Instructor: Dr. Xiaowei Yang

Office: MSCS 435

Office Hours: MW 12:00-1:00pm at MLSC; Friday 12:00-1:00pm at office

or by appointment

Phone: 744-2304

Email: yang@okstate.edu

(Emails must contain your name, course and section number in

the subject line. i.e. Yang Math 1513-005)

Webpage: oc.okstate.edu

MyMathLab Tech Support: 1-800-677-6337 or http://www.mymathlab.com/contactus stu.html

**Syllabus Attachment.** OSU has compiled useful information that applies to all classes at http://academicaffairs.okstate.edu/faculty-a-staff

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 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 or a Grade of C or better in Math 1483. Some minimal familiarity with a graphing calculator such as the Texas Instruments TI-83 or 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.

- MyMathLab Access or Textbook Package. 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.
- <u>Graphing Calculator</u>. 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, worksheets, attendance, 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
Worksheets	100 points	the following scale.
Attendance	40 points	900-1000 points A
MLSC Participation	60 points	800-899 points B
Mid-Term Exam 1, 2, 3, 4	400 points	700-799 points C
Final Examination	200 points	600-699 points D
		0-599 points F
TOTAL	1000 points	•

**Examinations.** There will be four (4) fifty-minute examinations 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.

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

Exam 1: Wednesday September 17 over 1.1-1.6 & 2.1-2.3

Exam 2: Wednesday October 8 over 2.4-2.6 & 3.1-3.5

Exam 3: Wednesday November 5 over 4.1-4.4 & 6.1-6.2 & 7.1-7.2 & 8.1-8.2

Exam 4: Monday November 24 over 5.1-5.6

Final Exam: Friday December 12, 12:00-1:50pm (Comprehensive) NRC 106

**Homework Grade.** Homework will be completed online using the MyMathLab (MML) program. The total number of points possible on homework assignments is 200 points. The lowest 2 homework scores will be dropped. Late work will not be accepted.

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 2 lowest worksheet scores will be dropped.

Attendance/Class Participation Score. 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 I 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 also 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. Four (4) points will be earned each week beginning the week of August 18 and ending the Friday (December 7) 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. 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 Computer Lab is open the following times this semester:

Sunday 1:00pm - 5:00pm 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 <a href="www.math.okstate.edu/mlrc">www.math.okstate.edu/mlrc</a>, 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., 10:30am. 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., 11:20 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):

- 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 <u>unavoidably</u> 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 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 2014 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.

## Register for MyMathLab

Follow these steps from any computer as soon as possible. Assistance will be available in the MLSC beginning Monday August 18 (see below for hours).

## To register you will need:

- 1. Your OSU email address
- 2. The MyMathLab Course ID for your group is vang59348
- 3. MyMathLab Student Access Code that is packaged with your textbook or purchases online

#### Steps to Register:

- 1. Open Internet Explorer, Google Chrome, Firefox, or Safari. Go to www.mymathlab.com.
- 2. Look for "Students" on the right side of the screen and click on Register.
- 3. Follow the directions on the screen. Enter the Course ID for your section (see above).
- 4. When prompted, enter your Student Access Code (packaged with your text).
- 5. In the School Location section, select United States, and enter the Zip Code 74078 to find Oklahoma State.
- 6. When you have finished registering and see the Confirmation screen, log in to MyMathLab and click on your course. If you are on your home computer, you should click on Browser Check to make sure that you have the latest version of players that you will need.
- 7. Click on How to Enter Answers for an introduction to entering answers in MyMathLab.

Need help? Come to the math lab! There will always be a tutor or instructor there to help.

# MLSC College Algebra Lab Information

Hours:

Monday-Thursday 9:00am-9:00pm Friday 9:00am-5:00pm Sunday 1:00pm-5:00pm **Location:** 5<sup>th</sup> Floor of Edmon Low Library
Check in at the information desk

\*\*The lab will be closed on university holidays. Any other lab closures will be announced in advance.

Every Visit: Bring your OSU ID and always check-in and check-out at the Information Desk. If you do not check-in and check-out, the time of that visit will not be recorded and can not be retrieved!

WEEK	DATE	SECTION/TOPIC	DUE DATES
1	8/18	Class Overview & Introduction	In Class Questions – Wednesday 8/20
		Syllabus & MyMathLab Registration	Due online – Friday 8/22 at 11:59pm
		Review Material & Entering answers in MML	
	8/20	1.1 Introduction to Graphing	In Class Questions – Friday 8/22
			Due online – Friday 8/22 at 11:59pm
	8/22	1.2 Functions and Graphs	In Class Questions – Monday 8/25
		•	Due online – Monday 8/25 at 11:59pm
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2	8/25	1.3 Linear Functions, Slope and Applications	In Class Questions – Wednesday 8/27
			Due online – Wednesday 8/27 at 11:59pm
	8/27	1.4 Equations of Lines and Modedling	In Class Questions – Friday 8/29
			Due online – Friday 8/29 at 11:59pm
			Worksheet 1 – due at beginning of Class
	8/29	1.5 Linear Equations, Functions, Zeros, and	In Class Questions –Wednesday 9/3
		Applications	Due online – Wednesday 9/3 at 11:59pm
3	9/1	University Holiday Labor Day	
	J/ ±	- Labor Day	
	9/3	1.6 Solving Linear Inequalities	In Class Questions – Friday 9/5
1			Due online – Friday 9/5 at 11:59pm
			Worksheet 2 – due at beginning of Class
	9/5	2.1 Increasing, Decreasing, and Piecewise	In Class Questions – Monday 9/8
		Functions; Applications	Due online – Monday 9/8 at 11:59pm
4	9/8	2.2 The Algebra of Functions	In Class Questions – Wednesday 9/10
			Due online – Wednesday 9/10 at 11:59pm
	9/10	2.3 The Composition of Functions	In Class Questions – Friday 9/12
			Due online – Friday 9/12 at 11:59pm
			Worksheet 3 – due at beginning of Class
	9/12	2.4 Symmetry	In Class Questions – Monday 9/15
			Due online – Monday 9/15 at 11:59pm
5	9/15	2.5 Transformations	In Class Questions – Friday 9/19
			Due online - Friday 9/19 at 11:59pm
	9/17	Exam 1 over 1.1-1.6 & 2.1-2.3	Sample Exam 1 – due at the beginning of Class
	9/19	2.6 Variation and Applications	In Class Questions – Monday 9/22
			Due online – Monday 9/22 at 11:59pm
6	9/22	3.1 The Complex Numbers	In Class Questions – Wednesday 9/22
			Due online – Wednesday 9/22 at 11:59pm
	9/24	3.2 Quadratic Equations, functions, Zeros, and	In Class Questions – Friday 9/26
	-1-0	Models	Due online – Friday 9/26 at 11:59pm
			Worksheet 4 – due at beginning of Class
	9/26	3.2A Quadratic Equations, functions, Zeros,	
	2/20		In Class Questions – Monday 9/29
		and Models	Due 1 Manday 0/20 1 44 50
		and Models	Due online – Monday 9/29 at 11:59pm

7	9/29	3.3 Analyzing Graphs of Quadratic Functions	In Class Questions – Wednesday 10/1
			Due online – Wednesday 10/1 at 11:59pm
	10/1	3.4 Solving Rational Equations and Radical	In Class Questions – Friday 10/3
	-	Equations	Due online – Friday 10/3 at 11:59pm
	agr Tu	P G St St	Worksheet 5 – due at beginning of Class
	10/3	3.5 Solving Equations and Inequalities with	In Class Questions – Monday 10/6
		Absolute Value	Due Online – Monday 10/6 at 11:59pm
		1 -11 10 1 10 1 10 10 10 10 10 10 10 10 10	
8	10/6	4.1 Polynomial Functions and Modeling	In Class Questions – Friday 10/10
			Due online – Wednesday 10/10 at 11:59pm
	10/8	Exam 2 over 2.4 -2.6 & 3.1-3.5	Sample Exam 2 – due at the beginning of Class
	10/10	4.2 Graphing Polynomial Functions	In Class Questions – Monday 10/13
		4.3 Long Division of Polynomials	Due online – Wednesday 10/13 at 11:59pm
			area and a second
9	10/13	4.3 Synthetic Division of Polynomials	In Class Questions – Wednesday 10/15
		4.4 Theorems about Zeros of Polynomial	Due online – Wednesday 10/15 at 11:59pm
		Functions	
i i	10/15	6.1 Systems of Equations in Two Variables	In Class Questions – Friday 10/17
		The state of the s	Due online – Friday 10/17 at 11:59pm
	-		Worksheet 6 – due at beginning of Class
	10/17	6.2 Systems of Equations in Three Variables	In Class Questions – Monday 10/20
	,		Due online – Monday 10/20 at 11:59pm
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10	10/20	7.2 The Circle and the Ellipse	In Class Questions – Wednesday 10/22
			Due online – Wednesday 10/22 at 11:59pm
	10/22	7.1 The Parabola	In Class Questions – Monday 10/27
	10,22	7.2 1.10 1 0.10.50.0	Due online – Monday 10/27 at 11:59pm
			Worksheet 7 – due at beginning of Class
	10/24	University Holiday Fall Break	
	10,21		
11	10/27	8.1 Sequences and Series	In Class Questions – Wednesday 10/29
	10/2/	0.1 Sequences and series	Due online – Wednesday 10/29 at 11:59pm
-	10/29	8.2 Arithmetic Sequences and Series	In Class Questions – Friday 10/31
	10,25	0.2 Artimetic sequences and series	Due online – Friday 10/31 at 11:59pm
			Worksheet 8 – due at beginning of Class
	10/31	5.1 Inverse Functions	In Class Questions – Monday 11/3
	10/31	5.1 inverse i unctions	Due online – Monday 11/3 at 11:59pm
			Due omme Womany 11/3 at 11/3 pm
12	11/2	5.2 Exponential Functions and Graphs	In Class Questions – Friday 11/7
12	11/3	5.2 Exponential runctions and Graphs	Due Online – Friday 11/7 at 11:59pm
	11/5	Fuery 2 com 4.1 4.4 9.6 1.6 2.9 7.1 7.2 9.9 1	Sample Exam 3 – due at the beginning of Class
	11/5	Exam 3 over 4.1-4.4 & 6.1-6.2 & 7.1-7.2 & 8.1-	Sample Exam 5 – due at the beginning of Class
	11/7	5.3 Logarithmic Functions and Graphs	In Class Questions – Monday 11/10
	11//	5.5 Logarithmic runctions and Graphs	Due online – Monday 11/10 at 11:59pm
	-		2 2 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
13	11/10	5.4 Properties of Logarithmic Functions	In Class Questions – Wednesday 11/12
72	11/10	3.4 Froperties of Logarithmic Functions	Due online – Wednesday 11/12 at 11:59pm
	11/17	E AA Proportion of Logarithmic Constiant	In Class Questions – Friday 11/14
	11/12	5.4A Properties of Logarithmic Functions	Due online – Friday 11/14 at 11:59pm
	00101	F. Calda F. Calda San San San San San San San San San Sa	Worksheet 9 – due at the beginning of class
	11/14	5.5 Solving Exponential Equations and	In Class Questions – Monday 11/17
		Logarithmic Equations	Due Online – Monday 4/7 at 11:59pm

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14	11/17	5.5A Solving Exponential Equations and	In Class Questions – Wednesday 11/19
		Logarithmic Equations	Due online – Wednesday 11/19 at 11:59pm
	11/19	5.6 Applications and Models: Growth and	In Class Questions – Wednesday 11/21
		Decay; Compound Interest	Due Online – Wednesday 11/21 at 11:59pm
			Worksheet 10 – due at the beginning of Class
	11/21	Chapter 5 Review	
15	11/24	Exam 4 over 5.1-5.6	Sample Exam 4 – due at the beginning of Class
	11/26	University Holiday Thanksgiving Break	
	11/28	University Holiday Thanksgiving Break	
16	12/1	Final Review	
	12/3	Final Review	Worksheet 11 – due at beginning of Class
	12/5	Final Review	Worksheet 12 – due at beginning of Class
Finals	12/12	Comprehensive Final 12:00noon – 1:50pm	Give Final Location
			Sample Final Exam – due at the beginning of
			the Final