

**CENTRAL CONNECTICUT STATE UNIVERSITY
COURSE SYLLABUS**

For

INTERMEDIATE ALGEBRA

FALL 2010

**INSTRUCTOR
MARIAN P. COLLINS**

E-mail: moreyp38@hotmail.com

Office: Maria Sanford, Room 323

**Office Hours: 10 –11 A.M. MWF
12 – 1 P.M. MWF
1 – 2 P.M. MWF
2 – 3:30 P.M. F by appointment**

I. REQUIRED TEXT

Craine, T., McGowan, J., and Ruben, T., Elementary and Intermediate Algebra, A Practical Approach, Boston, Massachusetts, Houghton Mifflin Co., 2004 (ISBN 0-618-10337-6).

II. PREREQUISITE

Placement examination or a grade of C- or higher in MATH 099.

III. 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.

IV. COURSE OBJECTIVES

Intermediate Algebra (Math 101) is designed to fill the algebra gap between basic algebra and pre-calculus. The course covers the topics of rational expressions, roots and radicals, quadratic equations, relations and functions, the parabola, exponential and logarithmic functions, inequalities, and direct and indirect variation.

Through class attendance and discussion, individual review of the presented above topics, and doing designated assignments, the student should be able to demonstrate a working knowledge, comprehension, and implementation of the basic rules of algebra. The student will develop an understanding for selecting the most efficient method in problem solving.

In a number of areas, the course will be supplemented with applications, verbal problems and lectures from other textbooks. Group dynamics will be implemented and study guide effectiveness will be discussed.

V. MAJOR GOALS

- 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 application of algebra to a wide variety of “real world” situations.

The final exam is set by the Department and consists of 30% Skills, 30% Graphs, and 40% Problem Solving

IV. COURSE OUTLINE

A. Unit I - Quadratic Equations and the parabola (approximately 1/5 semester)

Unit I introduces various methods of solving quadratic equations and basic characteristics of the parabola.

With good study habits, discussion and review of class lectures and assigned material along with doing problems the student will develop the following:

1. An understanding of the methods of solving quadratic equations
2. Identify and interpret characteristics of the parabola

B. Unit II - Relations and Functions, Systems of Equations and Inequalities (approximately 1/5 semester)

The intent of Unit II is to help the student understand the concepts of functions and relations, systems of equations and inequalities. The unit examines systems of first and second degree equations and the various methods at our disposal to solve these equations.

Following the conclusion of the unit, students should be able to:

1. Understand functions and relations
2. Understand and solve systems of equations

C. Unit III – Roots, Powers, Direct and Indirect Variation (approximately 1/5 semester)

This unit is a treatment of the algebra of rational exponents and radicals. It is a continuation of the examination of the various rules of algebra.

Along with good habits, review of class lectures and doing an adequate number of related problems, the student should develop:

1. Knowledge of concepts of exponents, roots, direct and indirect variation
2. Skills for problem solving
3. Mastery of algebraic terminology dealing with the mechanics of #1

D. Unit IV – Exponential and Logarithmic Functions (approximately 1/5 semester)

Unit IV examines exponential and logarithmic functions and their graphs. By review and doing sufficient problems, the student should develop an:

1. Understanding of exponential functions
2. Understanding of logarithmic functions

E. Unit V - Rational Expressions, Functions and Equations (approximately 1/5 semester)

The purpose of this unit is to review the various rules and graphs regarding rational expressions.

With good study habits, review of the material and doing required assignments, the student should be able to:

1. Perform the basic operations on rational expressions
2. Solve equations containing rational expressions
3. Demonstrate a working knowledge of terms which accompany #1 and #2

VII. COURSE REQUIREMENTS

A. REQUIRED WORK

All students will be required to follow the grading procedure. A college student is expected to put in at least 2 hours of work outside of class for every hour in class. **For Math 101/ the expectation is at least 6 hours per week outside of class.**

B. MAKE-UP WORK

There will be NO make-up examinations, except under extreme circumstances.

C. GRADING

There will be four unit exams and one final exam. Each unit exam will carry the same weight. Each exam will be announced in class a minimum of one week in advance.

Unless specifically designated, homework assignments will include any odd numbered problems in the exercise sets of the units being covered in the text. Assignments will be collected periodically and graded.

Notebooks are collected during the latter weeks of the course and graded as 15% of the last exam. The grades will then be averaged to produce the Final Grade.

The instructor's grading system is as follows:

A = 93%	C+ = 77%	D- = 60%
A- = 90%	C = 73%	F = 59%
B+ = 87%	C- = 70%	
B = 83%	D+ = 67%	
B- = 80%	D = 63%	

Time permitting, we may have a few quizzes (announced one class session prior). Two quizzes will count as one exam- (Perhaps we may want to divide a unit exam in halves.) **Note: In order to receive a grade of C- or better for the course, it is departmental policy that your grade on the final exam should be at least 60%.** Copies of sample final exams will be available for your study.

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.**

D. ATTENDANCE

Proper attire is required.

More than 3 unexcused absences will result in a partial drop in the letter grade; i.e., an A will become an A-, a B+ will become a B, etc.

E. CALCULATOR USE:

Graphing calculators are required for Math 101. The textbook is based on the TI-82 and the 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.

F. ELECTRONIC DEVICES POLICY:

Cell phones, laptops and PDA's are not to be used during class, exams or quizzes unless special accommodations are necessary.

H. No eating, drinking or smoking in the classroom.

I. Please be punctual!

NOTE: Any departures from this outline, responding to the needs of the students, will be made at the discretion of the individual instructor.

VIII. UNIVERSITY POLICIES:

1. You must take the final examination at the time specified in the course selection book *add time appropriate for your section.*
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, room 241, Copernicus Hall if you are not already registered with them. Student Disability Services maintains the confidential documentation of your disability and assists you in coordinating reasonable accommodations with your faculty.
3. 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."
4. The last day to withdraw from a course and receive a grade of "W" is Monday, October 25. Approvals for withdrawal prior to this date 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 to drop the course. After October 25, withdrawals are allowed only under extenuating circumstances and with the appropriate supporting documentation and require approval of the course instructor, department chair and dean of the School of Arts and Sciences.

XI. RESOURCES AVAILABLE:

1. If you need help, take advantage of your instructor's office hours. Do not wait until just before the final test to do so.
2. The Learning Center is located in Room 241, Copernicus. Free tutoring is available in Room 241, Copernicus. 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. Extra practice problems will be available in the math department office, Room 107 Marcus White, 832-2835.

ADMINISTRATIVE DIRECTORY

Administrative Offices

Admissions			Library	832-2055
Undergraduate	832-2278		Media Center	832-2025
Graduate	832-2350		Police / Public Safety	832-2375
Affirmative Action	832-3025		Registrar's Office	832-2236
Bookstore	832-2665		(including transcript request information)	
Bursar	832-2010		Registrar's Office FAX	832-2250
Card Office	832-2140		Residence Life	832-1660
Center for Advising & Career Exploration	832-1615 or 832-1630		Snow Phone	832-3333
Center for International Education	832-2040		Student Center	832-1960
Counseling & Wellness Center	832-1945		TDD #	1-860-832-1958
Financial Aid Office	832-2200		University Switchboard	832-3200
Graduate Studies	832-2363		Veterans Affairs	832-2838
Health Services	832-1925		Women's Center	832-1655
Learning Center	832-1900			

ACADEMIC DEANS AND DEPARTMENT CHAIRPERSONS

Department	Dean / Chairperson	Room	Phone (860) 832-....
School of Arts & Sciences	Dr. Susan Pease, Dean	FD 112	2600
Anthropology	Dr. Michael Park	FD 109B	2610
Art	Dr. Cora Marshall	FA 151	2621
Biology	Dr. Jeremiah Jarrett	NC 332	2648
Chemistry and Biochemistry	Dr. Thomas Burkholder	NC 440	2675
Communication	Dr. Serafin Mendéz-Mendéz	RVAC 317	2694
Computer Science	Dr. Bradley Kjell	MS 303	2710
Criminology & Criminal Justice	Dr. Raymond Tafrate	RVAC 208	3147
Design (Graphic/Information)	Prof. Susan Vial	RVAC 324	2557
Economics	Dr. Stephen Cox (Acting)	RVAC 411	2725
English	Dr. Stephen Cohen	EW 304	2751
Geography	Dr. Peter Kyem	FD 208-011	2785
History	Dr. Glenn Sunshine	FD 206	2810
Mathematical Sciences	Dr. Jeffrey McGowan	MW 108	2850
Modern Languages	Dr. Lilian Uribe	LD 212	2875
Music	Dr. Charles Menoche	HW 212	2904
Philosophy	Dr. David Blitz	MW 301	2918
Physics & Earth Sciences	Dr. Ali Antar	NC 509	2931
Political Science	Dr. Paul Petterson	FD 015	2969
Psychology	Dr. Laura Bowman	MW 212	3118
Sociology	Dr. Stephen Adair	MS 306	2979
Theatre	Prof. Thomas Callery	FA 107	3150
School of Business	Dr. Siamack Shojai, Dean	RVAC 210	3209
Accounting	Dr. Lawrence Grasso	RVAC 4490200	3226
Finance	Dr. Kathy Czynnik	RVAC 4270100	3264
Management & Organization	Dr. Margaret Mitchell	RVAC 4270200	3287
Management Information Systems	Dr. Marianne D'Onofrio	RVAC 4490100	3297
Marketing	Dr. Jean Lefebvre	RVAC 413	3309
School of Education & Professional Studies	Dr. Mitchell Sakofs, Dean	HB 203	2101
Counseling & Family Therapy	Dr. Connie Tait	HB 221	2154
Educational Leadership	Dr. Anthony Rigazio-Digilio	HB 231	2130
Nursing	Dr. Linda Wagner	HB 324	0032
Physical Education & Human Performance	Dr. David Harackiewicz	HK 0180	2155
Reading & Language Arts	Dr. Helen Abadiano	HB 209	2175
Social Work	Dr. Catherine Baratta	RVAC 3240500	3129
Special Education	Dr. Mitchell Beck	HB 220	2400
Teacher Education	Dr. Susan Seider	HB 226	2415
School of Engineering & Technology	Dr. Zdzislaw Kremens, Dean	NC 22407	1800
Biomolecular Sciences	Dr. James Mulrooney	NC 204	2660
Computer Electronics and Graphics Technology	Dr. Karen Tracey	NC 2120910	1842
Engineering	Dr. Alfred Gates	NC 2350920	1823
Manufacturing and Construction Management	Dr. Jacob Kovel	NC 2120920	0192
Technology and Engineering Education	Dr. James DeLaura	NC 2350910	1840

○ IMPORTANT DATE ■ NO SCHOOL

AUGUST/SEPTEMBER 2010

S	M	T	W	R	F	S
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

OCTOBER 2010

S	M	T	W	R	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

NOVEMBER 2010

S	M	T	W	R	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

DECEMBER 2010

S	M	T	W	R	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JANUARY 2011

S	M	T	W	R	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

AUGUST 2010

- 30 FALL CLASSES BEGIN 8:00 A.M.
Full-time students: Last day to withdraw with 100% refund.

SEPTEMBER 2010

- 6 Labor Day holiday - no classes.
7 Add/drop ends.
Last day to change from part-time to full-time status.
Part-time students: Last day to withdraw with 100% refund.
14 Full-time students: Last day to withdraw with 60% refund.
Last day to drop first eight-week courses.
15 Last day for graduate students to apply for Dec. 2010 graduation.
20 Last day to change from full-time to part-time status.
Part-time students: Last day to withdraw with 50% refund.
Last day to declare Pass/Fail or Audit options.
27 Mid-term for first eight-week courses. Last day to withdraw without permission.
Full-time students: Last day to withdraw with 40% refund.

OCTOBER 2010

- 25 Academic advising begins for continuing students for Spring 2011 and continues through November 5.
First eight-week courses end.
Mid term: Last day to withdraw from full-semester courses without permission.
26 Second eight-week courses begin.

NOVEMBER 2010

- 8-19 CentralPipeline Spring 2011 registration for matriculated students.
9 Last day to drop second eight-week courses.
22 Last day for full-time students to withdraw from the University
Mid-term for second eight-week courses. Last day to withdraw without permission.
24-28 Thanksgiving Recess - no classes
29 Thanksgiving recess ends. Classes resume 8:00 a.m.

DECEMBER 2010

- 1 Deadline for undergraduates to apply for December 2011 graduation (Registrar's Office).
9 Day classes end. Last day to submit three-part withdrawal form.
10 Reading Day - no classes
11-17 Examinations-day and evening courses
18 Semester ends; make up day if needed.
25 University closed, no classes
27 Winter Session begins
31 No classes

JANUARY 2011

- 1 New Year's Day - No classes
13 Winter Session ends
17 Martin Luther King Holiday - office closed
24 Spring 2011 classes begin

DAY COURSE — EXAM SCHEDULE

EXAMINATION SCHEDULE FOR DAY CLASSES
FALL SEMESTER 2010

CLASS TIME	MONDAY, DECEMBER 13	EXAM TIME
MWF 9:00		8:00 - 10:00
MWF 11:00		11:00 - 1:00
M&W(F) 2:00		2:00 - 4:00
TUESDAY, DECEMBER 14		
T & R 9:30		8:00 - 10:00
T & R 11:00		11:00 - 1:00
T & R 3:30		2:00 - 4:00
WEDNESDAY, DECEMBER 15		
MWF 10:00		8:00 - 10:00
MWF 12:00		11:00 - 1:00
MWF 1:00		2:00 - 4:00
THURSDAY, DECEMBER 16		
T & R 8:00		8:00 - 10:00
T & R 12:30		11:00 - 1:00
T & R 2:00		2:00 - 4:00
FRIDAY, DECEMBER 17		
MWF 8:00		8:00 - 10:00
M&W(F) 3:00/3:30		11:00 - 1:00

Examinations for all classes will be given at the times designated. Courses of one semester hour of credit will hold their examinations on the last day of class preceding December 11.

Examinations will be held in their regularly scheduled classrooms unless notified by instructor.

Information regarding final exams for all sections of MGT 480 will be announced in class.

EVENING COURSE — EXAM SCHEDULE

EXAMINATION SCHEDULE FOR EVENING CLASSES
FALL SEMESTER 2010

CLASS TIME

EXAM TIME (P.M.)

SATURDAY, DECEMBER 11

S between 8:00 AM and 9:30 AM 8:00 - 10:00 AM
S between 10:00 AM and 1:00 PM 10:30 AM -12:30 PM

MONDAY, DECEMBER 13

M 4:00 - 6:40 4:00 - 6:00 PM
M 5:00 - 7:40 or MW 5:15 (or 5:20) - 6:30 (or 6:35) 5:00 - 7:00 PM
Includes all courses that begin between 5:00 and 6:35 on M or MW
M 6:45 - 9:25 7:30 - 9:30 PM

TUESDAY, DECEMBER 14

T 4:00 - 6:40 4:00 - 6:00 PM
T 5:00 - 7:40 or TR 5:15 (or 5:20) - 6:30 (or 6:35) 5:00 - 7:00 PM
Includes all courses that begin between 5:00 and 6:35 on T or TR
T 6:45 - 8:00 7:30 - 9:30 PM

WEDNESDAY, DECEMBER 15

W 4:00 - 6:40 or MW 4:00 - 5:15 4:00 - 6:00 PM
W 5:00 - 7:40 or MW 6:45 (or 7:00) - 8:00 (or 8:15) or W 6:45 - 9:25 6:30 - 8:30 PM

THURSDAY, DECEMBER 16

R 4:00 - 6:40 or TR 4:00 - 5:15 4:00 - 6:00 PM
R 5:00 - 7:40 or TR 6:45 (or 7:00) - 8:00 (or 8:15) or R 6:45 - 9:25 6:30 - 8:30 PM

FRIDAY, DECEMBER 17

Available for special requests

Examinations will be held in their regularly scheduled classrooms unless notified by instructor.

Information regarding final exams for all sections of MGT 480 will be announced in class.

Suggested Time Table for MATH 101

Fall Semester 2010

Classes meet for approximately 15 weeks prior to the final examination.

MWF classes meet for 40 fifty-minute periods. TR classes meet for 29 seventy-five-minute periods.

Schedule allows MWF classes to have four 50 minutes tests and TR classes to have three 75 minute tests. In addition, Part I of the final exam may be given on the last day of classes.

This schedule is a suggestion only. However, all instructors should pace their course to cover all six chapters in order and leave time at the end to review for the final examination.

Week	Dates	Monday	Wednesday	Friday	Dates	Tuesday	Thursday
1	8/30-9/3	7.1	7.2	7.2-7.3	8/31-9/2	7.1	7.2
2	9/6-9/10	No Class	7.3	7.4	9/7-9/9	7.3	7.4
3	9/13-9/17	8.1	8.2	Review	9/14-9/16	8.1	8.2
4	9/20-9/24	Test to 8.2	8.3	8.4	9/21-9/23	8.3	8.4
5	9/27-10/1	9.1	9.2	9.2-9.3	9/28-9/30	9.1/Review	Test to 8.4
6	10/4-10/8	9.3	Review	Test to 9.3	10/5-10/7	9.2	9.3
7	10/11-10/15	10.1	10.2	10.2-10.3	10/12-10/14	10.1	10.2
8	10/18-10/22	10.3	10.3-10.4	10.4	10/19-10/21	10.3	10.4
9	10/25-10/29	11.1	11.1-11.2	11.2	10/26-10/28	Review	Test to 10.4
10	11/1-11/5	11.2-11.3	11.3	11.3-11.4	11/2-11/4	11.1	11.2
11	11/8-11/12	11.4	Review	Test to 11.4	11/9-11/11	11.3	11.4
12	11/15-11/19	12.1	12.1-12.1	12.2-12.3	11/16-11/18	12.1	12.2
13	11/22-11/26	12.3	No Class	No Class	11/23-11/25	12.3	No Class
14	11/29-12/3	12.3	Review	Test to 12.3	11/30-12/2	Test to 12.3	Review
15	12/6-12/10	Review	Final Part 1	No class	12/7-12/9	Review	Final Part 1
16	12/13-12/17	Final Exam Part 2			12/14-12/16	Final Exam Part 2	

Dates	Monday	Wednesday
8/30-9/1	7.1	7.2
9/6-9/8	No class	7.3
9/13-9/15	7.4	8.1
9/20-9/22	8.2	8.3
9/27-9/29	8.4/Review	Test to 8.4
10/4-10/6	9.1	9.2
10/11-10/13	9.3	10.1
10/18-10/20	10.2	10.3
10/25-10/27	10.4/Review	Test to 10.4
11/1-11/3	11.1	11.2
11/8-11/10	11.3	11.4
11/15-11/17	12.1	12.2
11/22-11/24	12.3	Review
11/29-12/1	Test to 6.4	Review
12/6-12/8	Review	Final Part 1
12/13-12/15	Final Exam Part 2	

CCSU ACADEMIC INTEGRITY POLICY

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 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>).