MAT 142: College Mathematics
Fall 2012 ASU Online Course Syllabus

Instructor: Beth Jones	**E-mail: insert email**
	Office Hours: **In-person:** **10:30 am – 11:30 am Tuesday and Thursday** **Virtual** **8 pm – 9 pm Tuesday and Thursday** https://connect.asu.edu/beth_office_f12
Office: PSA 725	

Course Information

Course Description

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, sets, probability, statistics, and finance. Applies basic college-level mathematics to real-life problems. Appropriate for students whose major does not require MAT 117 or 170.

Course Objectives

- Students will be able to apply proportional reasoning to solve a range of problems.
- Students will learn about sets, set notation, set operations and use set theory to solve problems
- Students will learn basic counting techniques and a variety of strategies to solve probability-based problems
- Students will apply a variety of statistical measures to solve problems
- Students will solve a variety of financial-based problems including problems involving simple and compound interest, annuities, and amortized loans.

Prerequisites

This course is open to students whose major does not require MAT 119, MAT 170, or MAT 210 and who have completed MAT 106, MAT 113 or MAT 117 with C or better or completed the ALEKS Math Placement Test with a score of 30% or higher or completed MAT 194: EFM (now MAT 110) with skills mastered for MAT 142. This course also carries General Studies "MA" credit.

Course Materials & Structure

Textbook

You are not required to purchase a textbook for this course. Reading materials will be provided in each lesson as .PDF chapters. If you would like to purchase a hard copy (available for purchase at the ASU bookstore) we are using the following text:

Mathematics All Around, 4th Edition (Custom Package); by Thomas L. Pirnot; Pearson Custom Publishing; ISBN 0-558-326153-0

Calculator

At minimum, a scientific calculator is required for this course. A few of the recommended models include the TI-30XS Multiview, TI-34 Multiview, TI-36, TI-83, and TI-84. A graphing calculator is not required. You are expected to bring your calculator to class daily. Cellular phone calculators are not permitted in class or during an exam. Also, the sharing of calculators is not permitted during exams.

Diagnostic Assessment

A diagnostic assessment is administered online before you begin each section to determine your learning path and the content materials you will receive. You are expected to watch the video for each section before completing the diagnostic assessment. ***The diagnostic assessment results do not get calculated into your final course grade.***

Knewton Study Center

The information you receive in the Knewton Study Center could differ from your classmates depending on your results of the diagnostic quizzes and understanding of the course material. You are expected to work out solutions to problems and take notes while interacting with the online content just as if you were in a traditional lecture. You can use these notes as you prepare for your exams or in class for the problem solving sessions. **All material in the Knewton Study Center must be completed by Friday, October 12.** No credit will be given for work completed after October 12.

Problem Solving Sets

Written problem solving activities are an integral part of learning mathematics. You will complete one problem solving set each week. Each Monday, you will receive a problem set via email based on the most recent lessons you have completed. Each problem set must be completed and returned two days later (on Wednesday) by 11:59 pm. You may either hand write the solutions to the problems or use equation editor to write the math. You will submit the solutions using the dropbox in Learning Studio. If your solutions are hand-written, you can scan them or take a picture of them and submit that image. You will need to make sure that you name and the date are on each problem set.

Exams

You will take five unit exams during the semester according to the deadlines listed below. Based on the recommended pace of the course you should not have any trouble meeting these deadlines. Each exam will involve a mix of mechanical skills and conceptual reasoning. You only get a single attempt at each unit exam. Once you put in the exam password, you attempt has started and must be completed in 90 minutes. No exam scores will be dropped.

- The first four exams can be taken on your home computer in an unproctored setting.
- **THE LAST EXAM MUST BE PROCTORED.**
  The only approved proctoring is to use ProctorU (http://www.proctoru.com/). **The students will bear all costs for this option.** The student will make all arrangements and a web cam is required.

- A lock down browser is required to take an exam. See the technology requirements section for a link to a browser and installation instructions.
- **It is not possible to access an exam without a password that will be provided by the instructor for the first four exams. The password for the last exam will be provided by the proctor.** You should email your request for each password once you have completed half of the sections in a unit.

Exam	Last Day to Take Exam
Unit 1 Exam	Friday, August 31, 2012
Unit 2 Exam	Friday, September 7, 2012
Unit 3 Exam	Friday, September 21, 2012
Unit 4 Exam	Friday, September 28, 2012
Unit 5 Exam	Friday, October 12, 2012

Course Design

Click HERE (http://asuonline-dev.asu.edu/math/flowchart/142_flow.pdf) to see a graphic of the course flow for 142.

Course Expectations & Student Resources

Course Expectations

- You are expected to complete a minimum of 4 sections per week as outlined on the course schedule.
- Over the course of the semester, you are expected to remain on schedule and "On Track" as designated by your instructor. Students who are "Off Track" by the day/time designated by your instructor may receive a loss of points for your participation grade.

Attendance

- All First Year Mathematics courses have an attendance/participation policy. In an online course such as this one, any of the following is reason to receive a grade on EN for "non-attendance".
  - Failure to take any exam by the deadline.
  - Failure to score at least 50% on 3 or more lessons before the deadline for taking that unit's tests. A lesson is a single lesson in one of the sections (i.e.: lesson 1.2a in section 1.2 in unit 1), the syllabus quiz, or the required email.
- **All students are required to email the instructor no later than 11:59 pm Friday, August 24 as "attendance" for the first week of class.** 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 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.
- Students cannot be dropped for the course for non-attendance/non-participation once they have attended/participated in the class.

Participation Grade

- Each week on Thursday, your progress will be checked to determine if you are on schedule according to the Course Schedule below. If you are on schedule, you will receive your participation points for the week.

Student Resources / Computer Lab

- Your primary resource for tutoring is the computer lab. During non-class and non-testing times, tutors will be available to answer questions for you regarding the course content. You can also visit the Student Success Center. Specific hours for when a MAT 142 tutor is available at the Student Success Center can be found on their webpage at: http://studentsuccess.asu.edu.
- Another tutoring resource is Student Success online tutoring. Students interested in receiving online tutoring can go to http://tutoring.asu.edu/online to schedule a one hour appointment with a tutor. Online sessions will be in small groups, with a maximum of *three students per one-hour time slot*. Students should most certainly be informed that they are not guaranteed one-on-one math tutoring online. The web side will have the most up-to-date available tutoring hour.
- If you own a laptop computer, you are encouraged to bring it with you to the computer lab when you are working on course content or taking an exam.
- The Technology Studio can check your laptop or personal computer free of charge to make sure you are ready to access all the course content from your computer. If you choose to use your laptop for exams, the Technology Studio can also assist you in installing the secure browser required for testing.
- You must wear headphones while in the computer lab and while using your computer in class.

Evaluation Activities

This course requires students to complete four important evaluation activities:

- Success in ASU Math Study Consent Form
- ACES Pre-test
- ACES Post-test
- Engagement Survey

Your course website includes detailed information about the evaluation activities, how long it takes to complete each one, and when each one should be completed. It will take about 45 minutes total over the semester to complete all four evaluation activities. Don't forget you will need to include your name and ASURITE ID on each evaluation activity in order to get credit for completing the task. NOTE: If you took MAT 194, MAT 142 or MAT 117 in Fall 2011 or Spring 2012, your course included the same evaluation activities. You will need to complete the evaluation activities again in this course.

How to Succeed in this Course

- Staying on schedule according to schedule included below and "on track" is a critical component of student success in this course. Stay ahead of schedule and make sure you are aware of all the resources available to you that are listed in the syllabus and on the course site so you don't fall behind.
- Check your ASU e-mail at least daily.
- Log in to the course site every day.

Course Schedule

Week of	What to do	Deadline
8/23 – 8/29	☐ Complete Getting Started Badge ☐ Complete ASU Math Study Consent ☐ Complete ACES Pre-Test ☐ Complete Syllabus Quiz	11:59 pm 8/23
	☐ Email instructor	11:59 pm 8/24
	☐ 1.1 – Approaching Problems ☐ 1.2a – Direct Proportions ☐ 1.2b – Solving with Proportions ☐ **Request Unit 1 Exam password** ☐ 1.3a – Understanding Percents ☐ 1.3b – Percent Problems ☐ 1.4a – Unit Conversions ☐ 1.4b – Conversions in the Real World	1 section per day with suggested deadline 8/29
	☐ **Make arrangements for the proctoring the Unit 5 exam is using ProctorU.** ☐ **Email instructor with your proctoring information for the Unit 5 Exam**	
	☐ **Take Exam 1 no later than Friday, August 31.**	8/31 start exam no later than 10:30 pm (max 90 minutes to complete exam)
8/30 – 9/5	☐ 2.1a – Describing Sets ☐ 2.1b – Cardinality and Special Sets ☐ 2.2 – Relating Sets ☐ **Request Unit 2 Exam password** ☐ 2.3a – Operations with Two Sets ☐ 2.3b – Operations with Three Sets ☐ 2.4a – Two-set Survey Problems ☐ 2.4b – Three-set Survey Problems	1 section per day with suggested deadline 9/5
	☐ **Take Exam 2 no later than Friday, September 7.**	9/7 start exam no later than 10:30 pm (max 90 minutes to complete exam)

9/6 – 9/12	□ 3.1 – Basic Counting Methods □ 3.2 – Understanding FCP □ 3.3 – How Many Ways? □ 3.4 – How Likely? □ **Request Unit 3 Exam password**	1 section per day with suggested deadline 9/12
9/13 – 9/19	□ 3.5 – Combined Events □ 3.6 Working with Conditions □ 3.7 – Calculating Expected Value	1 section per day with suggested deadline 9/19
	□ **Take Exam 3 no later than Friday, September 21.**	9/21 start exam no later than 10:30 pm (max 90 minutes to complete exam)
9/20 – 9/26	□ 4.1a – Construction Data Visualizations □ 4.1b – Interpreting Data Visualizations □ 4.2a – Mean, Median, Mode □ 4.2b – Five-number Summary □ **Request Unit 4 Exam password** □ 4.3 – Range and Standard Deviation □ 4.4a – The Normal Curve □ 4.4b – Applications of the Normal Curve	1 section per day with suggested deadline 9/26
	□ **Take Exam 4 no later than Friday, September 28.**	9/28 start exam no later than 10:30 pm (max 90 minutes to complete exam)
9/27 – 10/3	□ 5.1 – Time is Money □ 5.2 – Interest on Your Interest □ 5.3 – Add-on and Daily Balance Methods	1 section per day with suggested deadline 10/3
10/4 – 10/10	□ 5.3 – Add-on and Daily Balance Methods □ 5.4 – The Annuity Formula	1 section per day with suggested deadline 10/10
	□ **Take Exam 5 no later than Friday, October 12.**	10/12 (based on computer lab schedule or as set up with ProctorU)

Grading Policy

Point Distribution	Percentage
5 Unit Exams	50%
Problem Sets	25%
5 Unit Badges	20%
Participation / Misc.	5%

Grade	Grading Scale
A+	97% or above
A	90% - 96.99%
A-	89.5% - 89.99%
B+	87% - 89.49%
B	80% - 86.99%
B-	79.5% - 79.99%
C+	77% - 79.49%
C	70% - 76.99%
D	60% - 69.99%
E	< 60%

Key Semester Dates

Drop/Add Deadline:	Friday, August 24, 2012
Course Withdrawal Deadline:	Wednesday, September 12, 2012

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.
- Students with disabilities should arrange to meet with me as soon as possible to arrange for reasonable accommodations for their learning needs. Students registered with DRC must notify the instructor at least two weeks prior to any exam deadline.
- Alternative arrangements for any religious observances, ASU sanctioned activity, or ASU student athlete obligations must be arranged with the instructor at least two weeks prior to the event. As a reminder, there are no extensions or makeups for exams after the exam close date.
- No individual extra credit assignments will be offered.

ACADEMIC DISHONESTY

In the "Student Academic Integrity Policy" manual, ASU defines "'Plagiarism" [as] using another's words, ideas, materials or work without properly acknowledging and documenting the source. Students are responsible for knowing the rules governing the use of another's work or materials and for acknowledging and documenting the source appropriately." You can find this definition at:
http://www.asu.edu/studentaffairs/studentlife/judicial/academic_integrity.htm#definitions

Academic dishonesty, including inappropriate collaboration, will not be tolerated. There are severe sanctions for cheating, plagiarizing and any other form of dishonesty.

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 (http://www.asu.edu/studentaffairs/studentlife/srr/index.htm).

Students are entitled to receive instruction free from interference by other members of the Lab. 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.

- **Please note the following links to ASU's academic integrity policy http://provost.asu.edu/academicintegrity/policy**

Technology Requirements

- **Email and Internet**

You must have an active ASU e-mail account and access to the Internet. *All instructor correspondence will be sent to your ASU e-mail account using the course email function.* Please plan on checking your ASU email account regularly for course related messages.

This course uses Pearson LearningStudio for the facilitation of communications between faculty and students, submission of assignments, and posting of grades. This course site can be accessed through *my*ASU at http://my.asu.edu

- **Computer Requirements**

This course requires that you have access to a computer that can access the internet. You will need to have access to, and be able to use, the following software packages:

- The recommended web browser for these courses are (Mozilla Firefox (http://www.mozilla.com/), and Google Chrome (http://www.google.com/chrome))
- Adobe Acrobat Reader (free) (http://get.adobe.com/reader/)
- Adobe Flash Player (http://www.adobe.com/products/flashplayer/) (free)
- Microsoft Office (http://office.microsoft.com/) or a program that reads Powerpoint, Word, and Excel documents. A popular free alternative is Open Office. (http://www.openoffice.org/)
- Pearson Lockdown Browser (http://asuonline-dev.asu.edu/math/mml-lockdown/mmldb.html)

You are responsible for having a reliable computer and internet connection throughout the course.

Evaluation Activities

This course requires students complete four important evaluation activities:

- Success in ASU Math Study Consent Form
- ACES Pre-test
- ACES Post-test
- Engagement Survey

Your course web site includes detailed information about the evaluation activities, how long it takes to complete each one, and when each should be completed. It will take about 45 minutes total over the semester to complete all four evaluation activities. Don't forget you will need to include your name and ASURITE ID on each evaluation activity in order to get credit for completing the task.

Support

Technical Support

See the Technical Support tab on the left of the student website for contact information.

Scheduling your Math Test

Click here to schedule your test (icourse and face-to-face students only)
(http://asuonline-dev.asu.edu/math/schedule-test/schedule-test.html)

Cancelling your Math Test

Click here for information on how to cancel your test appointment.
(http://asuonline-dev.asu.edu/math/schedule-test/cancel-appointment.html)

Tutoring

Tutoring will be available during various hours in each of the ASU Math Labs locations. The hours will vary between locations. Please check the math lab schedule for tutoring hours on each campus.

Additional math tutoring assistance will be available on each of the ASU campus locations. Please check with the Math Tutoring Center on the Tempe campus and the Student Success Centers on the Downtown Phoenix, Polytechnic and West campus for additional math tutoring availability and hours: http://studentsuccess.asu.edu. Please note that these locations may be subject to change, depending on room availability.

Each of the tutors working in the Math Labs, Student Success Centers, Math Tutoring Center actively engage the students who come in for assistance. The tutors are trained in techniques of engagement, discussion, assessment, and troubleshooting in order to create a positive learning environment for all students. Students who are actively engaged using techniques of reading, writing, listening, and speaking with their applications of materials are more likely to be comfortable in the Math Lab space, interacting with tutors and professors in that same space, while retaining the content material that they will need to apply to future Math courses and computations in non-Math courses, as well.

Academic Integrity

ASU expects and requires all its students to act with honesty and integrity, and respect the rights of others in carrying out all academic assignments. For more information on academic integrity, including the policy and appeal procedures, please visit http://provost.asu.edu/academicintegrity and the *Student Conduct Statement* below.

Conduct

Students are required to adhere to the behavior standards listed in the

- Arizona Board of Regents Policy Manual Chapter V – Campus and Student Affairs: Code of Conduct (http://www.azregents.edu/policymanual/default.aspx)
- ACD 125: Computer, Internet, and Electronic Communications (http://www.asu.edu/aad/manuals/acd/acd125.html)
- ASU Student Academic Integrity Policy. (http://provost.asu.edu/files/AcademicIntegrityPolicyPDF.pdf)

Students are entitled to receive instruction free from interference by other members of the Lab. 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.

Appropriate Labroom behavior is defined by the instructor. This includes the number and length of individual messages online. Course discussion messages should remain focused on the assigned discussion topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. Inappropriate discussion board messages may be deleted if an instructor feels it is necessary. Students will be notified privately that their posting was inappropriate.

Student access to the course Send Email feature may be limited or removed if an instructor feels that students are sending inappropriate electronic messages to other students in the course.

Accessibility Statement

In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act of 1990, professional disability specialists and support staff at the Disability Resource Centers (DRC) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities. DRC staff coordinate transition from high schools and community colleges, in-service training for faculty and staff, resolution of accessibility issues, community outreach, and collaboration between all ASU campuses regarding disability policies, procedures, and accommodations.
Students who wish to request an accommodation for a disability should contact the Disability Resource Center (DRC) for their campus.

Tempe Campus
http://www.asu.edu/studentaffairs/ed/drc/
480-965-1234 (Voice)
480-965-9000 (TTY)

Polytechnic Campus
http://www.asu.edu/studentaffairs/ed/drc/
480-727-1165 (Voice)
480-727-1009 (TTY)

West Campus
http://www.west.asu.edu/drc/
University Center Building (UCB), Room 130
602-543-8145 (Voice)

Downtown Phoenix Campus
http://campus.asu.edu/downtown/DRC
University Center Building, Suite 160
602-496-4321 (Voice)
602-496-0378 (TTY)

International Students

Assistance for international students can be found at http://global.asu.edu/current

Syllabus Disclaimer

Instructors view the course syllabus as an educational contract between the instructor and the students. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. Instructors reserve the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus changes via email or in the course site Announcements. Please remember to check your ASU email and the course site Announcements often.