

**MAT 117**

**FALL 2009**

<b>Instructor:</b>	<b>Office:</b>
<b>SLN:</b>	<b>Office Hours:</b>
<b>Telephone:</b>	<b>E-mail:</b>
<b>MAT117 URL:</b> <a href="http://math.asu.edu/fym/Courses/mat117.html">http://math.asu.edu/fym/Courses/mat117.html</a>	<b>Instructor URL:</b>

### Topic Schedule

Week of	Topics	Comments
8/24 – 8/28	Orientation, 3.1: Functions, 3.2: The Graph of a Function	
8/31 – 9/4	3.3: Properties of Functions, 3.4: Library of Functions; Piecewise-defined Functions	
9/7 – 9/11	3.5: Graphing Techniques: Transformations	<i>OFF: Labor Day, 9/7</i>
9/14 – 9/18	4.1: Linear Functions and Their Properties, 4.2: Building Linear Functions from Data	
9/21 – 9/25	Review, R5: Factoring Polynomials R6: Synthetic Division	<b>Exam 1 (3.1 – 4.2): 9/22, 9/23, 9/24</b> <i>1<sup>st</sup> Academic Status Report 9/21 – 9/28</i>
9/28 – 10/2	4.3: Quadratic Functions and Their Properties, 5.1: Polynomial Functions and Models	
10/5 – 10/9	5.2: Properties of Rational Functions, 5.3: The Graph of a Rational Function, 5.5: The Real Zeros of a Polynomial Function	
10/12 – 10/16	5.6: Complex Zeros: Fundamental Theorem of Algebra, 6.1: Composite Functions, 6.2: One-to-One Functions; Inverse Functions	
10/19 – 10/23	Review, 6.3: Exponential Functions 6.4: Logarithmic Functions,	<b>Exam 2 (R5,R6, 4.3 – 6.2): 10/20, 10/21, 10/22</b>
10/26 – 10/30	6.5: Properties of Logarithms 6.6: Logarithmic and Exponential Equations,	<i>2<sup>nd</sup> Academic Status Report 10/26 – 11/2</i>
11/2 – 11/6	6.7: Compound Interest, 6.8: Exponential Growth & Decay, Logistic Models,	
11/9 – 11/13	8.1: Systems of Linear Equations: Substitution & Elimination, 8.2: System of Equations: Matrices	<i>OFF: Veterans Day, 11/11</i>
11/16 – 11/20	Review, 9.1: Sequences,	<b>Exam 3 (6.3 – 8.2): 11/17, 11/18, 11/19</b>
11/23 – 11/27	9.2: Arithmetic Sequences,	<i>OFF: Thanksgiving Break, 11/26 &amp; 11/27</i>
11/30 – 12/4	9.3: Geometric Sequences; Geometric Series, <b>Review</b>	
12/7 – 12/8	<b>Review</b>	<i>OFF: Reading Day – 12/9</i>

**Text:** Sullivan, Michael, *College Algebra 8<sup>th</sup> Edition*, Pearson/Prentice – Hall, 2008,  
or in lieu of textbook an E-Book using a MyMathLab Access Code.

**Prerequisites:** Students entering MAT 117 are expected to have completed Intermediate Algebra or its equivalent with a grade of A, B, or C. If the Placement Test Results showed that a lower level course MAT 106 is recommended, then the student should take this course prior to taking MAT 117. The URL for the Placement Test is <http://math.asu.edu/fym/placement.html>

**Graphing Calculator:** 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 the TI 83/84 or TI *n*-spire or Casio 9850GB Plus. Calculators with QWERTY keyboards or those that do symbolic algebra, such as the Casio FX2, Casio 9970Gs, TI-89, or TI-92 **cannot** be used in class or during an exam.

#### GRAPHING CALCULATOR WORKSHOP

	Date	Time	Place
<b>TI-Calculator</b>	8/31/09	5:00PM – 7:00PM	LSA – 191
	9/2/09	5:00PM – 7:00PM	LSA – 191
	Date	Time	Place
<b>Casio-Calculator</b>	8/31/09	3:05PM – 5:00PM	ECG – 238
	9/1/09	4:35PM – 6:30PM	ECG – 238

**Exams:** You will take three exams during the semester. Each midterm exam consists of 25 multiple choice problems.

- **The best possible preparation of them is regular attendance and completion of assigned homework.**
- These exams are to be completed outside of regular class time in the [Mathematics Department Testing Center](#) in PS-A21 (basement)
- To be admitted to the Testing Center each student must have a valid ASU Sun Card.
- The testing center is open 9:00 a.m. – 6:30 p.m. M-Th and 9:00 a.m. – 3:30 p.m. Friday. Make sure you arrive **before** 6:30 p.m. M-Th or 3:30 p.m. Friday. The Testing Center will not allow for late entry. Arrival before the door closes allows the student one hour and twenty-five minutes to complete the test.
- Students should complete exams as early as possible during the allotted time frame, since the Testing Center can get extremely busy in the afternoons.
- Your calculator memory may be viewed during any exam and will be cleared if anything suspicious is noted. The instructor has the right to regard finding suspicious material in your calculator memory as cheating.

**Makeup exams:** The instructor is not required to give a make-up exam. If a make-up exam is given for any reason, it will be more difficult than the original. Make every effort to take each exam on time.

Exam	Sections	Dates
Exam #1	3.1, 3.2, 3.3, 3.4, 3.5, 4.1, 4.2	<b>T/Th:</b> Tue. 9/22 or Wed. 9/23 <b>M/W/F:</b> Wed. 9/23 or Thur. 9/24
Exam #2	R5, R6, 4.3, 5.1, 5.2, 5.3, 5.5, 5.6, 6.1, 6.2	<b>T/Th:</b> Tue. 10/20 or Wed. 10/21 <b>M/W/F:</b> Wed. 10/21 or Thur. 10/22
Exam #3	6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 8.1, 8.2	<b>T/Th:</b> Tue. 11/17 or Wed. 11/18 <b>M/W/F:</b> Wed. 11/18 or Thur. 11/19
Final Exam	All sections including 9.1, 9.2, 9.3	See the ASU Final Exam Schedule

**Final Exam:** The final exam will be given according to the ASU Final Exam Schedule. There will be no make ups given for the final, and no finals will be rescheduled for personal reasons, including non-refundable airplane tickets. (Refer to the last page of this syllabus.)

## Grading

Distribution:	Exams 1, 2, and 3	50%
	Homework, Quizzes, Projects	30%
	Cumulative Final Exam	20%

## Grading Scale

90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
0 – 59%	E

## Attendance:

- Attendance will be taken on a regular basis as studies have shown that students that attend class regularly are more likely to complete their courses successfully.
- For classes that meet three days a week (MWF, for example), the maximum number of allowed absences is six (6). For classes that meet two days a week (TTh for example), the maximum number is four (4).
- **Students who exceed the maximum number of absences will receive a grade of EN.**

## Homework, Quizzes & Projects:

- Homework, quizzes, and projects will be graded. Students may work together on homework, but each individual student is required to submit their own work.
- Homework will be submitted online via the internet using the online homework system MyMathLab. It can be either your own computer or one in any of the ASU computer labs.
- To log onto MyMathLab, go to <http://www.coursecompass.com/>  
You will need 3 items to register for MyMathLab:
  1. course ID –
  2. valid access code (from text book or online registration)
  3. valid email address

Further instructions regarding MyMathLab will be given in class.

Regular quizzes and projects will be given and frequently reflect material that has recently been discussed in class. There will be no make-up quizzes or homework.

Students are expected to read relevant sections of the textbook prior to attending class.

## Students Resources:

- **Tutor Center:** The [Math Tutor Center](#) (free of charge) in PSA 116 will be open with the following schedule:
  - Monday – Thursday from 8:00 AM – 8:00 PM.
  - Friday 8:00 AM – 3:00 PM.
  - Sunday 1:00 PM – 6:00 PM.Come in for help before it is too late, and several days before an exam day to strengthen your preparation. In order to be admitted to the Tutor Center each student must present their valid ASU Sun Card.
- **ASU Learning Support Services (LSS):** Learning Support Services ([LSS](#)) uses a peer-assisted model to provide academic support and learning opportunities that foster students' academic, personal, and professional success. LSS staff members are professionally trained to assist peers in achieving academic success. Services are provided at Hassayampa Academic Village (1<sup>st</sup> floor), Memorial Union Room 178, and Palo Verde West.

## **Departmental and University Policies and Procedures**

Course Withdrawal Deadline - In Person	November 6 <sup>th</sup> , 2009
Course Withdrawal Deadline - Online	November 8 <sup>th</sup> , 2009
Complete Withdrawal Deadline	December 8 <sup>th</sup> , 2009

**Withdrawal:** A student may withdraw from a course with a grade of **W** during the withdrawal period. The instructor's signature is not required.

**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 guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed.

**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.

**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. If necessary, the matter may be pursued 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 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. See the following website for more details: [http://www.asu.edu/studentaffairs/studentlife/judicial/academic\\_integrity.htm](http://www.asu.edu/studentaffairs/studentlife/judicial/academic_integrity.htm)

### **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](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.

**The grade of XE:** A grade of **XE** is reserved for "failure for academic dishonesty." The XE grade may be petitioned after 1 year.

**Disability Accommodations:** If you have a disability that needs accommodating, please report this privately to the instructor **by the end of the first week of class**. You should also contact the Disability Resource Center at (480) 965 – 1234 (voice) or (480) 965 – 9000 (TTY). All efforts will be made to ensure you have equal opportunity to succeed in the course.

**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. Students who engage in disruptive classroom behavior may be subject to various sanctions. The procedures for initiating a disruptive behavior withdraw can be found at <http://clas.asu.edu/classroom/disruptive>.

**Note:** This syllabus is tentative and should not be considered definitive. The instructor reserves the right to modify it (including the dates of the tests) to meet the needs of the 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, late assignments, etc.

## **Recommended problems from Sullivan's College Algebra, 8<sup>th</sup> edition**

### Section – Homework Problems

3.1 – 19, 27, 29, 31, 32, 39, 41, 43, 48, 51, 55, 57, 61, 69, 73, 77, 93, 95

3.2 – 9, 13, 15, 23, 27, 35

3.3 – 15, 19, 21, 25, 27, 35, 39, 41, 44, 45, 53, 63, 65, 69, 75

3.4 – 22, 23, 25, 27, 31, 33, 41, 47

3.5 – 7, 9, 11, 15, 19, 23, 27, 29, 35, 39, 41, 51, 55, 57, 65abcd, 91

3.6 – 7, 11, 15, 23

4.1 – 15, 21, 31, 33, 37, 41, 45, 49

4.2 – 9, 15, 17, 21

R5 – 15, 21, 27, 31, 43, 45, 47, 55, 63, 84

R6 – 7, 9, 17

4.3 – 13, 17, 29, 37, 41, 45, 53, 55, 61, 63, 81, 83, 89

5.1 – 13, 17, 37, 39, 43, 45, 55, 57, 63, 71, 77

5.2 – 11, 15, 21, 23, 27, 41 vertical asymptote & horizontal asymptote only,  
44 v.a. & h.a. only, 47 v.a. & h.a. only, 54

5.3 – 17, 19, 33, 37, 45, 49, 55

5.5 – 11, 12, 13, 33, 39, 45, 49, 50, 59, 63

5.6 – 7, 13, 21, 23, 31, 33

6.1 – 7, 9, 13, 17, 19, 31, 39, 41, 55, 57, 69

6.2 – 17, 19, 31, 35, 49, 51, 57, 59, 63, 67, 93

6.3 – 23, 29, 31, 35, 63, 65, 67, 74, 87, 97, 106

6.4 – 9, 11, 13, 17, 21, 23, 25, 28, 29, 31, 33, 37, 42, 71, 81, 83, 87, 91, 95, 99, 101, 103, 104, 121, 126

6.5 – 7, 9, 11, 13, 17, 31, 33, 37, 41, 45, 47, 51, 55, 57, 60, 61, 63

6.6 – 6, 17, 21, 23, 26, 32, 37, 41, 47, 49, 57, 63, 97

6.7 – 5, 11, 17, 19, 27, 31, 41, 45, 49

6.8 – 1, 3, 9, 21, 23

8.1 – 7, 15, 20, 25, 29, 31, 35, 37, 43, 45, 47, 59, 76

8.2 – 5, 11, 17, 21, 25, 27, 29, 39, 43, 49, 51, 53, 77

9.1 – 17, 19, 20, 23, 27, 30, 35, 37, 41, 49, 58, 61, 63, 69, 73, 86

9.2 – 5, 13, 15, 23, 30, 35, 37, 43, 47, 55

9.3 – 11, 23, 27, 33, 35, 39, 41, 45, 49, 55, 59, 67, 75, 77, 85, 91