MATH 121 COLLEGE ALGEBRA SYLLABUS SPRING 2014

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OFFICE HOURS: MW: 8:00 – 9:50 am, 1:00-1:50 pm;
F: 8:00 – 9:50 am; or by appointment

TEXT/SOFTWARE (REQUIRED): College Algebra, 2/E Custom Edition w/MyMathLab Student Access Kit by Kirk Trigsted
ISBN: 9781256659150

LEARNING OUTCOMES: Students who successfully complete Math 121 will be able to perform the following tasks:

- Simplifying Rational Expressions
- Adding, Subtracting, Multiplying, and Dividing Rational Expressions
- Simplifying Complex Rational Expressions
- Solving Linear Equations in One Variable
- Solving Equations Containing Rational Expressions
- Solving Linear Inequalities in One Variable
- Solving Quadratic Equations by Factoring, Square Root Property, Completing the Square, and Quadratic Formula
- Solving Higher Order Polynomial Equations by Factoring
- Solving Higher Order Polynomial Equations using the Quadratic Formula
- Solving Equations Containing Radicals
- Finding Intercepts of a Linear Equation in Two Variables and Graphing Linear Equations by Plotting Intercepts
- Graphing Horizontal and Vertical Lines
- Finding the Slope of a Line Given Two Points, or Given the Equation of the Line
- Graphing Linear Equations in Two Variables using the Slope and a Point on the Line
- Using Point-Slope Form and Slope-Intercept Form to write the Equation of a Line
- Finding the Equations of Parallel and Perpendicular Lines
- Finding the Domain and Range of a Relation Given a Set of Ordered Pairs, or Given the Graph of the Relation
- Determining Whether or Not a Relation is a Function using the Graph or an Equation
- Evaluating Functions; Difference Quotient
- Finding the Domain of a Function
- Combinations of Functions
- Compositions of Functions
- Finding the Inverse of a One-to-One Function
- Finding the vertex of a Quadratic Function of the form $f(x) = a(x-h)^2 + k$
- Finding the vertex of a Quadratic Function of the form $f(x) = ax^2 + bx + c$
- Finding the intercepts of the Graph of a Quadratic Function
- Graphing Quadratic Functions using the Vertex, Intercepts, and Two Other Points
- Graphing Higher Order Polynomial Functions
- Dividing Polynomials using Long Division and Synthetic Division
- Using the Remainder and the Factor Theorem to Determine Zeros of Higher Order Polynomial Functions
- Finding Equations of Vertical, Horizontal, and Slant Asymptotes of a Rational Function
- Solving Polynomial Inequalities
- Solving Rational Inequalities
- Solving Exponential Equations
- Applications of Exponential Functions
- Applications of the Natural Exponential Function
- Using the Basic Properties of Logarithms
- Using the Change of Base Property of Logarithms
- Using the Power Rule, Quotient Rule, and Power Rule to Expand Logarithmic Expressions
- Using the Power Rule, Quotient Rule, and Power Rule to Condense Logarithmic Expressions
- Solving Logarithmic Equations
- Solving Systems of Equations in Two Variables using the Substitution Method
- Solving Systems of Equations in Two Variables using the Elimination Method

DISCUSSION BOARDS/ATTENDANCE:

- You must post at least once in each week's discussion board AND complete ALL assignments before their due dates in order to receive credit for attendance each week.
- If you do not post in each week's discussion board by 11:59 pm on the Saturday ending each week, you will receive ONE (1) absence.
- If you do not complete ALL assignments before their due dates, you will receive ONE (1) absence.
- Students may accumulate up to FIVE (5) absences without penalty.
- FOR EACH ABSENCE ABOVE FIVE, students will have TEN (10) points deducted from their final point total at the end of the semester.

HOMEWORK:

- Homework will be assigned for each section of material covered, and will count for a total of 100 points.
- Homework assignments will be done on the computer using the MyMathLab software.
- Homework assignments may be done as many times as needed before the due date, with only the best score counting toward the student's grade.
- Homework must be submitted by 11:59 p.m. on the due date.
- Homework assignments may be completed after the due date for half credit.
- Homework assignments will not be accessible after the grace period.
- Any non-submitted homework assignment will be given a grade of zero (0).

TESTS:

- There will be three (3) unit tests during the semester.
- Unit Tests will be done on the computer using the MyMathLab software.
- Students will have ninety (90) minutes to complete each unit test.
- Tests may be attempted a maximum of five (5) times, with only the best score counting toward the student's final grade.
- Each test will count 100 points toward the student's final grade.
- If a test is missed for ANY reason, a grade of zero (0) will be given.
- THERE ARE NO MAKE-UP TESTS GIVEN FOR ANY REASON.
- The lowest of the three unit test grades will be dropped at the end of the semester.

MIDTERM EXAM:

- The midterm exam is an online, proctored exam.
- The midterm exam will cover material from Chapters 2 and 3 of the course.
- The midterm exam counts 100 points toward the student's final grade.
- Students will be given a maximum of two (2) hours to complete the midterm exam.
- **The midterm exam will be available for proctoring Tuesday, March 4 – Friday, March 7.**

FINAL EXAM:

- The final exam is an online, proctored exam.
- The final exam is comprehensive, consists of 50 multiple-choice questions, and will count 200 points.
- Students will be given a maximum of two (2) hours to complete the final exam.
- Any student who must miss the final exam because of an official University function must reschedule the exam on some other mutually satisfactory date.
- Any student having three or more final exams scheduled for the same day will arrange with the instructor to take either the 12:00 p.m. OR the 7:30 p.m. exam on some other mutually satisfactory date.
- Every student must take the final exam at the time scheduled.

- An "I" grade will not be given without the permission of the Department of Mathematics.
- **The final exam will be available for proctoring Friday, May 2 – Thursday, May 8.**

PROCTORED TESTING STATEMENT:

- **This course has TWO (2) proctored assessments.**
- It is the student's responsibility to schedule the appointment(s) for any proctored assessment(s).
- Please note that your instructor has limited the date and time that the assessment(s) is available.
- Please check the course schedule for specific information about the proctored assessment(s).
- **To schedule an appointment go to http://omo.outreach.olemiss.edu/testschedule**
- If you do not see your course listed on the appointment schedule for the Oxford, Tupelo or Desoto campuses, please check the online appointment system at a later time or contact the proctor.
- It is important that students report promptly at the appointed day and time. **ARRIVE AT LEAST 5 MINUTES BEFORE YOUR APPOINTMENT**.
- If you have to reschedule your exam appointment, contact your proctor directly.

FINAL GRADE: The cumulative total for the course is 600 points: (200 Tests, 100 HW, 100 Midterm, 200 Final Exam)

Grade	Points Necessary for Grade
A	555 – 600 = 93% - 100%
A-	537 – 555 = 90% - 92%
B+	519 – 537 = 87% - 89%
B	495 – 519 = 83% - 86%
B-	477 – 495 = 80% - 82%
C+	459 – 477 = 77% - 79%
C	417 – 459 = 70% - 76%
D	357 – 417 = 60% - 69%
F	below 357

CALCULATORS AND ELECTRONIC DEVICES:

- A scientific calculator is required for college algebra.
- Calculators with a Computer Algebra System and/or a QWERTY keyboard are not allowed during tests. This includes, but is not limited to, the TI-89, the TI-92, and the Casio Algebra FX 2.0.
- Cell phone calculators are also prohibited.
- **Use of cell phones or graphing calculators while taking a proctored test will be considered academic dishonesty and if you are caught using them, you will receive a grade of zero (0) on said test, and that test will not be dropped at the end of the semester.**

All cellular phones, pagers, and other electronic equipment should be turned off during class, during movies, in churches, in bookstores and restaurants, in elevators, and especially while operating a motor vehicle.

COMPUTERS: This course will be taught with the use of computers.

- Any questions regarding problems such as internet access in the dorms should be directed to the IT Helpdesk at 662-915-5222.

CHEATING: The following statement is the policy of the Department of Mathematics regarding cheating:

Offenses: Cheating on any exam, quiz, homework, work to be completed in class; theft or attempted theft of exam questions; use of prohibited technology; or possession of exam questions prior to the time for examination; shall all be offenses subject to appropriate penalties.

Penalties: The penalty for commission of any offense set out above is failure in the course and, subject to the approval of the Chancellor, dismissal or suspension from the university.

WITHDRAWAL DEADLINE FOR SPRING 2014: Tuesday, March 4

- After the course withdrawal deadline, a student may withdraw from a course only in cases of extreme and unavoidable emergencies as determined by the academic dean.
- Withdrawing from a course after the deadline will not be permitted because of dissatisfaction over an expected grade or because the student has changed his or her major.
- After the course withdrawal deadline, courses dropped will be recorded on University records and the W grade will be recorded if the student is not failing the course at the time of withdrawal; otherwise, the grade recorded will be F.

ACADEMIC NEEDS: It is the responsibility of any student with a disability who requests a reasonable accommodation to contact the Office of Student Disability Services (915-7128). Contact will then be made by that office through the student to the instructor of this class. The instructor will then be happy to work with the student so that a reasonable accommodation of any disability can be made.

SPECIAL DATES:	Classes begin:	Wednesday, January 22
	Withdrawal deadline:	Tuesday, March 4
	Midterm Exam:	**Tuesday – Friday, March 4-7**
	Spring Break:	Monday – Friday, March 10-14
	Good Friday:	Friday, April 18
	Classes end:	Friday, May 2
	Final Exam:	**Friday – Thursday, May 2-8**

Course Outline - MATH 121 Online Spring 2014

Unit	Date Available	Assignments	Due Dates
Week 1	January 22	Week 1 Discussion - Introductions	Jan 25 @ 11:59 pm
Week 2	January 26	R.6 Homework 1.1 Homework 1.4 Homework Week 2 Discussion	Jan 31 @ 11:59 pm Jan 31 @ 11:59 pm Jan 31 @ 11:59 pm Feb 1 @ 11:59 pm
Week 3	February 2	1.6 Homework 1.7 Homework Week 3 Discussion	Feb 7 @ 11:59 pm Feb 7 @ 11:59 pm Feb 8 @ 11:59 pm
Week 4	**February 9**	**Unit Test 1: R.6, 1.1, 1.4, 1.6, and 1.7** Week 4 Discussion	**Feb 14 @ 11:59 pm** Feb 15 @ 11:59 pm
Week 5	February 16	2.3 Homework 2.4 Homework Week 5 Discussion	Feb 21 @ 11:59 pm Feb 21 @ 11:59 pm Feb 22 @ 11:59 pm
Week 6	February 23	3.1 Homework 3.5 Homework 3.6 Homework Week 6 Discussion	Feb 28 @ 11:59 pm Feb 28 @ 11:59 pm Feb 28 @ 11:59 pm Mar 1 @ 11:59 pm
Week 7	**March 4**	**Midterm Exam (Proctored)** Week 7 Discussion	**Mar 7 @ 11:59 pm** Mar 8 @ 11:59 pm
Week 8	**Mar 10-14**	**Spring Break (No class)**	
Week 9	March 16	4.1 Homework 4.3 Homework Week 9 Discussion	Mar 21 @ 11:59 pm Mar 21 @ 11:59 pm Mar 22 @ 11:59 pm
Week 10	March 23	4.4 Homework 4.6 Homework 1.9 Homework Week 10 Discussion	Mar 28 @ 11:59 pm Mar 28 @ 11:59 pm Mar 28 @ 11:59 pm Mar 29 @ 11:59 pm
Week 11	**March 30**	**Unit Test 2: 4.1, 4.3, 4.4, 4.6, and 1.9** Week 11 Discussion	**Apr 4 @ 11:59 pm** Apr 5 @ 11:59 pm
Week 12	April 6	5.1 & 5.2 Homework 5.3 Homework Week 12 Discussion	Apr 11 @ 11:59 pm Apr 11 @ 11:59 pm Apr 12 @ 11:59 pm
Week 13	April 13	5.4 Homework 5.5 Homework 7.1 Homework Week 13 Discussion	Apr 18 @ 11:59 pm Apr 18 @ 11:59 pm Apr 18 @ 11:59 pm Apr 19 @ 11:59 pm
Week 14	**April 20**	**Unit Test 3: 5.1, 5.2, 5.3, 5.4, and 5.5** Week 14 Discussion	**Apr 25 @ 11:59 pm** Apr 26 @ 11:59 pm
Week 15	**May 2**	**Final Exam (Proctored)** Week 15 Discussion	**May 8 @ 11:59 pm** May 9 @ 11:59 pm