# PSQF 4143: Introduction to Statistical Methods

Fall 2015 / MWF: 12:30 – 1:20 pm / EPB 107

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Office Hours: MWF: 11 am – 12 pm or by appointment





An approximate answer to the right problem is worth a good deal more than an exact answer to an approximate problem. — *John Tukey* 

# **Course Description**

This course will provide an introduction to statistics. Upon completion of the course, students should be comfortable with basic descriptive statistics, inferential statistics, and the ability to reason logically using statistics. The focus will be less on computations and more on reasoning and interpreting statistical results.

# **Course Objectives**

The lectures have the following goals:

- 1. to clarify difficult concepts,
- 2. to integrate new concepts with previous material,
- 3. to relate new concepts with relevant external situations,
- 4. to supply additional examples for illustrating concepts under discussion.

In addition to lectures, there will be discussion sections held to provide more in depth exposure to materials in the text and class assignments. These can be a great avenue to ask questions and receive support for concepts that are difficult to grasp in lectures.

#### **Textbook**

Kirk, Roger (2007). *Statistics: an introduction*. Cengage Learning. *Student Coursepack for Introduction to Statistical Methods* (2015).

# **Course Requirements**

Minimum Competency Exams

There will be three minimum competency exams taken during lectures. The dates can be found on the course schedule. A cut score will be established so that these exams are pass/fail.

- · If you should fail a minimum competency exam, you can taken another minimum competency exam over the same material.
- · It is your responsibility to contact the teaching assistant to arrange for a make-up exam.
- · An unexcused absence from a minimum competency exam will result in a score of zero on the exam with no opportunity for make-up.
- · Your final grade will be reduced by one full letter for each minimum competency exam not passed by the deadline date.

Additional information on the minimum competency exams can be found in the coursepack. *Application Exams* 

There will also be three application exams that are taken outside of lectures. The dates can be found on the course schedule. The application exams will be multiple choice exams that are designed to measure objectives at a higher cognitive level compared to the minimum competency exams. An unexcused absence from an application exam will result in a score of zero on the exam.

Additional information on the application exams can be found in the coursepack.

#### Absences

An absence from either exam must be cleared with the instructor **before** the exam date. *Grading* 

To be eligible for a C- in the course, students must meet the following requirements:

- (a) pass all three minimum competency exams
- (b) correctly answer a minimum of 25% of the items across all three application exams

The assignment of grades above C- is based on performance on the applications exams. Plus/minus grading will be used.

# **Course and University Policies**

### Announcements and Communication

Any announcements regarding the course will be communicated via e-mail so please check it daily. Course materials will be posted to ICON. Go to icon.uiowa.edu for access to the ICON site.

## Adaptations and Modifications

Please inform me during the first two weeks if you require special adaptations or modifications to any assignment or due dates because of special circumstances such as learning disabilities, religious observances, or other appropriate needs.

## Academic Misconduct

Plagiarism and cheating may result in grade reduction and/or serious penalties. College policy on student academic misconduct: http://www.education.uiowa.edu/dean/policies/student-academic-misconduct.aspx

#### Other Information

Please be aware of University policy statements regarding academic misconduct, academic accommodations, student complaint procedures, etc. Consult the following websites:

- · Student disability services http://www.uiowa.edu/~sds/
- College policy on student complaints and dispute resolution http://www.education.uiowa. edu/dean/policies/student-complaint.aspx
- University policies on sexual harassment http://opsmanual.uiowa.edu/community-policies/ sexual-harassment or http://www.sexualharassment.uiowa.edu/policy.php

- · This course is provided by the College of Education and the Division of Continuing Education. Policies on matters such as course requirements, grading, and sanctions for academic dishonesty are governed by the College of Education. Students wishing to add or drop this course after the official deadline must receive approval of the Dean of the College of Education. The University policy on cross enrollments is at http://www.uiowa.edu/~provost/deos/crossenroll.doc

Day Number	Date	Day of Week	Section of Coursepack	Notes
1	Aug 24	M	Course Overview and Section 1	
2	Aug 26	W	Section 1	
3	Aug 28	F	Section 1 & 2	
4	Aug 31	M	Section 2	
5	Sep 2	W	Section 2	
6	Sep 4	F	Section 2	
September 7, University Holiday – No Class				
7	Sep 9	W	Section 2	
8	Sep 11	F	Section 2	
9	Sep 14	M	Section 3	
10	Sep 16	W	Section 3	
11	Sep 18	F	Section 4	
12	Sep 21	M	Section 4	
13	Sep 23	W	Section 5	
14	Sep 25	F	Section 5	
15	Sep 28	M	Minimum Comp Exam 1	In Class (See example in Coursepack)
_	Sep 29	Tu	APP Exam 1	1505 SC & 2217 SC: : 6:30 – 8:30 pm
16	Sep 30	W	Section 6	•
17	Oct 2	F	Section 6	
18	Oct 5	M	Section 7	
19	Oct 7	W	Section 7	
20	Oct 9	F	Section 8	Deadline to complete first MC1 retake
21	Oct 12	M	Section 8	•
22	Oct 14	W	Section 9	
23	Oct 16	F	Section 9	Deadline to complete second MC1 retake
24	Oct 19	M	Section 9	•
25	Oct 21	W	Section 9	
26	Oct 23	F	Section 9	
27	Oct 26	M	Section 9	
28	Oct 28	W	Section 10	
29	Oct 30	F	Section 10	
30	Nov 2	M	Minimum Comp Exam 2	In Class (See example in coursepack)
_	Nov 3	Tu	APP Exam 2	100 PH: 6:30 – 8:30 pm
31	Nov 4	W	Section 11	•
32	Nov 6	F	Section 11	
33	Nov 9	M	Section 12	
34	Nov 11	W	Section 12	
35	Nov 13	F	Section 13	Deadline to complete first MC2 retake
36	Nov 16	M	Section 13	•
37	Nov 18	W	Section 14	
38	Nov 20	F	Section 14	Deadline to complete second MC2 retake
Nov 22 to Nov 29, Thanksgiving Recess - No Classes				
39	Nov 30	M	Minimum Comp Exam 3	In Class (See example in Coursepack)
40	Dec 2	W	Section 14	
41	Dec 4	F	Section 15	
42	Dec 7	M	Section 16	Deadline to complete first MC3 retake
43	Dec 9	W	Section 16	1
	Dec 11	F	Section 16	
44				
44	Dec 14	M	_	Deadline to complete second MC3 retake