Instructor: Dr. Archer McWhorter, Jr.
Room 270B Melcher Hall
Voice: 713-743-4719 (UH) or 281-497-4306 (Home)
E-Mail: amcwhorter@uh.edu
Office Hours: 4:00-6:00 MTuW, or by appointment

TA/Grader: To be announced

Statistics for Business and Economics by McClave, Benson, and Sincich (current edition is number 12, but that edition is not necessary; most any old edition should be fine)

Prerequisite: Graduate standing

Homework: This course will average about one homework assignment per week. Most of the assignments will require use of Excel. Some, but not all, of these assignments will be taken up and graded. For assignments that must be handed in, late submission is permitted, but there will be a 10-point penalty per class meeting that the assignment is late. Complete solutions to homework assignments will be made available.

Exams: There will be two exams during the semester and a three-hour final exam. The final exam will be comprehensive. Tentative dates for these exams are given in the next section.

Grading: The weights and tentative dates of the homework assignments and exams are given below:

<table>
<thead>
<tr>
<th></th>
<th>Weight</th>
<th>Tentative Date</th>
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</thead>
<tbody>
<tr>
<td>Homeworks</td>
<td>15</td>
<td>Various</td>
</tr>
<tr>
<td>Exam 1</td>
<td>25</td>
<td>February 16</td>
</tr>
<tr>
<td>Exam 2</td>
<td>25</td>
<td>March 29</td>
</tr>
<tr>
<td>Final Exam</td>
<td>35</td>
<td>May 10 (Tuesday, 5-8pm)</td>
</tr>
</tbody>
</table>

Makeup Exams: Makeup exams will be offered only under the most extenuating circumstances. If you are unable to make it to an exam, you must contact me or my secretary before the scheduled time for the exam or take a zero on that exam. A makeup exam may be harder than the scheduled exam.
Drop Policy:  Wednesday, February 3, is officially the last day to drop a course without receiving a grade. Anyone who wishes to do so may drop this course after that date but no later than 6:00pm on Tuesday, March 1, and receive an automatic W; note that the first exam will be given February 16 and returned graded on February 23. Anyone who drops after March 1 will receive a W only if his/her average at that point is at least 40. Friday, April 1, is officially the last day to drop a course or withdraw.

Academic Honesty:

The University of Houston Academic Honesty Policy is strictly enforced by the C. T. Bauer College of Business. No violations of this policy will be tolerated in this course. A discussion of the policy is included in the University of Houston Student Handbook, and students are expected to be familiar with this policy (see http://www.uh.edu/dos/hdbk/acad/achonpol.html).

Accommodations for Students with Disabilities:

The C. T. Bauer College of Business would like to help students who have disabilities achieve their highest potential. To this end, in order to receive academic accommodations, students must register with the Center for Students with Disabilities (CSD) (telephone 713-743-5400), and present approved accommodation documentation to their instructors in a timely manner.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Material</th>
</tr>
</thead>
</table>
| 1    | Jan. 19 | Overview of course  
Introduction to Excel  
Keyboard shortcuts  
Naming and formatting cells  
Formulas and Functions  
Tables and slicers |
| 2    | Jan. 26 | Basic tools for summarizing data  
Graphics  
Numerical summary measures  
Using Excel to summarize data  
Introduction to probability |
| 3    | Feb. 2 | More probability basics  
Two-way tables  
Examples  
Random variables and probability distributions  
Special probability distributions  
Binomial |
| 4    | Feb. 9 | More special distributions  
Poisson  
Normal  
Random sampling  
Sampling distributions |
| 5    | Feb. 16 | Exam 1 |
| 6    | Feb. 23 | Continue sampling distributions  
Means  
Proportions  
Statistical inference - Estimation  
Point estimates  
Interval estimates |
| 7    | Mar. 1 | Statistical inference - Hypothesis testing  
One-sample problems (means, proportions)  
p-values  
Introduction to regression analysis |
| 8    | Mar. 8 | Continue simple linear regression  
Estimation  
Hypothesis testing  
Interpretation and application  
Examples |
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Mar. 15</td>
<td><em>Spring Break</em></td>
</tr>
<tr>
<td>10</td>
<td>Mar. 22</td>
<td>Two-sample problems&lt;br&gt;Means&lt;br&gt;Proportions&lt;br&gt;Independent samples vs. matched pairs</td>
</tr>
<tr>
<td>11</td>
<td>Mar 29</td>
<td><strong>Exam 2</strong></td>
</tr>
<tr>
<td>12</td>
<td>Apr. 5</td>
<td>Multiple regression&lt;br&gt;Estimation and hypothesis testing&lt;br&gt;Interpretation and application&lt;br&gt;Regression model-building&lt;br&gt;Purpose and examples&lt;br&gt;Variable transformations and dummy variables&lt;br&gt;Examples</td>
</tr>
<tr>
<td>13</td>
<td>Apr. 12</td>
<td>Analysis of count data&lt;br&gt;Sensitivity analysis using data tables&lt;br&gt;Computer Simulation Modeling&lt;br&gt;Basic ideas&lt;br&gt;Using native Excel&lt;br&gt;Using the Analysis Toolpak&lt;br&gt;Examples</td>
</tr>
<tr>
<td>14</td>
<td>Apr. 19</td>
<td>Optimization problems&lt;br&gt;Unconstrained&lt;br&gt;Constrained&lt;br&gt;Examples using Excel’s Solver add-in</td>
</tr>
<tr>
<td>15</td>
<td>Apr. 26</td>
<td>More optimization examples&lt;br&gt;Time Series Forecasting&lt;br&gt;Moving averages&lt;br&gt;Exponential smoothing&lt;br&gt;Classical decomposition with regression&lt;br&gt;Winters’s method (smoothing)</td>
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