# **MAT 142: College Mathematics**

## **Spring 2009 Course Syllabus**

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Office: UCENT 360P	<b>Office Hours:</b> M 1:30-3:00pm, T 3:00-4:00pm, W 2:30-3:15pm, Th 12:15-1:15pm, or by appointment.
Instructor URL: http://www.public.asu.edu/~jboshes/	

Welcome to MAT 142! The purpose of this course is to relate college-level mathematics to real-life problems. We will emphasize problem-solving techniques, specifically by means of discussing concepts including proportional reasoning, geometry, set theory, probability, statistics, and finance. This course is open to students whose major does not require MAT 119, MAT 170, or MAT 210 and have completed either MAT 106 or scored at least a 60 on the Unified Placement test. This course also carries General Studies "MA" credit.

### **Tentative Schedule**

Week	Dates	Monday	Wednesday
1	January 19 – 23	No School	Introduction
		Martin Luther King, Jr. Day observed	Problem Solving
			Proportional Reasoning I
2	January 26 – 30	Proportional Reasoning II	8.1: Perimeter and Area
3	February 2 – 6	8.2: Volume and Surface Area	8.5: Right Triangle Trigonometry
4	February 9 – 13	Geometry Project	Exam 1
5	February 16 –20	2.1: Sets and Set Operations	2.2: Applications of Venn Diagrams
6	February 23 – 27	3.1-3.2: Basic Terms of Probability	3.3: Basic Rules of Probability
7	March 2 – 6	3.5: Expected Value	3.6: Conditional Probability
8	March 9 – 13	No School	No School
		Spring Break	Spring Break
9	March 16 – 20	3.6: Conditional Probability	Exam 2
10	March 23 – 27	4.1: Population, Sample, and Data	4.2: Measures of Central Tendency
11	March 30 – April 3	4.3: Measures of Dispersion	4.4: The Normal Distribution
12	April 6 – 10	4.4: The Normal Distribution	Exam 3
13	April 13 – 17	5.1: Simple Interest	5.2: Compound Interest
14	April 20 – 24	5.3: Annuities	5.6: Payout Annuities
15	April 27 – May 1	5.4: Amortized Loans	Finance Project
16	May 4 – May 8	Last Day of Class/Review	Finals Week Begins

## **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.

#### Required Text:

*Mathematics: A Practical Odyssey*; by Johnson & Mowry; Thomson Publishing Company; ISBN 0-324-62114-0. Students are expected to read relevant sections of the textbook prior to attending class.

## **Calculator:**

A scientific calculator is required for this course. A few of the recommended models include the TI-30, TI-34, and TI-36. A graphing calculator (such as the TI-83) is not required, but if you own one, you may use it. Cellular phone calculators are not permitted in class or during an exam. Also, the sharing of calculators is not permitted during exams.

#### **Student Success Center:**

The Student Success Center, located on the first floor of University Center, will be open Monday-Thursday from 8am-6pm and on Friday from 8am-5pm. Be sure to go for help before it is too late and several days before an exam. Additional information on the Student Success Center can be found on their webpage at: http://studentsuccess.asu.edu/downtown.

#### Exams

You will take 3 exams during the semester and one final exam according to the tentative dates listed below. Any changes will be announced at least one week in advance. Each exam will involve a mix of mechanical skills and conceptual reasoning. The best possible preparation for them is regular attendance and completion of assigned homework. No exam scores will be dropped.

Exam	Date	Topics on Exam
Exam #1	Wednesday, February 11, 2009	Problem Solving, Proportional Reasoning, 8.1, 8.2, 8.5
Exam #2	Wednesday, March 18, 2009	2.1, 2.2, 3.1, 3.2, 3.3, 3.5, 3.6
Exam #3	Wednesday, April 8, 2009	4.1, 4.2, 4.3, 4.4
Final Exam	See below.	5.1, 5.2, 5.3, 5.4, 5.6

#### Final Exam:

The final exam will be given in our regular classroom as scheduled on the final exam scheduled located at: http://www.asu.edu/registrar/registration/finals.html. According to ASU policy, final exams can be rescheduled only under the following circumstances: (1) religious conflict, (2) the student has more than 3 exams scheduled on the same day, or (3) two finals are scheduled to occur at the same time. No final exams will be rescheduled for personal reasons or non-refundable airline tickets.

Class Number & Time	Date & Time of Final Exam
SLN 24380 (3:30pm)	Wednesday, May 13, 2009; 12:10-2:00pm

#### WeBWorK

Homework will be graded on a regular basis. Your homework will be submitted online at http://webwork.asu.edu/. You are encouraged to work together, but each individual student is required to submit his or her own work. It is highly recommended that the students work his or her WeBWorK problems on paper, and save these exercises as part of his or her notes. They come in handy when reviewing for an exam, or for obtaining help when the student has difficulty with the material. No late homework will be accepted, however, the approximate equivalent of one homework assignment will be dropped at the end of the semester.

#### **Written Assignments:**

Written assignments may be collected and graded. These assignments may include in-class assignments or may be written homework assignments to supplement WeBWorK. All written homework assignments must be turned in neat, organized, and stapled if there are multiple pages. If not, your homework will not be graded. No late assignments will be collected if you miss class <u>for any reason</u>. Homework assignments are considered late if they are turned in after the instructor has collected them at the beginning of class. If there is a long-term documented emergency, other graded criteria for the course will be adjusted on a prorata basis to calculate the final written assignment grade.

## Quizzes:

In order to ensure all students participate during class and keep up with the material, occasional quizzes may be given reflecting recent material discussed in class. No make-up quizzes will be given if you miss class <u>for any reason</u>. If there is a long-term documented emergency, other graded criteria for the course will be adjusted on a pro-rata basis to calculate the final quiz grade.

## **Make-Up Policy:**

Make-up exams are only given in the case of <u>documented immediate family/medical emergencies</u>. There are no exceptions to this policy. Please note that work emergencies do not constitute family/medical emergencies. Arrangements for any make-ups must be done within one week of the exam. There are no make-ups for quizzes or homework.

## **Attendance:**

All students are expected to come to class each day prepared to discuss assignments and material being presented in class. During class, any student can expect to be called upon to answer questions posed by the instructor and other students. Moreover, part of being prepared for class involves bringing all course materials to class, including your calculator. Statistics show that students who regularly come to class tend to do better than students who skip class every now and again. Only three (3) unexcused absences will be allowed during the semester. The fourth absence is grounds for the student earning a grade of EN (failure due to lack of attendance) for the semester.

## Final Grade Breakdown:

Your final grade is determined as follows:

Component	Percentage	
Exam 1	17.5%	
Exam 2	17.5%	
Exam 3	17.5%	
Final Exam	17.5%	
Homework / WeBWorK / Other	30%	

Grade	x = Final Percentage
A+	$98\% \le x \le 100\%$
A	$90\% \le x < 98\%$
A-	$89.5\% \le x < 90\%$
B+	$87\% \le x < 89.5\%$
В	$80\% \le x < 87\%$
B-	$79.5\% \le x < 80\%$
C+	$77\% \le x < 79.5\%$
С	$70\% \le x < 77\%$
D	$60\% \le x < 70\%$
Е	<i>x</i> < 60%

## **Additional Information:**

- The highest standards of academic integrity are expected of all students at all times. Violations of academic integrity include, but are not limited to, cheating, fabrication, tampering, plagiarism, or facilitating such activities. We will act very harshly against any acts of academic dishonesty during quizzes or exams.
- Students with differing abilities should arrange to meet with me by the end of the first week of classes to arrange for reasonable accommodations for their learning needs. Students registered with DRC must notify the instructor at least one week prior to any exam.
- Arrangements for any religious observances, ASU sanctioned activity, or ASU student athlete obligations must be arranged with the instructor at least one week prior to the event.
- Classroom disturbances, including but not limited to: arriving late, talking in class, and cellular phones, are not tolerated. Each student is expected to show respect for every student registered in the course. Turn off any cellular phones and other electronic devices prior to entering class. Blatant cellular phone or other electronic device usage (i.e., text messaging) during class will result in the student being marked absent for the day. Recurring disturbances caused by an individual will result in an administrative withdrawal from the course.
- No individual extra credit assignments will be offered.
- I reserve the right to make changes to this syllabus as necessary. Changes will be considered official if they are announced in class or placed on my web site.
- Welcome to the course! I encourage you to stay after class, visit the Student Success Center, come to my office hours, or
  make an appointment with me to discuss any material that is unclear to you. I wish you well in the course and all of your
  other academic pursuits this semester.

**Key Semester Dates** 

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Drop/Add Period:	January 20-23, 2009
Course Withdrawal: (In-person)	Friday, April 3, 2009
Course Withdrawal: (Online)	Sunday, April 5, 2009
Complete Withdrawal:	Tuesday, May 5, 2009