

Math 101 Fall Semester 2010

Central Connecticut State University
Department of Mathematical Sciences

READ THIS SYLLABUS CAREFULLY. YOU ARE RESPONSIBLE FOR KNOWING THIS INFORMATION!

Prerequisite: SAT Math score, placement examination or a grade of C- or higher in MATH 099.

Course Description: MATH 101 is the second in a two-course sequence in elementary and intermediate algebra (MATH 099/MATH 101) designed to provide students with a foundation to study college level mathematics. MATH 101 carries three credits that count toward meeting the minimum number of credits required for graduation but do not satisfy the general education requirement. Mastery of material in this course is necessary for success in mathematics and statistics courses with numbers greater than 100 and for courses in the natural and social sciences. You must earn a C- or higher in MATH 101 to meet the prerequisite for any Skill Area II general education course.

The major goals of this course are:

- a. to gain an appreciation for the role variables play in constructing mathematical models;
- b. to use tables, graphs, and equations to model mathematical situations;
- c. to gain facility in using the symbolism of algebra to solve equations and find equivalent expressions;
- d. to gain facility in solving word problems; and
- e. to gain an appreciation for the applications of algebra to a wide variety of “real world” situations.

Instructor: J. Bradlau

Email: jbradlau@snet.net

Phone: 860-628-9327

Office: Frank J. Diloreto Hall

Office Hours: 7:30 – 8:00 AM, Monday, Wednesday, Friday, Frank J. Diloreto Hall 107
9:00 – 10:00 AM Monday, Rm TBA
9:00 – 9:30 AM Friday, Rm TBA

Textbook: Elementary and Intermediate Algebra: A Practical Approach by T. Craine, J. McGowan, and T. Ruben, published by Houghton Mifflin (ISBN 0-618-10337-6). Note: This textbook is used for both MATH 099 and MATH 101.

Coverage: In MATH 101 you are responsible for all of the material in Chapters 7-12 except for the optional sections marked with an asterisk (*). The six chapters will be covered in the order they

appear in the text. Each section has 25 problems at the end, 15 new problems and 10 skill and review problems. All problems will be assigned and you are expected to work all of them.

Whether or not you took MATH 099 here at CCSU, it is a good idea to review Chapters 1 through 6 to be sure that you remember the main ideas of elementary algebra. A guide for doing this is found on pages 503-508 in the textbook.

Class Meeting Times: This class meets for 150 minutes of instruction per week.

Class meetings: Monday, Wednesday, Friday 8:00-8:50 A.M. Frank J. Diloreto Hall 107

Attendance will be taken. Poor attendance may affect your grade.

Course Requirements: Attend and participate in class regularly; complete homework assignments; take quizzes and tests, as scheduled. There will be **no make-ups for quizzes or tests**. A general rule for any college course is that you are expected to put in at least 2 hours of work outside of class for every credit hour. **For MATH 101, the expectation is at least 6 hours per week outside of class.**

Calculator Use: Graphics calculators are required for MATH 101. The textbook is based on the TI-82, TI-83, and I will be using one of these in class. Please let me know if you are using some other calculator, and I can help you make adjustments.

Electronic Devices Policy: Cell phones, laptops, and PDA's, ect. may not be used in class or during examinations or quizzes.

University Policies:

1. You must take the final examination at the time specified in the course selection book.

Final Exam, Friday, Dec 17, 8:00AM – 10:00AM

2. Please contact me privately to discuss your specific needs if you believe you need course accommodations based on the impact of a disability, medical condition, or if you have emergency medical information to share. I will need a copy of the accommodation letter from Student Disability Services in order to arrange your class accommodations. Contact Student Disability Services, room 241, Copernicus Hall if you have not already registered with them. Student Disability Services maintains the confidential documentation of your disability and assists you in coordinating reasonable accommodations.

3. All students are expected to demonstrate integrity in the completion of their coursework. Academic integrity means doing one's own work and giving proper credit to the work and ideas of others. It is the responsibility of each student to become familiar with what constitutes academic dishonesty and plagiarism and to avoid all forms of cheating and plagiarism. Students who engage in plagiarism and other forms of academic misconduct will face academic and possibly disciplinary consequences. Academic sanctions can range from a reduced grade for the assignment to a failing grade for the course. From a disciplinary standpoint, an Academic Misconduct Report may be filed and a Faculty Hearing Board may impose sanctions such as probation, suspension or expulsion.

For further information on academic misconduct and its consequences, please consult the Student Code of Conduct (<http://www.ccsu.edu/StudentConduct>) and the Academic Misconduct Policy (<http://www.ccsu.edu/AcademicIntegrity>).

4. In the event of a weather emergency which requires curtailment or cancellation of classes, listen to WTIC (1080 AM) or call (860) 832-3333 for the “general snow message.”

5. The last day to withdraw from a course is **Monday, October 25**. From August 30 through October 25, students may withdraw from the course by completing a withdrawal form available in the Enrollment Center in Willard Hall. During this period, approvals for withdrawal are not required; however, it is strongly recommended that students consult with their academic advisors prior to deciding to withdraw. Cessation of attendance, notice to the instructor, or telephone calls to the Enrollment Center are not considered official notice of a student’s intention to drop the course. After October 25 withdrawals are allowed only under extenuating circumstances and with appropriate supporting documentation and require approval of the course instructor, department chair and dean of the School of Arts and Sciences.

Resources Available:

1. If you need help, take advantage of your instructor's office hours. Do not wait until just before the first test to do so.
2. The Learning Center is located in Room 241, Copernicus. Free tutoring is available in Room 242, Copernicus, and at other locations on campus. A schedule for hours the Center is open will be posted soon after the beginning of the semester.
3. Form a study group with other students in your section. Explaining solutions to homework problems to each other is a good way to learn.
4. A list of private tutors for hire is available in the math department office, Room 107 Marcus White, 832-2835.

Evaluation

Minimum averages have been established for each of these grades:

A 93% A– 90% B+ 87% B 83% B– 80% C+ 77% C 73% C– 70% D+ 67% D 63% D– 60%

The average for the course will be based on the following weights:

Homework	Collected randomly. Each section should be completed before the next class session	15%
Quizzes	15-20 minutes in length	20%
Tests		40%
Department Final Examination		25%
Total		100%

The final exam is set by the Department of Mathematical Sciences and consists of 30% skills and 70% graphs and problem solving. **Note: In order to earn a grade of C- or higher in this course, your overall average must be at least 70% (C-) and your grade on the final examination must be at least 60%. (The 60% minimum has been set by the Department of Mathematical Sciences.)**

Since the final examination will count for 25% of the overall average, the grade you actually need on the final exam will depend upon your average going into the final.

If your average going into the final is:	Then on the final you will need at least:
73.3% or above	60%
70%	70%
65%	85%
60%	100%.

Therefore, in order to provide a margin of safety, **you should aim for an overall average of at least 73.3% going into the final.**

Tentative Schedule of Important Dates

Quizzes:	Wednesday, Sept 15, Friday, Oct 8, Friday, Nov 12
Test I	Monday, Sept 27
Test II	Monday, Oct 25
Test III	Friday, Dec 3
Final Exam	Friday, Dec 17, 8:00 – 10:00

Topics Covered

Solving Quadratic Equations
Parabolas
Algebraic Techniques for Solving Quadratic Equations
Applications that Lead to Quadratic Equations

What is a Function?
Graphs of Functions
Important Functions
Modifying Basic Functions

Rational Exponents and Radicals
Power Functions and Their Graphs
Direct Variation

Exponential Growth

Exponential Decay

Logarithms

Logarithmic Scales

Rational Expressions

Rational Functions and Their Graphs

Solving Rational Equations

Indirect Variation

Inequalities and the Number Line

Solving Nonlinear Inequalities by Graphing

Inequalities in Two Variables; Systems

Tentative Daily Schedule.

Wk	Dates	Mon	Wed	Fri
1	8/30-9/3	Factoring Review	7.1	7.2
2	9/6-9/10	No Class	7.3	7.3-7.4
3	9/13-9/17	7.4	8.1 Quiz	8.2
4	9/20-9/24	8.3	8.4	Review
5	9/27-10/1	Test 7&8	9.1	9.2
6	10/4-10/8	9.2-9.3	9.3	10.1 Quiz
7	10/11-10/15	10.1-10.2	10.2	10.3
8	10/18-10/22	10.3-10.4	10.4	Review
9	10/25-10/29	Test 9&10	11.1	11.1
10	11/1-11/5	11.2	11.2-11.3	11.3
11	11/8-11/12	11.3-11.4	11.4	12.1 Quiz
12	11/15-11/19	12.1	12.2	12.2
13	11/22-11/26	12.3	No Class	No Class
14	11/29-12/3	12.3	Review	Test 11&12
15	12/6-12/10	Review	Review	No Class
16	12/13-12-17			Final Exam