Mathematics for the Social Sciences I

Credit Hours: 3
Term: Fall 2015
Course Meeting Time: TR 9:00-10:20am, LART 101
Prerequisite Courses: M0311 or TSI score between 350 – 390 or placement by previous Accuplacer scores
Instructor: Dr. Hongling Yang
Office Location: Bell Hall 316
Contact Info: 747-7001
E-mail: h.yang@utep.edu
Emergency Contact: 747-5761
Office Hours: TR: 10:30m--12:00pm or by appointments


Required Technology: MS Excel and a WebAssign account.

WebAssign: Go to www.webassign.net and follow these steps:
1) Under Username put your 800 number
2) Under Institution put UTEP
3) Under Password put your 800 number

You will be given a two-week grace period during which you will be able to log in without an access code. You will need to purchase an access code to log in after this period. If you purchased a new book, the code should have come with it. Otherwise you’ll have to buy one through the WebAssign site. E-book w/code is $75.

Course Information: Math 1320 is a pre-calculus course for liberal arts, business and other non-science majors. The topics covered include:
- Linear, quadratic, exponential, and logarithmic functions
- Systems of linear equations
- Matrix algebra
- The mathematics of finance
- The algebra of sets
- Probability

Students will learn mathematical concepts and methods used in management, social science, and business. Students will develop the view that mathematics is an evolving discipline that is interrelated with human culture. Students will also understand the connections of mathematics to other disciplines.
Assignments: You will find all assignments on http://webassign.net/. Please use Mozilla Firefox, since WebAssign works best with this browser. There will be an in-class assignment every class period, which we will work on during class time. You are encouraged to work in groups on these assignments. Unannounced quizzes may be administered in the classroom. There will be a quiz once or twice a week. The lowest two quiz scores will be dropped.

Assessment: Your overall grade will consist of the weighted average of your scores on three exams, quizzes, WebAssign homework, and the final exam. If it benefits you, the score you receive on the final exam will replace your lowest exam score. However, scores from all four exams will be used for calculation of your overall grades.

Grading Policy: The usual grading scale will be used for this course (90%-100% is an A, 80%-89% is a B, etc.)

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three exams</td>
<td>45% (15% each)</td>
</tr>
<tr>
<td>WebAssign homework</td>
<td>15%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Attendance</td>
<td>05%</td>
</tr>
<tr>
<td>Comprehensive final exam</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
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</tbody>
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Make-up Policy: Make-up quizzes will only be given for students attending university sponsored events (such as student athletes traveling to meets), and only with prior notification and appropriate documentation. A make-up exam will only be given in extraordinary circumstances (severe illness, death in immediate family), and with appropriate documentation (e.g. doctor’s note).

Attendance Policy: As with every college course, attendance is essential for success. Try not to be absent unless it is absolutely necessary. If possible, it is better to let me know ahead of time when you will be absent. If you are absent, it is your responsibility to find out which assignments you need to make up.

Academic Integrity: We will follow the university’s policy in this course, as explained in the Handbook of Operating Procedures. You may find it [here](#). You may be directed to change seats at any time during exams.

Civility: Please do not use cell phones, pagers, IPods, MP3 players, blue tooth devices, etc. during class. Cell phones and pagers should be set to silent or vibrate, and if you absolutely must answer your phone, calls should be taken outside of class. Please do not wear headsets or blue tooth devices during class. Please do not send text messages during class.

Disability Statement: If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.utep.edu/CASS. CASS’ Staff are the only individuals who can validate and if need be, authorize accommodations for students with disabilities.
Military Statement: If you are a military student with the potential of being called to military service and/or training during the course of the semester, you are encouraged to contact me as soon as possible.

Course Schedule: See last page.

Technology: A TI-83 or TI-84 (or similar) graphing calculator is recommended.

Drop Deadlines: The last day to drop the course without a "W" is Wednesday, September 9th. The last day to drop the course with a "W" is Friday, October 31st. Students who decide to drop the course must process a drop form, in person, at the Registrar's Office, by Friday, Oct 30th. Please note that the College of Science will remain aligned with the University and will not approve any drop requests after that date.

Incompletes: All grades of Incomplete must be accompanied by an Incomplete Contract that has been signed by the instructor of record, student, departmental chair, and the dean. Although UTEP will allow a maximum of one year to complete this contract, the College of Science requests it be limited to a month based upon completion data. A grade of Incomplete is only used in extraordinary circumstances confined to a limited event such as a missed exam, project, or lab. If the student has missed a significant amount of work (e.g. multiple assignments or tasks), a grade of Incomplete is not appropriate or warranted.

Tutoring: Online tutorials can be found here. The Tutoring and Learning Center (TLC) offers free tutoring and is located in the campus library. There are several useful features of WebAssign designed to give extra help. There are numerous private tutors available. Please also make use of the instructor's office hours.

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Sections Covered</th>
<th>Events</th>
</tr>
</thead>
</table>
| 1    | 8/24 – 8/28 | 1.1 Functions from three viewpoints  
1.2 Functions and Models |                                                            |
| 2    | 8/31 – 9/4  | 1.3 Linear Functions and Models  
1.4 Linear Regression |                                                            |
| 3    | 9/7 – 9/11  | 9.1 Quadratic Functions & Models  
9.2 Exponential Functions & Models | 9/7 Labor Day, no class  
9/9 – Census Day  
(Last day to drop w/o a W) |
| 4    | 9/14 – 9/18 | 9.3 Logarithmic Functions & Models  
Exam #1 Review |                                                            |
| 5    | 9/21 – 9/25 | 2.1 Simple Interest  
Exam 1 this week  
(Exact date TBA) |                                                            |
| 6    | 9/28 – 10/3 | 2.2 Compound Interest  
2.3 Annuities, Loans, and Bonds |                                                            |
| 7    | 10/5 – 10/9 | 3.1 Systems of 2 Eqs./2 unknowns  
3.2 Using Matrices to Solve Systems |                                                            |
| 8    | 10/12 – 10/16 | 3.3 Applications of Systems of Eqns  
Exam #2 Review |                                                            |
| 9    | 10/19 – 10/23 | 6.1 Sets and Set Operations  
6.2 Cardinality |                                                            |
| 10   | 10/26 – 10/30 | 6.3 Decision Algorithms | **Exam 2 this week**  
(Exact date TBA)  
10/30 – Course drop deadline |
| 11   | 11/2 – 11/6  | 6.4 Permutations & Combinations  
7.1 Sample Spaces and Events |                                                            |
| 12   | 11/9 – 11/13 | 7.2 Relative Frequency  
7.3 Probability and Probability Models |                                                            |
| 13   | 11/16 – 11/20 | 7.4 Prob. & Counting Techniques  
7.5 Conditional Probability |                                                            |
| 14   | 11/23 – 11/27 | 7.6 Bayes’ Theorem (optional)  
Exam #3 Review | 11/26-11/27 Thanksgiving  
No Classes |
| 15   | 11/30 – 12/4 | Final Exam Review | **Exam 3 this week**  
12/4 – Dead Day, no classes |
| 16   | 12/7 – 12/11 | **Final exam date TBA** | **Final exam week** |

(Subject to change)