



Instructor: Ashwini Bhat

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Class Meeting: MWF, 1:30PM-2:20PM, CLB 112

Office Hours:

- M, 10:30AM-11:30AM, MS 421
- W, 4:30PM-6:30PM, MLSC

Online Classroom: [oc.okstate.edu](http://oc.okstate.edu)

MyMathLab Tech Support:

- [mymathlab.com/contactus\\_stu.html](http://mymathlab.com/contactus_stu.html)
- 1-800-677-6337

OSU Syllabus Attachment: [academicaffairs.okstate.edu/faculty-a-staff](http://academicaffairs.okstate.edu/faculty-a-staff)

**Description.** This study of College Algebra involves the use of technology – the use of the graphing calculator has been integrated into the delivery throughout. 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. Some minimal familiarity with a graphing calculator such as the Texas Instruments TI-83 or TI-83 Plus 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.

**Textbook.** You are required to purchase a bundle that includes MyMathLab access, a custom textbook, and a graphing calculator manual. The text is *College Algebra: Graphs and Models (OSU Custom 2<sup>nd</sup> edition)* by M. Bittinger, J. Beecher, D. Ellenbogen, and J. Penna. Pearson Education, Inc. 2013. Note if you do not register for MyMathLab immediately, you will not be able to complete required homework. You are responsible for registering in time to meet all course deadlines.

**Graphing Calculator.** You are required to have a TI-83, TI-83 Plus, TI-84, or TI-84 Plus graphing calculator for this course. I will be using a TI-83 Plus graphing calculator for class demonstrations. You may check out a TI-83/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, quizzes, attendance, MLSC participation, hourly exams, and the final exam as shown below. Course grades will be determined according to the following distribution.

Distribution	
Homework	200 points
Worksheets	100 points
Attendance	40 points
MLSC participation	60 points
Mid-Term Exam 1,2,3,4	400 points
Final Examination	200 points

Grade	
900-1000 points	A
800-899 points	B
700-799 points	C
600-699 points	D
0-599 points	F

**Examinations.** There will be four fifty-minute exams with a maximum possible score of 100 points each and a 200 point comprehensive final examination. *Make-up midterm exams* will be given only for documented, valid and unavoidable conflicts. Your request to receive a make-up exam must be made in writing in advance for known conflicts or in a timely manner when 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.

**Homework.** Homework will be completed online using the MyMathLab program. The total number of points possible on homework assignments is 200 points. Late work will not be accepted. The lowest two homework scores will be dropped.

**Worksheets.** During the semester you will complete Worksheets on weeks when an exam is not scheduled. All work must be shown. The total number of points possible on worksheets is 100 points. Late worksheets will not be accepted. The two lowest worksheet scores will be dropped.

**Attendance.** Daily attendance is critically important. It is difficult, and sometimes impossible, to succeed in a college course without regular attendance. At least once per day, I will take attendance in some way. For each day you are present in class for the entire class session and actively participating you will receive one attendance point. The total number of attendance points possible for the semester is 44 points, however your score will be calculated based on 40 attendance points.

**MLSC Participation.** In addition to participating in class daily, you will earn points by using the free resources at the Mathematics Learning Success Center (MLSC). Each week (Sunday-Friday) you are required to spend a minimum of one hour at the MLSC to earn MLSC participation points. Four points will be earned each week beginning the week of August 18 and ending December 7. 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 your 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. Please be mindful that the computer is unforgiving: 59 minutes in a week will not earn any MLSC points. To see your time for the week use your okey password at [star.okstate.edu](http://star.okstate.edu).

**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 1:30pm. 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 2:20pm.

**Drop and Withdraw Policy.** *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):

- a. Student's lack of knowledge or misunderstanding of the deadline.
- b. Student waited to get the results of an exam or other assignment.
- c. Student's grades have declined since the deadline.
- d. Student doesn't need the course for graduation.
- e. 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 2014 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 online 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 online 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 [sds.okstate.edu](http://sds.okstate.edu). (OSU Fall 2014 Syllabus Attachment)

**Office Hours.** I encourage you to come talk to me during my office hours or email for an appointment, 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.

**Schedule.** The following course schedule is preliminary.

MONDAY	WEDNESDAY	FRIDAY
Aug 18th <b>1</b> Syllabus and MML Registration Getting to know you <i>Review</i>	20th <b>2</b> §1.1 <i>Introduction to Graphing</i>	22nd <b>3</b> §1.2 <i>Functions and Graphs</i> Due: Getting to know you, Review, §1.1
25th <b>4</b> §1.3 <i>Linear Functions, Slope, and Applications</i> Due: §1.2	27th <b>5</b> §1.4 <i>Equations of Lines and Modeling</i> Due: §1.3, Worksheet 1	29th <b>6</b> §1.5 <i>Linear Equations, Functions, Zeros, and Applications</i> Due: §1.4
Sep 1st University holiday	3rd <b>7</b> §1.6 <i>Solving Linear Inequalities</i> Due: §1.5, Worksheet 2	5th <b>8</b> §2.1 <i>Increasing, Decreasing, and Piecewise Functions; Applications</i> Due: §1.6
8th <b>9</b> §2.2 <i>The Algebra of Functions</i> Due: §2.1	10th <b>10</b> §2.3 <i>The Composition of Functions</i> Due: §2.2, Worksheet 3	12th <b>11</b> §2.4 <i>Symmetry</i> Due: §2.3
15th <b>12</b> §2.5 <i>Transformations</i> Due: §2.4	17th <b>13</b> <b>Exam 1</b> §1.1–2.3 Due: Sample Exam 1	19th <b>14</b> §2.6 <i>Variation and Applications</i> Due: §2.5
22nd <b>15</b> §3.1 <i>The Complex Numbers</i> Due: §2.6	24th <b>16</b> §3.2 <i>Quadratic Equations, Functions, Zeros, and Models</i> Due: §3.1, Worksheet 4	26th <b>17</b> §3.2A <i>Quadratic Equations, Functions, Zeros, and Models</i> Due: §3.2
29th <b>18</b> §3.3 <i>Analyzing Graphs of Quadratic Functions</i> Due: §3.2A	Oct 1st <b>19</b> §3.4 <i>Solving Rational Equations and Inequalities with Absolute Value</i> Due: §3.3, Worksheet 5	3rd <b>20</b> §3.5 <i>Solving Equations and Inequalities with Absolute Value</i> Due: §3.4
6th <b>21</b> §4.1 <i>Polynomial Functions and Modeling</i> Due: §3.5	8th <b>22</b> <b>Exam 2</b> §2.4–3.5 Due: Sample Exam 2	10th <b>23</b> §4.2 <i>Graphing Polynomial Functions</i> §4.3 <i>Long Division of Polynomials</i> Due: §4.1
13th <b>24</b> §4.3 <i>Synthetic Division</i> §4.4 <i>Zeros of Polynomial Functions</i> Due: §4.2, §4.3 (Long Division)	15th <b>25</b> §6.1 <i>Systems of Equations in Two Variables</i> Due: §4.3 (Synthetic Division), §4.4, Worksheet 6	17th <b>26</b> §6.2 <i>Systems of Equations in Three Variables</i> Due: §6.1

MONDAY	WEDNESDAY	FRIDAY
20th <b>27</b> §7.2 <i>The Circle and the Ellipse</i> Due: §6.2	22nd <b>28</b> §7.1 <i>The Parabola</i> Due: §7.2, Worksheet 7	24th University holiday
27th <b>29</b> §8.1 <i>Sequences and Series</i> Due: §7.1	29th <b>30</b> §8.2 <i>Arithmetic Sequences and Series</i> Due: §8.1, Worksheet 8	31st <b>31</b> §5.1 <i>Inverse Functions</i> Due: §8.2
Nov 3rd <b>32</b> §5.2 <i>Exponential Functions and Graphs</i> Due: §5.1	5th <b>33</b> <b>Exam 3</b> §4.1–8.2 Due: Sample Exam 3	7th <b>34</b> §5.3 <i>Logarithmic Functions and Graphs</i> Due: §5.2
10th <b>35</b> §5.4 <i>Properties of Logarithmic Functions</i> Due: §5.3	12th <b>36</b> §5.4A <i>Properties of Logarithmic Functions</i> Due: §5.4, Worksheet 9	14th <b>37</b> §5.5 <i>Solving Exponential Equations and Logarithmic Equations</i> Due: §5.4A
17th <b>38</b> §5.5A <i>Solving Exponential Equations and Logarithmic Equations</i> Due: §5.5	19th <b>39</b> §5.6 <i>Applications and Models: Growth and Decay; Compound Interest</i> Due: §5.5A, Worksheet 10	21st <b>40</b> <i>Chapter 5 Review</i> Due: §5.6
24th <b>41</b> <b>Exam 4</b> §5.1–5.6 Due: Sample Exam 4	26th University holiday	28th University holiday
Dec 1st <b>42</b> <i>Final Review</i>	3rd <b>43</b> <i>Final Review</i> Due: Worksheet 11	5th <b>44</b> <i>Final Review</i> Due: Worksheet 12

FRIDAY
Dec 12th <b>Comprehensive Final Exam</b> 12noon–1:50pm, CLB 313 Due: Sample Final Exam

**Final Note.** Any changes in this syllabus will be communicated to you in class by the instructor.