

**Instructor:** Scott Hader

**Office:** MSCS 409

**Office Hours:** MW 1:30-2:20 at MLSC; F 1:30-2:20 in my office or by appointment

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**Connect Math Tech Support:** 1-949-390-2095 or <http://support.connectmath.com/>

**ALEKS Tech Support:** 1-714-619-7090

**Syllabus Attachment.** OSU has compiled useful information that applies to all classes at

[http://academicaffairs.okstate.edu/sites/default/files/Fall\\_2015\\_Syllabus.pdf](http://academicaffairs.okstate.edu/sites/default/files/Fall_2015_Syllabus.pdf)

This website includes add/drop/withdrawal dates, university holidays, accommodations for students with disabilities, academic resources, and much more. You are responsible for reading this information and having any questions answered.

**This study of College Algebra involves the use of technology** – the use of the graphing calculator has been integrated into the delivery of this course. Online methods are also used. Technology can be a tremendous aid in learning mathematics only if it is used *appropriately*. Technology is not a "quick fix" to learning functions or any mathematics! Because of the importance of technology today, a goal of the course is that you are comfortable with it and that you know when it is *appropriate* to choose it in learning mathematics. I think you will find technology is a great asset in learning mathematics.

**Course Prerequisites.** A minimum score of 30 on the ALEKS assessment or a Grade of C or better in Math 1483. Some minimal familiarity with a graphing calculator such as the Texas Instrument TI-83Plus is also required.

**Course Objectives.** To learn college-level algebra and to complete the college mathematics requirements for further study of mathematics and of mathematically-dependent subjects.

### Required Textbook Package and Supplies.

- **Connect Math Homework and Textbook & ALEKS Homework Package.** The bursar account of each individual enrolled in College Algebra 2 weeks after the University drop deadline will be charged for access to the Connect Math and ALEKS homework and e-textbook. There are also several resources and a gradebook provided online. If you desire a softbound printed textbook it can be ordered directly from McGraw-Hill from the Connect Math homepage for \$15.00.
- **Graphing Calculator.** You are required to have a TI 83 or a TI 84 series graphing calculator (CAS system, TI Nspire, or similar calculators are not allowed) for this course. I will be using a TI-83 Plus graphing calculator for class demonstrations. You may check out a TI-83 Plus graphing calculator from the Mathematics Department (401 MS) for use during the semester while the supply lasts; there is NO charge.

**Course Evaluation.** There will be a total of 1000 points possible in this course, distributed among homework, worksheets, group work, MLSC participation, hourly exams, and the final exam as shown below. Course grades will be determined according to the following distribution.

Homework	200 points	Letter grades will be assigned according to the following scale.	
Worksheets	75 points	900-1000 points	A
In Class Group Work	50 points	800-899 points	B
MLSC Participation	75 points	700-799 points	C
Mid-Term Exam 1, 2, 3, 4	400 points	600-699 points	D
Final Examination	200 points	0-599 points	F
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TOTAL	1000 points		

**Examinations.** There will be four (4) fifty-minute examinations with a possible score of 100 points each and a 200 point comprehensive final examination. *Make-up midterm exams* will be considered if and only if the request is made in **advance** for known conflicts that are **documented, valid and unavoidable**; or your request must be made in a timely manner when last minute extenuating circumstances arise. If this condition is not satisfied, it is understood that the opportunity to receive a make-up exam is voided. In the instance that a make-up exam is appropriate, the College Algebra course coordinator will schedule and administer the make-up exam in a timely manner. Bring your student ID to each examination.

**Exam Dates.** Our exams will be held on the following dates; mark your calendar NOW!

**Exam 1: Friday September 11 over 1.1-1.8**

**Exam 2: Monday October 5 over 2.1, 2.3-2.8, 5.1 & 3.7**

**Exam 3: Wednesday October 28 over 3.1-3.5, 2.2, 7.1 & 7.3**

**Exam 4: Wednesday November 18 over 4.1-4.6**

**Final Exam: Monday December 7, 12:00-1:50pm (Comprehensive) ANSI 123**

**Homework Grade.** Homework will be completed online using the Connect Math program and additionally the ALEKS Prep for College Algebra for the first six weeks of the semester. The homework category will be worth 200 points and each assignment will be worth 5 points. Late homework will not be accepted.

**Worksheets.** During the semester you will complete Worksheets about once a week as noted in the course outline. The worksheets will be due at the beginning of the class session on the due date. Late worksheets will not be accepted. All work must be shown. The worksheet category will be worth 75 points and each worksheet will be worth 5 points.

**In Class Group Work.** Periodically (about once a week) over the semester Group Work will be completed in class. You must be present to complete the Group Work. Group work cannot be made up. The Group Work category will be worth 50 points and each Group Work will be worth 5 points.

**MLSC Participation.** You will earn points by using the free resources at the Mathematics Learning Success Center (MLSC). Each week (Sunday-Friday) you will spend a minimum of 1 hour at the MLSC to earn MLSC participation points. Five (5) points will be earned each week beginning the week of August 17 and ending the Friday (December 4) of pre-finals week. (The MLSC may be open during Finals Week, but participation points will not be earned.) **To ensure that your points are recorded each time that you go to the MLSC, make sure that you check in and check out with your OSU Student ID and identify yourself as a College Algebra student.** I also encourage you to keep a log of the dates and times that you visited for your own reference. MLSC Participation Points will not be recorded if you check into the MLSC during the time your class meets. You also need to spend a minimum of 15 minutes working on College Algebra each time you attend the MLSC for the time to count. By the end of the second week of class you will be able to log into the STAR system and view the time you have completed for the week. (You are responsible to make sure you are in attendance at the MLSC for the minimum 15 minutes each time you check in.) The weekly points earned are all or nothing. Please be mindful that the computer is unforgiving and 59 minutes in a week will not earn any MLSC points. To see your time for the week log in to "star.okstate.edu" and use your okey password.

**Every time you go to the MLSC:** Check in and check out with your OSU Student ID Card.

**The MLSC is open the following times this semester:**

Sunday	1:00pm – 9:00pm
Monday – Thursday	9:00am – 9:00pm
Friday	9:00am – 5:00pm

The MLSC will be closed on University Holidays

**MLSC: Mathematics Learning Success Center** - The MLSC is an invaluable resource to support your mathematical learning. The MLSC is located on the 5<sup>th</sup> floor of the Library (Check in at the front desk). For more information, visit the MLSC website at [www.math.okstate.edu/mlsc](http://www.math.okstate.edu/mlsc), or call 405-744-5818 or 405-744-5688.

**Electronics In The Classroom.** To promote learning and student interaction in the classroom electronic devices will not be permitted. These electronic devices include, but are not limited to cell phones, ipods, ipads, laptops, and earbuds.

**More on Class Attendance.** Class attendance involving active participation is a very important element in your success in learning College Algebra. YOU ARE EXPECTED TO ACTIVELY PARTICIPATE IN EACH CLASS SESSION. Experience has shown a definite correlation between good class attendance and good grades. Signing the class Attendance Sheet for another student is not permitted; if it is determined that a student signed in for another student, this unethical conduct will be regarded as a violation of Academic Integrity and the appropriate University policies will be employed. Of course, you won't get anything out of the class if you are there physically but not mentally or if you are unprepared. Simply showing up to class is not enough.

Because of the value I place on our class sessions as active learning opportunities, I ask that you assume responsibility for being physically present no later than time the class is scheduled to start, e.g., 8:30am. If you do miss a class session, you are responsible for finding out what you missed from a classmate, including any announcements and notes from class discussions. I also realize that you may have a class that follows this one; I will dismiss each class session promptly at time the class is scheduled to end, e.g., 9:20 am.

**Drop and Withdrawal Policy (General University Policy 2-0206).** "Dropping" means withdrawing from a specific course while "withdrawal" means withdrawing *from all courses* and leaving the University for the balance of the term. The drop and withdrawal dates are noted on the syllabus attachment. IT IS YOUR RESPONSIBILITY TO KNOW AND COMPLY WITH ALL DEADLINES. Reasons similar to those listed below will NOT result in approval for dropping a course after the deadline (from OSU Policy 4.03):

- Student's lack of knowledge or misunderstanding of the deadline.
- Student waited to get the results of an exam or other assignment.
- Student's grades have declined since the deadline.
- Student doesn't need the course for graduation.
- Different deadlines existed at a previous school.

**Incomplete Grade.** The grade of "I" is given to students who satisfactorily complete the majority of the course work and whose work averages "D" or better, but who have been **unavoidably** prevented from completing the remaining work of the course. A condition that the students must repeat the course in order to remove the "I" is not permitted. The maximum time allowed for a student to remove an "I" is one calendar year.

**Academic Integrity.** The university has explicit rules governing academic integrity. Please consult the OSU Fall 2015 Syllabus Attachment mentioned above.

Working with another person or in study groups on problems can be helpful in learning the material. I encourage you to work together if you find it helpful. However, **all written and on line work submitted must be your own.** Copying someone else's problem solution, showing your written solution to someone else, or having another person complete your on line work is prohibited; such behaviors are regarded as violations of academic integrity and will be treated according to the University's policy. In order to be successful in learning the material and doing well on the examinations you must think very hard about the problems themselves **before** discussing them with anyone else.

**Special Accommodations for Students.** If you think you have a qualified disability and need special accommodations, you should notify the instructor and request verification of eligibility for accommodations from the Office of Student Disability Services. Please advise the instructor of your disability as soon as possible, and contact Student Disability Services, to ensure timely implementation of appropriate accommodations. Faculty have an obligation to respond when they receive official notice of a disability but are under no obligation to provide retroactive accommodations. To receive services, you must submit appropriate documentation and complete an intake process during which the existence of a qualified disability is verified and reasonable accommodations are identified. Call 405-744-7116 or go to <http://sds.okstate.edu/>." (OSU Fall 2015 Syllabus Attachment)

**Office Hours.** I encourage you to come talk to me during my office hours (or email for an appointment if you can't make any of those times) when you have questions or concerns. When you come to my office hours or to the MLSC, you should come prepared with specific questions. You should have already reviewed your lecture notes, read through and taken notes on the relevant portions of the textbook, and attempted some problems. Be prepared to tell me or the tutor where you are stuck or what concepts are still confusing to you, and we will be happy to help.

**Final Note. Any changes in this syllabus will be communicated to you by the instructor in class or on our course website.**

WEEK	DATE	SECTION/TOPIC	ASSIGNMENTS DUE
1	8/17	Course Introduction -- Syllabus & Course Outline Connect Math & ALEKS Prep for College Algebra	
	8/19	1.1 Linear Equations and Rational Equations	
	8/21	1.2 Applications and Modeling with Linear Equations	Section 1.1 Homework (Connect) Getting To Know You MLSC Points Week 1
	8/22		Master 20 ALEKS Topics (1 – 20)
2	8/24	1.3 Complex Numbers	Section 1.2 Homework (Connect)
	8/26	1.4 Quadratic Equations	Section 1.3 Homework (Connect) Worksheet 1
	8/28	1.5 Applications of Quadratic Equations	Section 1.4 Homework (Connect) MLSC Points Week 2
	8/29		Master 20 ALEKS Topics (21 – 40) ALEKS Initial Assessment (Connect)
3	8/31	1.6 More Equations and Applications	Section 1.5 Homework (Connect)
	9/2	1.7 Linear Inequalities and Compound Inequalities	Section 1.6 Homework (Connect) Worksheet 2
	9/4	1.8 Absolut Value Equations and Inequalities	Section 1.7 Homework (Connect) MLSC Points Week 3
	9/5		Master 20 ALEKS Topics (41 – 60)
4	9/7	Labor Day -- University Holiday	
	9/9	2.1 The Rectangular Coordinate System and Graphing Utilities	Section 1.8 Homework (Connect) Worksheet 3
	9/11	<b>EXAM 1 over 1.1 – 1.8</b>	MLSC Points Week 4
	9/12		Master 20 ALEKS Topics (61 – 80)
5	9/14	2.3 Functions and Relations	Section 2.1 Homework (Connect)
	9/16	2.4 Linear Equations in Two Variables and Linear Functions	Section 2.3 Homework (Connect) Worksheet 4
	9/18	2.5 Applications of Linear Equations and Modeling	Section 2.4 Homework (Connect) MLSC Points Week 5
	9/19		Master 20 ALEKS Topics (81 – 100)
6	9/21	5.1 Systems of Linear Equations in Two Variables and Applications	Section 2.5 Homework (Connect)
	9/23	2.6 Transformations of Graphs	Section 5.1 Homework (Connect) Worksheet 5
	9/25	2.7 Analyzing Graphs of Functions and Piecewise- Defined Functions	Section 2.6 Homework (Connect) MLSC Points Week 6
	9/26		Master 20 ALEKS Topics (101 – 120)
7	9/28	2.8 Algebra of Functions and Function Composition	Section 2.7 Homework
	9/30	3.7 Variation	Section 2.8 Homework Worksheet 6
	10/2	3.1 Quadratic Functions and Applications	Section 3.7 Homework Worksheet 7, MLSC Points Week 7
8	10/5	<b>EXAM 2 over 2.1, 2.3 – 2.8, 5.1 &amp; 3.7</b>	

	10/7	3.2 Introduction to Polynomial Functions	Section 3.1 Homework
	10/9	Fall Break -- University Holiday	
9	10/12	3.3 Division of Polynomial Functions and the Remainder And Factor Theorems	Section 3.2 Homework
	10/14	3.4 Zeros of Polynomials	Section 3.3 Homework Worksheet 8
	10/16	3.5 Rational Functions	Section 3.4 Homework MLSC Points Week 9
10	10/19	2.2 Circles	Section 3.5 Homework
	10/21	7.1 The Ellipse	Section 2.2 Homework Worksheet 9
	10/23	7.3 The Parabola	Section 7.1 Homework MLSC Points Week 10
11	10/26	4.1 Inverse Functions	Section 7.3 Homework Worksheet 10
	10/28	<b>EXAM 3 over 3.1 – 3.5, 2.2, 7.1 &amp; 7.3</b>	
	10/30	4.2 Exponential Functions	Section 4.1 Homework MLSC Points Week 11
12	11/2	4.3 Logarithmic Functions	Section 4.2 Homework
	11/4	4.4 Properties of Logarithms	Section 4.3 Homework Worksheet 11
	11/6	4.5 <u>Exponential</u> and Logarithmic <u>Equations</u>	Section 4.4 Homework MLSC Points Week 12
13	11/9	4.5A Exponential and <u>Logarithmic Equations</u>	Section 4.5 Homework
	11/11	4.6 Modeling with Exponential and Logarithmic Functions	Section 4.5A Homework Worksheet 12
	11/13	4.6A Modeling with Exponential and Logarithmic Functions	Section 4.6 Homework MLSC Points Week 13
14	11/16	8.1 Sequences and Series	Section 4.6A Homework Worksheet 13
	11/18	<b>EXAM 4 over 4.1 – 4.6A</b>	
	11/20	8.2 Arithmetic Sequences and Series	Section 8.1 Homework
15	11/23	8.3 Geometric Sequences and Series	Section 8.2 Homework Worksheet 14
	11/25	Thanksgiving -- University Holiday	
	11/27	Thanksgiving -- University Holiday	MLSC Points Bonus Week (11/24)
16	11/30	Review Exam 1 & 2 Material	Section 8.3 Homework Worksheet 15
	12/2	Review Exam 3 & 4 Material	Worksheet 16,
	12/4	Review	MLSC Points Week 16
Finals Week	12/7	<b>Final Exam -- Comprehensive 12:00noon – 1:50pm ANSI 123</b>	