## MATH 1030, COLLEGE ALGEBRA **SYLLABUS**

| COURSE TITLE: | College Algebra                                             |
|---------------|-------------------------------------------------------------|
| CREDIT:       | 3 credit hours                                              |
| TEXT:         | College Algebra and Trigonometry by Blitzer, third edition. |
| SOFTWARE:     | MyMathLab.                                                  |

COURSE DESCRIPTION: This is a course in Algebra. The course is computer-assisted, which means students will use the computer (along with the instructor) to complete the course. Topics include linear, guadratic, and rational equations and inequalities, the algebra of functions (including polynomial, rational, exponential, and logarithmic functions), the graphs of some of these functions, and systems of equations.

**PREREQUISITES:** You must have: 22 or higher on the UMSL Math Placement Test within the last six months. The prerequisites will be checked. If a record of your prerequisites is not in the UMSL computer system, you will be asked to provide verification by the end of the first week of classes; otherwise you will be removed from class.

### **MYGATEWAY** (https://mygateway.umsl.edu/webapps/login):

You need to check WS08-MATH1030-002 site. Weekly reading assignment, worksheets, solutions, reviews for the tests, and a copy of the syllabus are among the material that will be posted in the **Course Documents** folder on this site. A message will be posted in the announcements as soon as any new material is posted on MYGATEWAY. To assure that you have the correct copies, please print or view your assignments from the machines on campus. You should save the document to the computer before printing.

#### EMAIL REQUIREMENT:

All correspondence will be made through the e-mail address that you register with in CourseCompass.

#### CourseCompass (http://www.coursecompass.com)

This is a computer-assisted course in which students will use the computer to do homework, get help, and prepare for the tests. The first day of class you will register using the access code that accompanies your textbook and the Math1030 section B Course Access Code. Please use an e-mail address that you check frequently as most communication from the instructor will be via e-mail.

### HELP:

Help is available outside class:

- (1) CourseCompass
- (2) MTLC -- You can do your homework and get help from the TA's and other instructors. Time to be announced.
- (3) From Your instructor's office hours. You may attend any of the Math 1030 instructors' office hours.
- (4) Free tutoring is available in the Math Lab in 425 SSB in the daytime, evenings and weekends. Visit <u>http://www.cs.umsl.edu/lab/mathlab.html</u> or call 516-5190 for more details.

# STRUCTURE OF THE COURSE

## ATTENDANCE:

This class meets three times a week. Attendance will be recorded daily. Announcements of any changes in the syllabus, test dates, or assignments will be made in class. Two points per missing lecture and/or lab will be taken off your next exam grade unless you are excused or you meet **all of the** following conditions:

- You have an 80% or better in your last exam
- You have an 80% or better in your exam average.
- You have an 80% or better course average
- You have an 80% or better quiz average
- You have an 80% or better homework average

You are encouraged not to miss a lecture even if you qualify to miss.

The lectures and labs are mandatory prior to the first exam and the last lecture for the semester is also mandatory. Coming to a class meeting late or leaving early without a proper and prior excuse will be counted as not attending that meeting at all. Once you are in the classroom, please turn off all your pagers or cell phones. Working on your laptop is not allowed during the lectures.

## HOMEWORK:

Working homework problems is the best preparation for quizzes and tests. You will use CourseCompass to do your homework. The problems are similar to the problems presented during lecture. Homework can be completed more than once with the **last score** kept as the grade for that section. The immediate feedback, the guided solutions, and examples are great help. You can ask questions from your instructor, teaching assistants, or other students. <u>YOU MUST CLICK THE SUBMIT BUTTON FOR YOUR HOMEWORK TO COUNT</u>. You may practice the problems as many times as you need to in order to master the knowledge and skills to do well on the tests and quizzes. It is recommended that you print the completed homework so that you can refer to them in class and use them to

study for the quizzes and exams. The homework grade will be calculated by taking the average of all the homework assignments. You are expected to spend at least two hours outside of class for each hour of class time. Late homework is not allowed.

- The homework should be done gradually and not on the due date.
- Make sure to redo the problems on your own once after getting help. Some students complain that they can do the homework but fail the quizzes. In the majority of those cases, the grade on the test and quizzes will drastically increase if you redo a problem after getting help.
- You need to have a notebook with the homework problems you are doing prior to keying your answer in the computer. This will help you with preparations for quiz and test reviews. At the time of each hourly exam, the notebook is checked and 20% is subtracted from your final homework grade if you don't maintain this notebook.
- In case you have done the problem correctly but the computer counted it wrong, you need to give your instructor a printout with the answer. Your grade will be changed if it is verified that you have the correct answer.

## WORKSHEETS:

Each week you will need to print the worksheet and lecture outline from CourseCompass. These will help you better understand the lecture material. The worksheet problems supplement the problems in the book. You should carefully read the assigned sections of the book prior to the lectures and work on the weekly worksheet **prior** to the weekly lecture. The solutions for the worksheet are posted prior to the quizzes. You need to check your work and ask questions if you have done a problem incorrectly. This worksheet will be collected on Friday before the quiz.

- You can't start a quiz early if you have not finished your worksheet.
- The worksheet is checked for attempt and not correctness and 20% is subtracted from your quiz grade for the week if you have not completed the worksheet.

# NO CALCULATORS ALLOWED FOR QUIZZES AND EXAMS!!

The reason for this is that we have found that the use of such devices tends to exacerbate student weaknesses, particularly regarding basic skills. For that reason, you might consider not using one on your homework unless it's an absolute must.

# QUIZZES:

There is a quiz over the material from the homework assignment each week. No make up is given for the in-class quizzes and your lowest grade for the semester will be dropped. The quizzes are mostly online and have to be taken in the lab at a designated time. Each quiz might have a few problems from the worksheets that are on paper. You have to show your work for the quizzes whether they are on paper or online. Paper will be provided for the online quizzes. Solutions for the quizzes will be posted, and you will be able to review your solutions to the online quizzes by Friday night following the quiz. There will also be a pretest quiz before each exam. The pretest quiz will cover any of the material that may appear on your test. Solutions will be posted the evening before the exam. You are expected to print the quiz solutions, print the online quizzes, and add your work from the quizzes and use it to study for the exams.

### TESTS:

Four **tests** will be given during Lab B, as dates noted on the calendar. The tests are very similar to the homework, worksheets, and quizzes. A make-up test may be given only in a case of verifiable emergency and only if you contact me prior to the test; illness requires a doctor's excuse. Any make-up test will be longer and more difficult than the test given in class. The test dates on the syllabus are <u>approximate</u> and subject to change. You have to show your work for the exams whether they are on paper or online. Paper will be provided for the online exams. Solutions for the tests are posted and the test (if online) will be available for you to review by the Monday night following the test. You are expected to print the solutions, print the online test, and add your work from the test. You will have a review sheet for each test. The best way to prepare for the tests is to review the quizzes and complete the test review. The test review is due before taking the pretest quiz. The review sheet is checked for an attempt and not correctness and 20% will be subtracted from your pretest guiz grade for if you have not completed the review sheet.

#### FINAL EXAM:

The **mandatory** FINAL EXAM will be comprehensive and worth 200 points. Your course grade can't be more than one letter grade higher than your final exam grade, i.e. the best grade you can get will be a D if you fail the final exam. There will be practice exam guestions provided prior to the final exam.

#### COURSE GRADE:

Your course grade will be based on:

| Homework   | 100 Points |
|------------|------------|
| Quizzes    | 100 Points |
| Test 1     | 100 points |
| Test 2     | 100 Points |
| Test 3     | 100 Points |
| Test 4     | 100 Points |
| Final Exam | 200 Points |
| Total      | 800 Points |

The grade scale is as follows:

| 720 - 800 | A | A or A-      |
|-----------|---|--------------|
| 640 - 719 | В | B+, B, or B- |
| 560 -639  | С | C+, C, C-    |
| 480 - 559 | D |              |
| Below 480 | F |              |

You need to follow the proper procedure for **dropping** the course. A grade of F will be assigned to a student whose name is still on the final class roster and has not dropped the course officially. This grade will not be changed retroactively. Delayed grades can be given only for a situation where a student has completed all the work, with a grade of C- or above, and has to miss the final exam because of an emergency. Delayed grades have to be approved by the Department of Mathematics and Computer Science.

### ACADEMIC DISHONESTY:

When one takes credit for another's work or uses unauthorized devices (such as calculators) in the course, when they are expressly forbidden, it is cheating. This may occur during in class exams/quizzes or take-home exams/quizzes in this course. The code of student conduct is in the UM-St. Louis Student Handbook.

According to the University's Collected Rules and Regulations (Chapter 200: Student Conduct), the term **Cheating** includes but is not limited to: (i) use of any unauthorized assistance in taking quizzes, tests, or examinations; (ii) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (iii) acquisition or possession without permission of tests or other academic material belonging to a member of the University faculty or staff; or (iv) knowingly providing any unauthorized assistance to another student on quizzes, tests, or examinations.

When cheating is determined, a zero grade will be given on the specific exam/quiz and the student(s) who is/are involved in the cheating will be reported to the Department of Mathematics and the Office of the Vice Chancellor for Student Affairs.

# Sample Course Schedule

|          | Monday   | Tuesday                                                                    | Wednesday | Thursday                               | Friday                                                              |
|----------|----------|----------------------------------------------------------------------------|-----------|----------------------------------------|---------------------------------------------------------------------|
| January  | ry 14 15 |                                                                            | 16        | 17                                     | 18                                                                  |
|          |          | Lecture 1<br>Section: 1.1, 1.2, 1.3                                        |           | Lab A Quiz 1<br><mark>Syllabus</mark>  | Lab Quiz 2<br>Sections 1.1, 1.2,<br>1.3                             |
|          | 21       | 22                                                                         | 23        | 24                                     | 25                                                                  |
|          |          | Lecture 2<br>Sections: 1.4, 1.5, 1.6                                       |           | Lab A                                  | Lab B Quiz 3<br>Sections 1.4, 1.5,<br>1.6                           |
| February | 28       | 29                                                                         | 30        | 31                                     | 1                                                                   |
|          |          | Lecture 3<br>Sections: 1.7, 2.1, 2.2                                       |           | Lab A                                  | Lab B Quiz 4<br>Sections 1.7, 2.1,<br>2.2                           |
|          | 4        | 5                                                                          | 6         | 7                                      | 8                                                                   |
|          |          | Lecture 4:<br>Sections 2.3, 2.4<br>Review for Test 1.                      |           | Pre-test Quiz 5<br>Chapter 1, 2.1, 2.2 | Test 1<br><mark>Chapter 1, 2.1, 2.2</mark>                          |
|          | 11       | 12                                                                         | 13        | 14                                     | 15                                                                  |
|          |          | Lecture 5:<br>Section: 2.5, 2.6, 2.8<br>Quiz 6 Due<br>Sections 2.3 and 2.4 |           | Lab A                                  | Lab B Quiz 7<br><mark>Sections 2.5, 2.6,</mark><br><mark>2.8</mark> |
|          | 18       | 19                                                                         | 20        | 21                                     | 22                                                                  |
|          |          | Lecture 6<br>Sections: 3.1, 3.2                                            |           | Lab A                                  | Lab B Quiz 8<br>Sections 3.1, 3.2                                   |
|          | 25       | 26                                                                         | 27        | 28                                     | 29                                                                  |
|          |          | Lecture 7<br>Sections: 3.3, 3.4, 3.5                                       |           | Lab A                                  | Lab B Quiz 9<br>Sections 3.3, 3.4,<br>3.5                           |

| March | 3  | 4                                                                  |    | 5  | 6                                                                                   | 7                                                                         |
|-------|----|--------------------------------------------------------------------|----|----|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
|       |    | Lecture 8:<br>Section 3.6<br>Review for Test 2.                    |    |    | Pre-test Quiz 10<br>Sections 2.3, 2.4, 2.5,<br>2.6, 2.8, 3.1, 3.2, 3.3,<br>3.4, 3.5 | Test 2<br>Sections 2.3, 2.4,<br>2.5, 2.6, 2.8, 3.1,<br>3.2, 3.3, 3.4, 3.5 |
|       | 10 | 11                                                                 |    | 12 | 13                                                                                  | 14                                                                        |
|       |    | Lecture 9:<br>Sections 3.7, 4.1, 4.2<br>Quiz 11 Due<br>Section 3.6 |    |    | Lab A                                                                               | Lab B Quiz 12<br>Sections 3.7, 4.1,<br>4.2                                |
|       | 17 | 18                                                                 |    | 19 | 20                                                                                  | 21                                                                        |
|       |    | Lecture 10<br>Sections: 4.3, 4.4                                   |    |    | Lab A                                                                               | Lab B Quiz 13<br>Sections 4.3, 4.4                                        |
|       |    |                                                                    |    |    |                                                                                     |                                                                           |
| April | 31 | 1                                                                  | 2  |    | 3                                                                                   | 4                                                                         |
|       |    | Lecture 11:<br>Section 8.1<br>Review for Test<br>3                 |    |    | Pre-test Quiz 14<br>Sections 3.6, 3.7, 4.1,<br>4.2, 4.3, 4.4                        | Test 3<br><mark>Sections 3.6, 3.7,</mark><br>4.1, 4.2, 4.3, 4.4           |
|       | 7  | 8                                                                  | 9  |    | 10                                                                                  | 11                                                                        |
|       |    | Lecture 12:<br>Sections 8.2,<br>8.4<br>Quiz 15 Due<br>Section 8. 1 |    |    | Lab A                                                                               | Lab B1 Quiz 16<br><mark>Section 8.2, 8.4</mark>                           |
|       | 14 | 15                                                                 | 16 |    | 17                                                                                  | 18                                                                        |
|       |    | Lecture 13<br>Sections: 9.1,<br>9.2, 9.5                           |    |    | Lab A                                                                               | Lab B1 Quiz 17<br>Section 9.1, 9.2, 9.3                                   |
|       | 21 | 22                                                                 | 23 |    | 24                                                                                  | 25                                                                        |
|       |    | Lecture 14<br>Sections: 11.1,<br>11.2, 11.3                        |    |    | Lab A                                                                               | Lab B1 Quiz 18<br>Sections 11.1, 11.2,<br>11.3                            |
| May   | 28 | 29                                                                 | 30 |    | 1                                                                                   | 2                                                                         |
|       |    | Lecture15:<br>Section 11.5<br>Review for Test<br>4                 |    |    | Pre-test Quiz 19<br>Chapters 8, 9, and 11                                           | Test 4<br>Chapters 8, 9, and<br><mark>11</mark>                           |