

MAT 117: College Algebra**Spring 2018 Course Syllabus - A Session****Course Description**

Welcome to College Algebra! The purpose of this course is to develop skills in Linear Functions, Quadratic Functions, General Polynomial Functions, Rational Functions, Exponential Functions, Logarithmic Functions and Systems of Linear Equations. We will emphasize problem-solving techniques, specifically by means of discussing concepts in each of these topics.

Course Objectives

- Create solid foundation of basic operations on numbers and applications in real world.
- Students will be able to apply algebraic reasoning to solve a range of problems.
- Students will develop skills required for success in future studies in calculus.

Prerequisites

MAT 106 or MAT 113 with a C or better, or completion of the Math Placement Test with a score of 40% or higher, or completed MAT 194: EFM with skills mastered for MAT 117, or MAT 110 Track 1.

Textbook

You are not required to purchase a hard copy of the textbook for this course since the ebook will be available online inside the course. Reading materials will also be provided online in each lesson as pdf chapters. If you would like to purchase a hard copy, this is the text: College Algebra; 2th Edition by Julie Miller & Donna Gerken, ISBN 978-0-07-783634-4.

Calculator

A graphing calculator (such as the TI-83/84) is **required**. **Cellular phone calculators and calculators with QWERTY keyboards or those that do symbolic algebra, such as the Casio FX2, Casio 9970Gs, TI-89, or TI-92, TI-nspire CAS also *cannot* be used during exams.**

A few important Terms associated with the ALEKS Platform

Topic is a specific problem type and is considered the smallest piece of content in the course. There are 380 topics in the course.

Objective is a group of similar topics. The course is divided into 18 Objectives, each with a different number of topics as shown in the table in this syllabus.

Initial Knowledge Check is a placement test with ~30 questions that determines how much of the course you already know. You get to skip those topics that you show mastery on, however, you will be re-assessed later in another similar knowledge check.

Progress Knowledge Check is an adaptive test that tests your mastery on previously learned topics as well as some new topics. If you do not show mastery on some topics already mastered, you will have to revisit/relearn those topics. If you show mastery on the new topics you will gain mastery on those topics and get to skip those topics.

Weekly Topic Goal is the number of topics that you are expected to complete by 11:59 pm on Sunday of that week. This goal will change from week to week. Please see the table in this syllabus. This contributes to your course grade and you should try to meet this goal each week. You can always do more than the required number of topics in any week.

Weekly Time Goal is the number of hours that you are expected to reach by 11:59 pm on Sunday of that week. This goal will change from week to week. Please see the table in this syllabus. You can always invest more than the required time in any week or you may naturally need more time than is required. This does not count towards your course grade.

Flow of Adaptive Course Work in ALEKS

- You will enroll in ALEKS using the same name that ASU has on record. You are automatically connected to the ALEKS site when you click on the “ALEKS” then “Go to ALEKS” link inside your Blackboard shell.
- You must do the Initial Knowledge Check. This will allow you to earn varying levels of mastery in one or more objectives in the course. The higher you score on the Initial Knowledge Check the higher your mastery level will be in each objective. However, you will be tested on the same content later in the Progress Knowledge Checks.
- After the Initial Knowledge Check you start where the system suggests. Suppose you start in Objective 1 at 70%. You will continue following your path until you attain the required mastery on Objective 1. Then you move on to Objective 2 and repeat the same starting from the mastery level gained from the Initial Placement Check.
- After either 10 hours working in the system **OR** 20 topics and 5 hours working in the system an automatic Progress Knowledge Check will be triggered for you to show mastery on the more recent set of topics you completed. If you do not do well, your mastery level will be lowered and you will be required study that content again to regain mastery.

Communicating with Your Instructor

When e-mailing, include the class you are in (e.g. **MAT :18150**). You **MUST** email from your **ASU provided email**, or will **NOT** get a response. Please check the syllabus, announcements, and existing posts in Blackboard regularly.

Attendance Policy

Attendance is required for this class. Please be aware that you may fail the class if you miss more than the equivalent of two weeks of classes.

Class Participation/Attendance 5%

- Students who do not begin working on the system by the end of Wednesday, 1/10, **will be dropped.**
- Students who **have not logged in and worked on the course for 3** consecutive weekdays during the session **will not receive the participation points for that week.**
- **Please be sure to regularly check your ASU email, Blackboard and course site for updates and information.**
- Please post questions on Piazza if you'd like further explanations or examples.

ALEKS Adaptive Mastery Level Progress (25%)

Your learning is personalized by the adaptive algorithms in the ALEKS software platform. Completing mastery in all objectives will account for 25% of the course grade. It is most important that you take notes and solve the problems on paper as you work through the course. This will be most helpful in retaining most of the content you learned. Once you have 380 topics in the ALEKS Pie you will get the full 25% of your course grade.

Topic Goals (20%)

You will have a pre-specified number of topics to complete each week. These are in place for you to track the number of topics you are completing each day of the week and reach the normal weekly topic goal by **11:59 pm on Friday night** of each week. You can complete more than the required number of topics in any week to stay ahead. Each week, each of them contributes to your course grade. These are time sensitive. They cannot be made up and cannot be done early.

Time Goals

Weekly time goals are in place for you to track the amount of time you are investing each day of the week and reach the normal weekly time goal by 11:59 pm on Friday night of each week. You can always invest more time to stay ahead. **This does not contribute to your course grade.** Please invest the appropriate amount of time

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necessary to be successful in the course. Statistics have shown that many students complete the course in as little as 30 hours of work while other take longer with a few students taking around 300 hours to complete the course.

Tests: (50%)

Test 1, Test 2, Test 3 and the Final Exam will involve a mix of mechanical skills and conceptual reasoning. They will be timed and allow only **ONE attempt**. Exams are proctored using the [Software Secure](#) platform for online sections. While testing, you are only allowed scratch paper, pen/pencil, and graphing calculator. Notes are not allowed, and you also cannot ask for help. **Cheating on exams may result in a 0 for the exam or even a failing grade in the class.**

Tests	Objectives	Time (Minutes)	No. Questions	Percent of Course Grade
Test 1	1 to 4	60	15	10%
Test 2	5 to 9	60	15	10%
Test 3	10 to 15	60	15	10%
Final Exam	4 to 19	110	20	20%

Course Expectations

- You are expected to complete 2-3 objectives per week as outlined on the course schedule.
- Over the course of the semester, you are expected to remain ahead of schedule based on the suggested syllabus calendar.
- You are expected to spend 15 hours per week to access the course content in the computer lab or on your personal computer elsewhere.

Student Resources / Computer Lab

- The schedule for online tutoring can be found at <https://tutoring.asu.edu/online-tutoring>.
- Online Tutoring is open Sunday-Thursday 3 p.m.-10 p.m. Students can view the schedule of when tutors are working for their specific class either via the website above or through [Tutor Search](#).
- If you own a laptop computer, you are encouraged to use it for taking an exam.

How to Succeed in this Course

- Make time for math every day.

- Staying ahead 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 regularly.
- Log in to the course site every day.

Grading Information: You must take Test 1, Test 2, Test 3, and the Final Exam along with doing the required work in each category shown below. You are expected to complete all 380 topics in the course but may be allowed to take the Final Exam if you complete at least 95% or 361 of the 380 topics in the course. You must keep up with the **Topic Goals as they do not transfer from week to week**. Any student that misses the equivalent of 2 weeks of classes may fail the course. Passing requires a weighted average of at least 70% as is shown in the Course Grade column in the Blackboard grade book. Of course, the course grade in Blackboard is not your true grade until grades in all categories are entered.

Course Grade Weightings	Percentage
ALEKS Topic Progress	25%
Topic Goals	20%
Participation/Attendance	5%
Test 1	10%
Test 2	10%
Test 3	10%
Final Exam	20%
Total	100%

Grade	Grading Scale
A+	[97,100]
A	[90,97)
A-	[89.5,90)
B+	[86,89.5)
B	[80,86)
B-	[79.5,80)
C+	[76,79.5)
C	[70,76)
D	[60,70)
E	[0,60)
Z	Incomplete -second semester stretch eligible

- **MAT 117 students will earn a grade of Z if not passing by the end of the semester. You then enroll in a MAT 117 S 0 credit course. This course is free and at the end of that semester the Z is replaced with the grade you end up with.**

Topic Goals Schedule for On Track Pacing

C Session	Time/Topic Goals		Number	Number	Time	Total	Topics	Total
Week	Start	End	Of Days	M-F days	Per Week	Time	Per Week	Topics
1	01/08/2018	01/12/2018	5	5	18	18	60	60
2	01/13/2018	01/19/2018	6	4	16	34	50	110
3	01/20/2018	01/26/2018	7	5	18	52	60	170
4	01/27/2018	02/02/2018	7	5	18	70	60	230
5	02/03/2018	02/09/2018	7	5	18	88	60	290
6	02/10/2018	02/16/2018	7	5	18	106	60	350
7	02/17/2018	02/23/2018	7	5	18	124	30	380
8	02/24/2018	02/27/2018	4	2	6	130		

Suggested Course Schedule for On-Track Pacing

Week	Dates	Objectives	Comments
1	01/08-01/12	Course Overview, Syllabus, Schedule, Introductions, Initial Assessment #1 Rules of Exponents (19 topics) #2 Review (44 topics)	Complete Syllabus Acknowledgement Quiz Drop/Add – Tuesday 01/09/18
2	01/15-01/19	#3 Refresh (32 topics) #4 Getting up to speed (26 topics)	
3	01/22-01/26	#5 Foundations (28 topics) #6 Props. of Functions (21 topics)	Test 1 by Monday 01/22/18 Course Withdrawal – Friday 01/26/18
4	01/29-02/04	#7 Linear Functions (28 topics) #8 Working with Linear F. (11 topics) #9 Systems of Equations (13 topics) #10 Graphs of Functions (24 topics)	
5	02/05-02/09	#11 Intermediate Functions (11 topics) #12 Composite Functions (16 topics) #13 Quadratic Equations (28 topics)	Test 2 by Monday 02/05/18
6	02/12-02/16	#14 Poly. Func. & Zeros (18 topics) #15 Rational Functions (12 topics) #16 Exponential Functions (13 topics)	
7	02/19-02/23	#17 Logarithmic Functions (15 topics) #18 App of Exp & Logs (21 topics)	Test 3 by Monday 02/19/18
8	02/26-02/27	Final Exam by Tuesday 02/27/18	Complete Course Withdrawal – Friday 02/27/18

The due dates for tests are firm and there will be no extension!!

Objectives Mastery Levels

Obj. #	Objective Names	Goal Topics	Cumulative Topics	Minimum Mastery Level Requirement
1	Rules of Exponents	19	19	90%
2	Review	44	63	95%
3	Refresh	32	95	95%
4	Getting Up To Speed	26	121	95%
5	Foundations	28	149	95%
6	Properties of Functions	21	170	95%
7	Linear Functions	28	198	95%
8	Working with Linear Functions	11	209	90%
9	Solving System of Equations	13	222	90%
10	Graphs of Functions	24	246	95%
11	Intermediate Functions	11	257	90%
12	Composite Functions	16	273	90%
13	Quadratic Equations	28	301	95%
14	Polynomial Functions & Zeros	18	319	90%
15	Rational Functions	12	331	90%
16	Exponential Functions	13	344	90%
17	Logarithmic Functions	15	359	90%
18	Applications of Exponential and Log Functions	21	380	95%

Please refer to the [ASU Academic Calendar](#) for important dates.

Drop/Add Deadline	Tuesday, January 09 th 2018
Course Withdrawal Deadline	Friday, January 26 th 2018
Complete Semester Withdrawal	Tuesday, February 27 th 2018

Tutor Center

The [Math Tutor Center](#) (**free of charge**) in WXMLR 116 will be open M-F 10:00 a.m. - 4:00 p.m. 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 present their valid ASU "Sun Card".

ASU Learning Resource Center (LRC)

The [LRC](#) provides counseling, tutoring in math (and many other subjects), supplemental instruction, and other types of support to students. It is located in PV West (in the "turtle building") and in the Memorial Union, Room 14, and is open from 10:00 a.m. to 4:00 p.m. Please email me if you have any questions, concerns, or if you have a disability that will require accommodations in this class. Note: To qualify for disability accommodations at ASU, students must qualify for services through the Disability Resource Center (DRC), which is located on the 1st floor of the Matthews Center Building, 480.965-1234 (V), 480.965.9000 (TTY).

Technical Support Contact Information

For technical assistance 24 hours a day, 7 days a week, please contact the University Technology.

Office Help Desk

Phone: 480-965-6500

Email: helpdesk@asu.edu

Web: <http://help.asu.edu/>

For information on systems outages see the ASU systems status calendar, please visit <http://syshealth.asu.edu/> and <http://systemstatus.asu.edu/status/calendar.asp>.

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 close date.
- 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.
- No individual extra credit assignments will be offered.

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.](#)
- [ACD 125: Computer, Internet, and Electronic Communications.](#)
- [ASU Student Academic Integrity Policy.](#)

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

End of Syllabus!!