# **MAT 142: College Mathematics**

# Fall 2009 Course Syllabus

Instructor: Jenifer Boshes	Class Number: 70927 (9:40); 70928 (10:45)
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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		Notes
1	August 24 – 28	Introduction	
l l		1.1 Problem Solving	
2	August 31 – September 4	7.5 Proportions and Variations	
		10.5 The Metric System and Dimensional	
		Analysis	
3	September 7 – September 11	2.1 The Language of Sets	No School 09-07-09
l l		2.2 Comparing Sets	Labor Day observed
4	September 14 – September 18	2.2 Comparing Sets	
	•	2.3 Set Operations	
		2.5 Infinite Sets*	
5	September 21 – September 25	2.4 Survey Problems	<b>Exam 1:</b> 1.1, 7.5, 10.5,
l l	1		2.1,2.2,2.3,2.5
6	September 28 – October 2	13.1 Introduction to Counting Methods	
	•	13.2 The Fundamental Counting Principle	
7	October 5 – October 9	14.1 The Basics of Probability Theory	
l l		14.2 Complements and Unions of Events	
8	October 12 – October 16	14.3 Conditional Probability and Intersections	
	30.000112	of Events	
l l		14.4 Expected Value	
9	October 19 – October 23	15.1 Organizing and Visualizing Data	<b>Exam 2:</b> 2.4, 13.1, 13.2,
			14.1-14.4
10	October 26 – October 30	15.2 Measures of Central Tendency	
		15.3 Measures of Dispersion	
11	November 2 – November 6	15.4 The Normal Distribution	
**	1 to veinber 2 1 to veinber o	15.5 Linear Correlation*	
12	November 9 – November 13	9.1 Percent Change and Taxes	Exam 3: 15.1-15.5
12	140 veinber 7 – 140 veinber 13	7.11 Creent Change and Taxes	Exam 5. 15.1-15.5
l l			No School 11-11-09
l l			Veteran's Day observed
13	November 16 – November 20	9.2 Interest	. c.cran s Day observed
15	1.0 vember 10 1.0 vember 20	9.3 Consumer Loans	
		7.0	
14	November 23 – November 27	9.4 Annuities	No School 11-27-09
			Thanksgiving observed
15	November 30 – December 4	9.5 Amortization	
		9.6 Annual Percentage Rate	
16	December 7 – December 8	Last Day of Class/Review	

<sup>\*</sup>If time permits

# **Cellular Phone Policy:**

I assume the responsibility of ensuring each of you is in a position to be successful in this class. Part of that responsibility is to ensure that all of us, collectively, are focused on the task at hand. Therefore, I request that your cell phone is turned off and put away while you are in this class, as its usage during class is disruptive and distracting to the learning environment, both individually and as a group.

### **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 All Around, Fourth Edition (Custom Package); by Pirnot; Pearson Custom Publishing; ISBN 0558326153.

### 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. If you need to purchase a calculator for this class and you also plan to take STP 226, I recommend that you purchase a TI-84, since that is required for STP 226.

#### Blackboard:

All homework assignments, class handouts, review sheets etc., will be posted on the Blackboard site for this class. You can access blackboard by going to My ASU and clicking on this class. Check the Blackboard site regularly for updates and announcements.

#### **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-3pm. 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	Monday, September 21, 2009	1.1, 7.5, 10.5, 2.1,2.2,2.3,2.5
Exam #2	Monday, October 19, 2009	2.4, 13.1, 13.2, 14.1-14.4
Exam #3	Monday, November 9, 2009	15.1-15.5
Final Exam	See below.	9.1-9.6

# 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 70927 (9:40am)	Friday, December 11, 2009; 7:30-9:20am
SLN 70928 (10:45am)	Monday, December 14, 2009; 9:50-11:40am

# Homework/MyMathLab:

Homework will be graded on a regular basis. You are encouraged to work together, but each individual student is required to submit his or her own work. Most of your homework will be submitted online at http://www.coursecompass.com using MyMathLab, but some written homework assignments will be collected and graded to supplement MyMathLab. All written assignments must be turned in neat, organized, and stapled if there are multiple pages. If not, your written homework will not be graded. No late assignments will be collected if you miss class <u>for any reason</u>, however, the approximate equivalent of one homework assignment will be dropped at the end of the semester. Written homework assignments are considered late if they are turned in after the instructor has collected them at the beginning of class. For the MyMathLab problems, <u>it is highly recommended that you work the problems on paper</u>, and save these exercises as part of your notes. They come in handy when reviewing for an exam or for obtaining help if you have difficulty with the material.

# **Quizzes:**

Quizzes will be given in class at my discretion. In-class projects will be assigned, and I will provide instructions at that time. NO MAKE-UP QUIZZES OR PROJECTS WILL BE GIVEN FOR ANY REASON.

### 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.

#### **How to Study:**

Students often ask me for advice on how to prepare for an exam. Be sure to look over the problems we covered in class, as well as the problems assigned for homework. Make sure you can work out these problems without the aid of your notes or textbook and check to make sure that your solution is correct. If you need assistance, please meet with me, visit the Student Success Center, or work with classmates for help. If you make a mistake, be sure you understand not only the correct way to do the problem, but why your method was wrong. If you understand the reasoning behind your actions, you are more likely to remember them and be successful. I often change or modify problems just enough to keep students from memorizing.

I highly recommend working in groups. Within your group, pick problems and present them to each other. Be sure you explain each step along the way, as if you were teaching a class. If you stumble over a step, you now know the concept on which you need to focus. If you can explain through an entire problem without any help or coaching, then you probably know the concept pretty well. This does take some extra time, but if you are determined and serious about doing well in the class, this is a great way to go about doing it.

### 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/ Quizzes /Attendance/Projects	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%

<u>Disabilities</u>: If you have any disability that may hinder your performance or that may require accommodation, please notify me as soon as possible.

- **Disability Accommodations:** Qualified students with disabilities who will require disability accommodations in this class are encouraged to make their requests to me at the beginning of the semester either during office hours or by appointment. Note: Prior to receiving disability accommodations, verification of eligibility from the Disability Resource Center (DRC) is required. Disability information is confidential.
- Establishing Eligibility for Disability Accommodations: Students who feel they will need disability accommodations in this class but have not registered with the Disability Resource Center (DRC) should contact DRC immediately. Their office is located on the first floor of the University Center Building, Suite 160. DRC staff can also be reached at: 602-496-4321 (V), 602-496-0378 (TTY), and at: <a href="mailto:DPCDisability-Q@asu.edu">DPCDisability-Q@asu.edu</a>. Their hours are 8:00 AM to 5:00 PM, Monday through Friday. Eligibility and documentation policies can be viewed at: <a href="http://campus.asu.edu/downtown/drc">http://campus.asu.edu/downtown/drc</a>.

# **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. 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.
- 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. It is the student's responsibility to be aware of their registration status.
- 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 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*.
- 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.

#### **Kev Semester Dates**

Drop/Add Period:	August 24-30, 2009	
Academic Status Report #1	September 21-28, 2009	
Academic Status Report #2	Oct. 26- Nov. 2, 2009	
Course Withdrawal: (In-person)	November 6, 2009	
Course Withdrawal: (Online)	November 8, 2009	
Complete Withdrawal:	December 8, 2009	