Syllabus for MAT 211 – Mathematics for Business Analysis Spring 2014

NOTE: THIS SYLLABUS MAY BE MODIFIED AT ANY TIME BY ANNOUNCEMENTS MADE IN CLASS.

Instructor:	Office:
SLN:	Office Hours:
Place:	E-mail:

EMAIL:

- this is the best way to contact me :
 - When e-mailing, include the class you are in (e.g. MAT 211, MWF, 10:00 AM).

Be sure to check your SPAM folder frequently, as sometimes e-mails I send students are accidentally filtered.

* Note about e-mail: When I send announcements, they will go to your @asu.edu account. You need to check this account regularly. I cannot be responsible for announcements you did not receive because you are using a different account than the one assigned by the university.

Basic Course Info

Materials

- Text: MAT 210/211 Brief Calculus and Mathematics for Business Analysis by Waner and Costenoble, 6th edition.(optional)
- WebAssign access (required)
- Graphing Caculator (required) : A graphing calculator is required for this course. If you already have a graphing calculator, you may use it. Examples of highly recommended models are TI 83/84 or Casio 9850GB Plus. Calculators that do symbolic algebra, such as the Casio FX2, Casio 9970Gs,TI-89, TI-92, or TI- *n*spire CAS **cannot** be used in class or during an exam.

Prerequisites

MAT 210, MAT 251, MAT 265, or MAT 270 with C or better.

Week	Lecture Topic & Description	Notes
Ι	Introduction	
1/13-1/17	15.1: Functions of Several Variables	
	3D graphs, level curves	
	Review: Derivatives	
II	15.2: Partial Derivatives	1/20
1/20-1/24	15.3: Maxima and Minima	
III	Appendix: Extreme Value Theorem	
1/27-1/31	15.4: Constrained Optimization: Method of Lagrange	
	Multipliers	
IV	5.1, 5.2: Linear Programming – Graphical Approach	
2/3-2/7	3.1: Systems of Linear Equations	
V	3.2: Gaussian Elimination	
2/10-2/14	Review	
VI	Test 1	Test 1
2/17-2/21	4.1-4.2: Matrices and Matrix Operations	
VII	4.3:Matrix Inversion	
2/24 -2/28	Appendix 3.6-3.7: Determinants and Cramer's Rule	
VIII	7.1-7.3: Properties of Probability	
3/3-3/7	7.5: Conditional Probability and Independence	
IX	Spring Break	
3/10-3/15		
Х	6.3,6.4: The Addition and Multiplication Principles,	
3/17-3/21	Permutations and Combinations	
	7.4: Probability and Counting Techniques	
XI	7.6: Bayes Theorem	
3/24-3/28	Review	
XII	Test 2	
3/31-4/4	8.1: Random Variables (Discrete)	Test 2
	8.3: Mathematical Expectation	
XIII	8.4: Variance, Standard Deviation	
4/7-4/11	8.2: Bernoulli Trials and Binomial Distribution	
XIV	Appendix P.1: Continuous Random Variables	
4/14-4/18	Appendix P.2: Probability Density Function	
XV	Appendix P.3: Mean, Variance, and Stand. Deviation	
4/21-4/25	8.5: Normal Distribution	
XVI	Appendix P.2: Normal Distribution	
4/28-5/2	Review	

Homework, Quizzes & Projects:

- Students are expected to read relevant sections of the textbook prior to attending class
- Homework, quizzes, and projects will be graded. Students may work together on homework, but each individual student is required to submit their own work.
- Quizzes and projects are given at the discretion of the instructor and frequently reflect material that has recently been discussed in class. To encourage attendance, instructors will **not** give makeup quizzes or projects.
- Instructors may assign both written homework and online homework. Online homework will be submitted online via the internet using the online homework systems WebAssign. Students may use

their own computers or computers in any one of the ASU computer labs. In order to log on to WebAssign, go to <u>http://www.webassign.net/</u>. In order to register for WebAssign, you must have an ACCESS CODE and a Class Key. The ACCESS CODE can be purchased with a new textbook or online <u>http://www.webassign.net/</u>.

FOR SLN: ??????? CLASS KEY is: ???????

Midterm Exam: There will be two midterm exams given throughout the semester, each one covering the material since the last exam. No test grade will be dropped from your grade record. The best possible preparation for them is regular attendance and completion of assigned homework. These exams will be done in class. Your calculator memory may be viewed during any exam and will be cleared if anything suspicious is written therein. The Instructor has the right to regard any suspicious material in your calculator memory as cheating. Makeup exams are given at the discretion of the instructor and only in the case of verified medical or other emergency, which must be documented. The instructor must be notified before the test is given.

Final Exam: MAT211 has a common final exam on **THURSDAY May 8th from 7:10 pm to 9:00 pm**. The place of the final exam will be announced later in the semester. Make-up final exams will **NOT** be given for reasons of a non-refundable airline tickets, vacation plans, work schedules, weddings, family reunions, and other such activities. Students should consult the final exam schedule before making end-of-semester travel plans.

Final Exam Make-up Policy: The final exam schedule will be strictly followed. Except to resolve those situations described below, no changes may be made in this schedule without prior approval of the Dean of the college in which the course is offered.

- 1. religious conflict.
- 2. the student has more than three ASU exams scheduled on the same day as the math final
- 3. there is a time conflict between the math final and another final exam.

Attendance: Attendance is <u>mandatory</u>. Instructors will take attendance on a regular basis. For classes that meet three days a week (MWF, for example), the maximum number of allowed absences is six (6). Students who exceed the number of allowed absences will receive a grade of EN. The grade, EN, indicates failure in the course because of lack of satisfactory attendance.

Classroom behavior: Under no circumstances should you allow your cell phone to ring during class. Any disruptive behavior, which includes ringing cell phones, listening to your mp3 player, text messaging, constant talking, eating food noisily, reading a newspaper will not be tolerated.

- Electronics
 - An appropriate calculator is the only form of technology allowed in the classroom
 - Cell phones should be turned off or set to silent mode during lecture
 - Cell phones may not be on during exams (this includes using them as clocks)
 - Earphones must not be worn during lecture

Exam	Dates	Dates	Sections Covered
	MW and MWF Classes	TTH Classes	
Exam 1 (Wk 6)	Feb. 17	Feb. 18	Sections 15.1-15.4, Extr. Values, 5.2, 3.1-3.2
Exam 2 (Wk 13)	Mar. 31	Apr. 1	Chapter 4, 6, 7
Final Exam	May 8. at 7:10pm-9:00pm		Chapter 8, Appendix P.

Grading Criteria:

Point Allocation	
2 Midterm Exams (22 % each)	44%
Final Exam	22%
Homework, Quizzes, Projects (Instructor Discretion)	34%

Grading scale:	A+>97%, A 93-96.99%, A- 90-92.99%,	
	B+ 87-89.99%, B 83-86.99%, B- 80-82.99%,	
	C+ 77-79.99%, C 70-76.99%,	
	D 60-69.99%,	
	E <60%.	

Students Resources:

Tutor Center: The Math Tutor Center (FREE OF CHARGE) is located in PSA-116. You must have a valid ASU "Sun Card" in order to be admitted. The Learning Resource Center has several locations on campus and specializes in small group tutoring sessions. For information visit <u>http://math.asu.edu/mathtutors</u>

Disabilities: If you have any disability that may hinder your performance, please notify your instructor as soon as possible.

Extra credit: If you come to class and do the homework, your grade will take care of itself. No individual requests for extra credit projects will be considered.

Campus Network or WEBASSIGN Outage: Due dates are set by your instructor. As such it is your responsibility to complete the assigned homework in the allocated time ahead of the dead line as the server could be down for an unknown period of time!!!

Agreement of Terms: By remaining registered in the course through drop/add period, you agree to all terms and policies set forth in the syllabus.

NOTE: THIS SYLLABUS (INCLUDING THE DATES OF TESTS) MAY BE MODIFIED AT ANY TIME BY ANNOUNCEMENTS MADE IN CLASS. It is the student responsibility to attend class regularly and to make note of any change. The Instructor also reserves the right to create class policies in regards to homework due date, etc.

Departmental and University Policies and Procedures

Course Withdrawal Deadline	April 6, 2014
Complete Withdrawal Deadline	May 2, 2014

Course Withdrawal: A student may withdraw from a course with a grade of W during the withdrawal period. The instructor's signature is not required. It is a student's responsibility to verify that that they have in fact withdrawn from a class.

Instructor-Initiated Drop: At the instructor's discretion, any student who has not attended class during the first week of classes may be administratively dropped from the course. However, students should be aware that non-attendance will NOT automatically result in their being dropped from the course. Thus, a student should not assume they are no longer registered for a course simply because they did not attend class during the first week. It is the student's responsibility to be aware of their registration status.

The grade of Incomplete: A grade of incomplete will be awarded only in the event that a documented emergency or illness prevents the student who is doing acceptable work from completing a small percentage of the course requirements.

The student must provide written documentation and be passing the class at the time to receive an Incomplete. The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed. *The Dean of the student's college must approve any exceptions to these rules*.

Final Exam Make-up Policy: The final exam schedule listed in the Schedule of Classes will be strictly followed. Except to resolve those situations described below, no changes may be made in this schedule without prior approval of the Dean of the college in which the course is offered. Under this schedule, if a conflict occurs, or a student has more than three exams on one day, the instructors may be consulted about an individual schedule adjustment necessary, the matter may be pursed further with the appropriate dean(s). This procedure applies to conflicts among any combination of Downtown Phoenix campus, Tempe campus, Polytechnic campus, West campus, and/or off campus class.

Make-up final exams will NOT be given for reasons of a non-refundable airline tickets, vacation plans, work schedules, weddings, family reunions, and other such activities. Students should consult the final exam schedule before making end-of-semester travel plans.

Honor Policy: The highest standards of academic integrity are expected of all students. The failure of any student to meet these standards may result in suspension or expulsion from the University or other sanctions as specified in the University Student Academic Integrity Policy. Violations of academic integrity include, but are not limited to, cheating, fabrication, tampering, plagiarism, or facilitating such activities.

ACADEMIC DISHONESTY! Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see http://provost.asu.edu/academicintegrity. Student Conduct Statement: Students are required to adhere to the behavior standards listed in Arizona Board of Regents Policy Manual Chapter V – Campus and Student Affairs: Code of Conduct (http://www.abor.asu.edu/1_the_regents/policymanual/chap5/5Section_C.pdf), ACD 125: Computer, Internet, and Electronic Communications (http://www.asu.edu/aad/manuals/acd/acd125.html), and the ASU

Student Academic Integrity Policy (<u>http://www.asu.edu/studentaffairs/studentlife/srr/index.htm</u>). Students are entitled to receive instruction free from interference by other members of the class. If a student is disruptive, an instructor may ask the student to stop the disruptive behavior and warn the student that such disruptive behavior can result in withdrawal from the course. An instructor may withdraw a student from a course when the student's behavior disrupts the educational process under USI 201-10 http://www.asu.edu/aad/manuals/usi/usi201-10.html.

Disability Accommodations: Please schedule an appointment to see your instructor or come by during office hours if you have a disability that will require accommodations in this class. *Note*: To qualify for disability accommodations at ASU, students must qualify for services through the Disability Resource Center (DRC), which is located on the first floor of the Matthews Center Building at 480-965-1234 (voice) or 480-965-9000 (TTY). Please complete this process as soon as possible.