# Course Outline

**Instructor:** Jonathon Jones  
**Office Hours:** MWF 10-11 a.m.  
**Office:** Econ 218

## Assigned Text:

## Supplementary Texts:
- Thomas H. Wonnacott and Ronald J. Wonnacott, *Econometrics*
- Toro Yamane, *Statistics: An Introductory Analysis*

## Tentative Lecture Topics

<table>
<thead>
<tr>
<th>Week of</th>
<th>Tentative Lecture Topics</th>
<th>Suggested Reading Assignment</th>
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<tbody>
<tr>
<td><strong>January 20</strong></td>
<td>Introductory remarks; myriad definitions; breathing some excitement into an extremely dry subject; descriptive statistics and inferential statistics</td>
<td>Chps. 1, 2</td>
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<tr>
<td><strong>27</strong></td>
<td>A close look at descriptive statistics; measures of the location and dispersion of distribution; linear transformations</td>
<td>Chp. 2 and work all problems.</td>
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<td><strong>February 3</strong></td>
<td>Probability; more definitions; mutually exclusive events; independence; conditional probability</td>
<td>Chp. 3 and work all problems.</td>
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<td><strong>10</strong></td>
<td>Probability distribution; more definitions; discrete random variables; discussion of various kinds of distributions</td>
<td>Chp. 4 and work all problems.</td>
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<tr>
<td><strong>17</strong></td>
<td>Two Random Variables; bivariate distributions; functions of two random variables; covariance and correlation</td>
<td>Chp. 5 and work all problems.</td>
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<td><strong>24</strong></td>
<td>Start Part II of Book: Basic Inference: Estimating Means; Random Sampling; moments of the sample mean. Review for Exam I will be held on Wednesday, 27 February 1980. Exam I will be held on Friday, 29 February 1980. Coverage of exam: Chps. 1-5. Note: Preliminary outline of term paper is due on Friday, 29 February 1980; 2-3 pages.</td>
<td>Chp. 6 and work all problems.</td>
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| March 2 | Random Sampling; the Central Limit Theorem | Chp. 6 and work all problems. |
Week of

March 9
Point estimation; population and samples; desirable properties of estimators; unbiasedness; efficiency consistency, and sufficiency

16
Interval estimations

23
Indulging in the Unearthly Delights of Spring Break
Look at Chp. 9 while you are relaxing

30
Hypothesis testing

April 6
Analysis of Variance
Review of Exam II will be held on Wednesday, 9 April 1980
Exam II will be held on Friday, 11 April 1980
Coverage of exam: Chp. 6-9

13
Start Part III: Relating Two or More Variables; Fitting a Line; least squares solution

20
Regression theory; the model; the mean and variance of estimation

27
Multiple regression theory
Review for Exam III will be held on Wednesday, 30 April 1980
Exam III will be held on Friday, 2 May 1980
Coverage of exam: Chps. 10-12

May 4
Correlation
Final Exam will be given on Wednesday, 14 May 1980. Exam will be comprehensive in nature.
Time: 2:30 - 5:30 p.m.

Suggested Reading Assignment

Chapter 7 and work all problems.

Chp. 8 and work all problems.

Chp. 9 and work all problems.

Chp. 9 and work all problems.

Chp. 10 and work all problems.

Chp. 11 and work all problems.

Chp. 12 and work all problems.

Chp. 13 and work all problems.

Chp. 14 and work all problems.

Chp. 14 and work all problems.

Suggested Reading Assignment

Chapter 7 and work all problems.

Chp. 8 and work all problems.

Chp. 9 and work all problems.

Chp. 9 and work all problems.

Chp. 10 and work all problems.

Chp. 11 and work all problems.

Chp. 12 and work all problems.

Chp. 13 and work all problems.

Chp. 14 and work all problems.

Chp. 14 and work all problems.

Grade will be based on 400 total points.

20% Exam I
20% Exam II
20% Exam III
15% Paper
25% Final exam