course grade.
- (2) **Computer assignments:** There will be computer-based projects which will combine to count for 10% of the overall grade.
- (3) **Mid-term and Final Exams:** The mid-term and final exam each count for 15% of the course grade. The mid-term (see date below) will cover the material discussed between 8/25 and 10/08 and the final exam will cover the entire course.

**Letter-Grade Assignment:** If  $G$  is the student's overall grade on a 100pt scale, then the letter grade assigned to  $G$  is given as follows:

$93 \leq G \leq 100$	$89 \leq G < 93$	$85 \leq G < 89$	$81 \leq G < 85$	$77 \leq G < 81$	$73 \leq G < 77$
A	A-	B+	B	B-	C+
$69 \leq G < 73$	$65 \leq G < 69$	$61 \leq G < 65$	$57 \leq G < 61$	$53 \leq G < 57$	$G < 53$
C	C-	D+	D	D-	E

**Computer:** We will use the Gnumeric spreadsheet for the computer projects. This is a free and open source program which is available at: <http://www.gnome.org/projects/gnumeric/>. This spreadsheet is nearly identical to Excel for what we will be doing. In fact, you may use Excel for the projects if you wish.

**Calculators:** You will need a calculator with the ability to exponentiate (e.g compute  $0.5^{12}$ ) in addition to the basic arithmetic operations. It will be convenient if your calculator can also store the results of calculations, operate on lists and perform basic statistical functions. Calculators such as the TI BA II Plus, TI BA-35, TI-30X, and TI 83/84/85/86/89/92 are all appropriate, but the TI 83/84 seem to be especially convenient.

**Makeups:** Make-up quizzes will not be given. Make-up exams will only be given in extraordinary circumstances. If notice of an unavoidable absence from an exam is given at least one week in advance, and if the instructor is provided supporting documentation that is persuasive and verifiable, then a make-up exam will be given within a reasonable time around the date of the missed exam. If less than one week's notice is given, and especially if no notice is given, then any make-up exam offered is subject to being more difficult than the one missed and/or accompanied by a grade penalty.

**Getting Help:** Students should consider the instructor as their primary resource for help in this course. If you are unable to see me during the official office hours, feel free to make an appointment. For secondary resources, note that ASUU provides several tutoring services, including free drop-in tutoring at the Peterson Heritage Center Seminar Room #1 (Sunday through Thursday 7:00 P.M.-10:00 P.M.) for all University of Utah students (see <http://www.sa.utah.edu/tutoring>). ASUU also provides one-on-one tutoring for \$6 per hour with discounted rates for groups. ASUU tutoring services office is located at the Student Services Building (SSB).

**A Few Dates to Keep in Mind:**

<b>9/1</b>	No class (Labor Day)
<b>9/3</b>	Last day to drop
<b>9/3</b>	Quiz 1
<b>9/10</b>	Quiz 2
<b>9/17</b>	Quiz 3
<b>9/24</b>	Quiz 4
<b>10/1</b>	Quiz 5
<b>10/8</b>	Quiz 6
<b>10/13</b>	No class (Fall break)

<b>10/15</b>	No class (Fall break)
<b>10/22</b>	Mid-term
<b>11/5</b>	Quiz 7
<b>11/12</b>	Quiz 8
<b>11/19</b>	Quiz 9
<b>11/26</b>	Quiz 10
<b>12/3</b>	Quiz 11
<b>12/15</b>	Final Exam (1:00-3:00)

**ADA Information:** A message from the Center for Disability Services (CDS):

*The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.*

The URL for CDS is <http://disability.utah.edu>. Please discuss these issues with me at the beginning of the course.

**Academic Integrity:** Please remember that all students at the University of Utah are bound by the student code (see <http://www.admin.utah.edu/ppmanual/8/8-10.html>).

**About this Syllabus:** The instructor reserves the right to make such alterations to this syllabus as unforeseeable circumstances may warrant. Any change will be announced in class and on the course webpage.

### Homework List for Chapters 1-9:

Ch-Sec No.	Pgs	Problems	Ch-Sec No.	Pgs	Problems
1-1	8-10	1, 2, 3	7-1	NA	none
1-2	13	4, 5, 6	7-2	237-239	1, 2, 3, 4, 5, 6, 7
1-3	17-19	7, 8, 9, 10, 11, 12	7-3	242-244	8, 10, 11
1 review	21-24	13, 14, 15, 16, 17, 18	7-4	247-248	13
2-1	30-31	2, 3, 4, 5, 6	7 review	248-252	14, 15, 16, 20
2-2	37-39	7, 8, 9, 13, 14, 15	8-1	260-261	1, 2, 3, 4
2-3	44-46	16, 17	8-2	263-264	5, 6, 7, 9
2-5	51-52	21, 22, 23, 24	8-3	267-268	10, 11, 13
2 review	65-68	34, 38, 39, 42	8-4	272-273	15, 16
3-1	72	none	8-5	275-277	17, 18, 19, 21
3-2	78-79	4, 5, 6, 7	8 review	282-286	25, 31, 32
3-3	84-85	9, 10, 11, 13, 14	9-1	292	2, 3
3-4	88-89	15, 17, 18, 20	9-2	299	4, 6
3-5	92-93	21, 22, 23, 24	9-3	303-306	7, 9, 10, 11, 13
3-6	97-98	25, 26, 27, 28, 29	9-4	309-310	14, 15, 16, 17, 18
3 review	104-108	35, 36, 37, 39, 42, 45, 46	9-5	313-314	19, 21
4-1	112-113	1, 4, 5	9-6	319-320	22, 23
4-2	115-116	7, 8, 9	9 review	321-323	27, 28, 30abcdefgh
4-3	122-123	11, 12, 13, 14, 15	<b>Notes:</b>		
4-4	126-127	17	(1)		Sections from chapters 1-9 that are not listed are ones we will not cover.
4-5	133-134	19abc, 21, 22, 23	(2)		Homework for chapters other than 1-9 will be given out separately and as needed.
4-6	139-140	24b, 25, 26, 27, 28	(3)		Some sections we <i>will</i> cover won't have assigned problems (7-1 and 3-1).
4 review	147-152	35, 36, 39, 45			
5-1	159-160	1, 2, 3			
5-2	162-163	9			
5-3	168-169	14, 15			
5-4	175-176	16, 17, 18, 19			
5 review	177-181	20, 21, 22, 23, 26			
1 - 5 review	182-186	28, 31, 33, 34			
6-1	194-195	1			
6-2	198-199	5, 6, 7			
6-3	205-207	9, 11, 12			
6-4	214-215	19, 21, 23			
6 review	226-230	33, 35, 39, 43			