

## MAT 117: College Algebra

### Spring C 2019 Course Syllabus

**01/07/2019 to 04/26/2019**

<b>Class #:</b>	<b>Instructor:</b>	
<b>Time:</b>	<b>Email:</b>	
<b>Days:</b>	<b>Office Phone:</b>	
<b>Office:</b>	<b>Office Hours:</b>	<b>&amp; By Appointment</b>

**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 a solid foundation of basic operations on numbers and applications in the 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.

**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 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. The ALEKS Calculator will not be available in the class.**

The spring 2019 Texas Instruments graphing calculator workshop is scheduled as follows:

Wed. Jan. 16, 2019	6:00 – 8:00 PM	NEEB 105
Thurs. Jan. 17, 2019	6:00 – 8:00 PM	NEEB 105

**Communicating with Your Instructor:** When emailing, include the class you are in (e.g. MAT 117 and your class #). You **MUST** email from your ASU provided email, or may **NOT** get a response. Please check the syllabus, announcements, and existing posts in Canvas regularly.

**A few important Terms associated with the ALEKS Platform:**

**Topic** is a specific problem type and is the smallest piece of content in the course. There are 370 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 a table in this syllabus.

**Initial Knowledge Check** is a placement test with about 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. The number of topics for 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. Extra topics done in any week will not count in any other week for a grade but will be helpful in completing the course earlier than the end of the semester.

**Weekly Time Goal** tracks the number of hours that you are investing in ALEKS each week. This **does not count** towards your course grade. Statistics have shown that many students complete the course in as little as 30 hours of work while others take longer, with a few students taking more than 300 hours of work.

### Flow of Adaptive Course Work in ALEKS:

- You are automatically enrolled in the ALEKS platform when you click on the “Go to ALEKS” link inside your Canvas course.
- After a brief tutorial on how to navigate in the ALEKS system, you will then be required to 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 progress knowledge checks.
- Next you click on “CONTINUE MY PATH” to start learning the topics that you did not show mastery of during the initial knowledge check. If you had a 70% mastery on Objective 1, 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 process, starting from the mastery level gained from the initial knowledge check. This process continues for all the remaining objectives.
- After either 10 hours working in the system **OR** 20 topics and 5 hours working in the system an automatic progress knowledge check will usually be triggered for you to show mastery on the more recent topics you completed. It is important that you regard this knowledge check seriously and do your best. If not, you may lose mastery on some topics and have to revisit/restudy them. You may usually postpone these knowledge checks for up to 24 hours and work on something else, such as reviewing or learning more topics, but then you will usually need to complete these knowledge checks before working in other areas of ALEKS.

**Attendance Policy:** Attendance is required for this class. Please be aware that missing classes will **LOWER** your final grade in class.

**Problem Solving: 15%:** You will complete each weekly problem set in small groups based on the most recent content you have completed in the course. There are no make-up problem sets for missing class. Missed problem sets will be recorded as 0’s in the grade book. The lowest problem set grade may be dropped as the Instructor deems appropriate.

### Class Participation/Attendance: 5%:

- Students who do not begin working on the system by the end of first week **will be dropped.**
- Students who **have not logged in and worked on the course for 3** days each week during the session **may not receive the participation points for that week. This does not apply to students that complete the weekly topic goals on time for that week.**
- **Please be sure to check your ASU email, Canvas and course site regularly for updates and information.**
- Please email questions or come to office hours if you would like further explanations or examples.

**ALEKS Pie Completion: 13%:** Your learning is personalized by the adaptive algorithms in the ALEKS software platform. Completing mastery in all objectives will account for 13% of the course grade. It is important that you take notes and solve the problems on paper as you work through the course. This will be helpful in retaining the content you learn. Once you have 370 topics in the ALEKS Pie, you will get the full 13% of your course grade.

**Topic Goals: 18%:** 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 week to reach the weekly topic goal by **11:59 pm on Sunday night** of each week. You can complete more than the required number of topics in any week to stay ahead. Each weekly topic goal contributes to your course grade. **These are time sensitive and must be completed in the week that they are due. They cannot be made up in future weeks and cannot be done in earlier weeks.**

**Tests: 49%:** Test 1, Test 2, Test 3 and the Final Exam will involve a mix of mechanical skills and conceptual reasoning. **Test 1 is not proctored.** That means you can take it from anywhere. **All exams** will be timed and allow only **ONE attempt.** Test 2, Test 3, and the Final Exam are proctored in class. While testing, you are only allowed a few loose sheets of extra paper, pen/pencil (or whiteboard and dry erase marker), and graphing calculator. (Refer to the part of this syllabus about which kinds of calculators may not be used during tests. Headphones, notes, and notebooks (including notebooks with blank paper) are not allowed, you may not refer to other websites during each test, and you may not ask for help. In particular, you need to put away all internet capable devices (watches, phones, tablets, computers other than the one you are testing on, etc.) where you cannot see or access them during the test. Also, please close extra browser tabs (except ALEKS and possibly Canvas) during tests; turn off devices such as TV, radio, and music players; and remove any headphones or ear buds you are using, Violating test rules or accessing an internet capable device (other than the one you are testing on) during the test may result in a score of 0 for the test. Cheating may result in a failing grade in the class.

Tests	Objectives	Time (Minutes)	Number of Questions	Percent of Course Grade
Test 1	1 to 4	60	12	5%
Test 2	5 to 9	60	12	12%
Test 3	10 to 15	60	12	12%
Final Exam	5 to 18	110	16	20%

**Cohort/Groups:** Each class will be partitioned into 4 or 5 groups (cohorts) with pre-assigned instructional assistants (IA's). The instructor will introduce the IA to their cohorts on the first day of class. Student must sit in their cohort throughout the semester. In Canvas you can see who is your cohort leader.

### **Course Expectations:**

- You are expected to complete 1 or 2 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 about 9 or more hours per week to access the course content in the computer lab or on your personal computer elsewhere.

### **Tutoring Resources / Computer Lab:**

- The schedule for tutoring can be found at <https://tutoring.asu.edu/student-services/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 completing the exams.
- The study helps within ALEKS itself include the electronic textbook, videos about each topic, and a way to message me, your instructor, about each question.
- There are course videos corresponding to each objective. These are accessed along the left side within Canvas from the links “Objectives 1 to 4 (Test 1)”, “Objectives 5 to 9 (Test 2)”, etc.

### **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 complete Test 1, Test 2, Test 3, and the Final Exam, along with doing the required work in each category shown below. You may complete the Final Exam after you learn all 370 topics in the course. That is, you may take the Final Exam before the scheduled date of the Final Exam. If you have completed at least 95% or 352 of the 370 topics in the course by the last day of the semester, you may complete the Final Exam on the day it is scheduled during the Final Exam week. Of course, you will then get 95% instead of the full 100% for the ALEKS Pie Completion. You must also keep up with the Topic Goals as they do not transfer from week to week. Passing the class requires a weighted average of at least 70% in the Course Grade entry in the Canvas grade book. Of course, the course grade in Canvas is not your true grade until grades from all categories are entered. Passing also requires you to complete all four tests and to complete at least 95% (352) of the 370 topics in the course.

Course Grade Weightings	Percentage		Grade	Grading Scale
ALEKS Pie Topic Progress	13%		A+	[97, 100]
Topic Goals	18%		A	[90, 97]
Participation/Attendance	5%		A-	[89.5, 90]
Problem Sets	15%		B+	[87, 89.5]
Test 1 (Objectives 1 to 4)	5%		B	[80, 87]
Test 2 (Objectives 5 to 9)	12%		B-	[79.5, 80]
Test 3 (Objectives 10 to 15)	12%		C+	[77, 79.5]
Final Exam (Objectives 5 to 18)	20%		C	[70, 77]
<b>Total</b>	<b>100%</b>		<b>D</b>	<b>[60,70]</b>
			<b>E</b>	<b>[0,60]</b>
			<b>Z</b>	Incomplete: second semester stretch eligible

- **MAT 117 students taking the class for the first time will earn a grade of Z if they are not passing by the end of the semester. They then enroll in a MAT 117 S zero-credit course. This course does not cost tuition, and at the end of that semester the Z is replaced with the grade the student earns in MAT 117 S.**
- **MAT 117 S students will earn a D or E if not passing by the end of the semester. They would then have to register for a fresh start in a 3-credit MAT 117 class.**

### Time and Topic Goals Schedule for On Track Pacing

C Session	Time/Topic Goals		Number	Topics	Total
Week	Start	End	of Days	Per Week	Topics
1	01/04/2019	01/13/2019	7	40	40
2	01/14/2019	01/20/2019	7	35	75
3	01/21/2019	01/27/2019	6	30	105
4	01/28/2019	02/03/2019	7	30	135
5	02/04/2019	02/10/2019	7	30	165
6	02/11/2019	02/17/2019	7	30	195
7	02/18/2019	02/24/2019	7	30	225
8	02/25/2019	03/03/2019	6	25	250
9	03/04/2019	03/10/2019			
10	03/11/2019	03/17/2019	7	25	275
11	03/18/2019	03/24/2019	7	20	295
12	03/25/2019	03/31/2019	7	20	315
13	04/01/2019	04/07/2019	7	20	335
14	04/08/2019	04/14/2019	7	20	355
15	04/15/2019	04/21/2019	7	15	370
16	04/22/2019	04/26/2019	5		

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

Drop/Add Deadline	Sunday, 01/13/2019
Course Withdrawal Deadline	Sunday, 03/31/2019
Complete Semester Withdrawal	Friday, 04/26/2019

**Note: In order to withdraw after Mar. 31, you would need to withdraw from ALL of your ASU courses, not just this course. That is why the later withdrawal is referred to as a Complete withdrawal from ASU.**

### Important Course Dates

Week	From	To	Objectives	Comments
1	Jan. 4	Jan. 13	Course Overview, Syllabus, Schedule, Introductions, <b>Initial Knowledge Check</b>	Complete Syllabus Acknowledgement Quiz
2	Jan. 14	Jan. 20		*Drop/Add – Sun. Jan. 13
3	Jan. 21	Jan. 27		
4	Jan. 28	Feb. 3	Objectives 1 to 4 due Fri. Feb. 1	
5	Feb. 4	Feb. 10		<b>Test 1 by Mon. Feb. 4</b>
6	Feb. 11	Feb. 17		
7	Feb. 18	Feb. 24		We <b>do</b> have regular classes on Mon. Feb. 18, Presidents' Day.
8	Feb. 25	Mar. 3	Objectives 5 to 9 due Fri. Mar. 1	<b>Test 2 by Fri. Mar. 1</b>
9	Mar. 4	Mar. 10	<b>Spring Break</b>	<b>Mar. 3 - 10</b>
10	Mar. 11	Mar. 17		
11	Mar. 18	Mar. 24		
12	Mar. 25	Mar. 31		*Course Withdrawal Sun. Mar. 31
13	Apr. 1	Apr. 7	Objectives 10 to 15 due Fri. Apr. 5	
14	Apr. 8	Apr. 14		<b>Test 3 by Mon. Apr. 8</b>
15	Apr. 15	Apr. 21		
16	Apr. 22	Apr. 26	Objectives 16 to 18 due Fri. Apr. 26	*Complete Course Withdrawal Fri. Apr. 26
17	Apr. 29	May 3	<b>Final Exams – <a href="#">ASU Final Exam Schedule</a></b>	

### Objectives Mastery Levels

<b>Obj. #</b>	<b>Objective Names</b>	<b>Goal Topics</b>	<b>Cumulative Topics</b>	<b>Minimum Mastery Level Requirement</b>
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	10	256	90%
12	Composite Functions	16	272	90%
13	Quadratic Equations	28	300	95%
14	Polynomial Functions & Zeros	16	316	90%
15	Rational Functions	7	323	90%
16	Exponential Functions	13	336	90%
17	Logarithmic Functions	14	350	90%
18	Applications of Exponential and Log Functions	20	370	95%

**Tutor Center:** The Math Tutor Center (**free of charge**) will be open M - F as scheduled at their website <https://tutoring.asu.edu/student-services/tutoring>. 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".

**Technical Support Contact Information:** For technical assistance 24 hours a day, 7 days a week, please contact the University Technology. Phone: 480-965-6500 or 1-855-278-5080. Email: [helpdesk@asu.edu](mailto: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/>.

### **Academic Integrity:**

- Academic honesty is expected of all students in all examinations, papers, and laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see <http://provost.asu.edu/academicintegrity>
- Any parts of exams, assignments, reports, or solutions to these, from current or previous semesters, posted to any website not affiliated with ASU may result in academic integrity disciplinary actions against the students posting them and the students using them.
- No individual extra credit assignments will be offered.

### **Conduct:**

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

- <https://eoss.asu.edu/dos/srr/c> (Student Code of Conduct).
- [ACD 125: Computer, Internet, and Electronic Communications.](#)
- <https://provost.asu.edu/academic-integrity> 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. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. Also, profanity, vulgarity, and unkindness will not be tolerated. Please be kind in your messages to everyone in our class. 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.

Classroom behavior: Be sure to arrive on time for class. Excessive tardiness will be subject to sanctions. 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/iPod player, text messaging, constant talking, eating food noisily, or reading a newspaper will not be tolerated.

**Accommodating students with disabilities:** 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. DRC staff can also be reached at: (480) 965-1234 (V) or (480) 965-9000 (TTY). For additional information, visit: <https://eoss.asu.edu/drc> .

**Policy against threatening behavior:** (Student Services Manual [SSM 104-02](#) “Handling Disruptive, Threatening or Violent Individuals on Campus”): All incidents and allegations of violent or threatening conduct by an ASU student (whether on-or off campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. If either office determines that the behavior poses or has posed a serious threat to personal safety or to the welfare of the campus, the student will not be permitted to return to campus or reside in any ASU residence hall until an appropriate threat assessment has been completed and, if necessary, conditions for return are imposed. ASU PD, the Office of the Dean of Students, and other appropriate offices will coordinate the assessment in light of the relevant circumstances.

**Absences related to religious observances/practices or university sanctioned events and activities:** If you will be absent from class due to a religious observance or practice or a university sanctioned event or activity, it is your responsibility to inform the instructor a week in advance. Your instructor will work with you on alternative and reasonable arrangements for any time missed.

**Title IX:** Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/faqs>.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, <https://eoss.asu.edu/counseling>, is available if you wish discuss any concerns confidentially and privately.

The School of Mathematical and Statistical Sciences encourages faculty to address and refer to students by their preferred name and gender pronoun. If your preferred name is different than what appears on the class roster, or you would like to be addressed using a specific pronoun, please let your instructor know.

**End of Syllabus!**