MAT 142: College Mathematics

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Office Hours:	12:15-1:45 M, 1:30-3:00 T, 1:00-1:45 W and by appointment
Time:	MW 2:00-3:15 \MW 3:30-4:45
Place:	UCENT 107 \UCENT 271
SLN:	84197 \84199

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 Students MA credit.

Tentative Schedule:

Week	Dates	Topics
1	8/25-8/29	Introduction Problem Solving Proportional Reasoning
2	9/1-9/5	NO SCHOOL LABOR DAY 9/1 Proportional Reasoning 8.1 Perimeter and Area
3	9/8-9/12	8.2 Volume and Surface Area 8.5 Right Triangle Trigonometry
4	9/15-9/19	8.5 Right Triangle Trigonometry Geometry Project **Exam 1**
5	9/22-9/26	2.1 Sets and Set Operation 2.2 Applications of Venn Diagrams
6	9/29-10/3	2.2 Applications of Venn Diagrams 3.1-3.2 Basic Terms of Probability 3.3 Basic Rules of Probability
7	10/6-10/10	3.5 Expected Value 3.6 Conditional Probability
8	10/13-10/17	**Exam 2** 4.1 Population, Sample and Data
9	10/20-10/24	4.2 Measures of Central Tendency 4.3 Measures of Dispersion 4.4 The Normal Distribution
10	10/27-10/31	4.4 The Normal Distribution 4.6 Linear Regression
11	11/3-11/7	4.6 Linear Regression **Exam 3**
12	11/10-11/14	5.1 Simple Interest 5.2 Compound Interest
13	11/17-11/21	5.3 Annuities 5.6 Payout Annuities
14	11/24-11/28	5.4 Amortized Loans
15	12/1-12/5	Finance Project
16	12/8-12/9	Review/Last Day

Cell 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: A Practical Odyssey*, 6th edition, by Johnson & Mowry, Thomson Publishing Company; ISBN 0-324-62114-0. It is expected that students read relevant sections before 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.

Success Express: Success Express is located on the first floor of University Center. Information can be found here. Be sure to go for help before it is too late and several days before an exam.

Exams: You will take 3 exams (in class) 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	Chapters
1	Wednesday, September 17	Problem Solving, Proportional Reason, Chapter 8
2	Monday, October 13	Chapters 2-3
3	Wednesday, November 5	Chapter 4
4	ASU Final Exam Schedule	Chapter 5

Final Exam: The final exam will be given in our regular classroom as scheduled on the final exam scheduled located at: http://students.asu.edu/node/318. 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.

SLN 84197 (2:00)	Monday, December 15 12:10-2:00 PM
SLN 84199 (3:30)	Wednesday, December 17 12:10-2:00 PM

WeBWorK: In order to ensure all students stay on top of the material, homework will be graded regularly. Your homework will be submitted online at WeBWorK. You are encouraged to work together on homework, 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 will be posted at http://www.public.asu.edu/~jboshes and include in-class assignments or 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 for any reason. Homework assignments are considered late if they are turned in after the instructor has collected them at the beginning of class.

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 for any reason. 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 documented immediate family/medical emergencies. 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, use Success Express, 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.

Point Allocation:

Exams	70%
Homework/Other	30%

Grades:

Grade	x
A+	$98\% \leq x < 100\%$
A	$90\% \leq x < 98\%$
A-	$89.5\% \leq x < 90\%$
B+	$87\% \leq x < 89.5\%$
B	$80\% \leq x < 87\%$
B-	$79.5\% \leq x < 80\%$
C+	$77\% \leq x < 79.5\%$
C	$70\% \leq x < 77\%$
D	$60\% \leq x < 70\%$
E	$x < 60\%$

Additional Information:

- The highest standards of academic integrity are expected of all students at all times. 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 and/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 DRS 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 Success Express, 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.

Important Dates:

Last day to add/drop (in person)	August 29
Last day to add/drop (online)	August 31
Course withdrawal (in person)	October 31
Course withdrawal (online)	November 2
Complete withdrawal	December 9