

EDISON COLLEGE
DIVISION OF ARTS AND SCIENCES
COMMON COURSE SYLLABUS

MAT 1033 (108) INTERMEDIATE ALGEBRA CRN 11428
TR 5:30 – 7:10 ARECA 103

Professor: Dr. Richard Schnackenberg **Office Location:**FGCU: Whitaker Hall 261
E-mail: rschnack@fgcu.edu **Phone Number:** (239) 590-7435
Office Hours: TR 10:00-12:00 or by appt. **Semester:** Fall Semester, 2008

I. COURSE NUMBER AND TITLE, CATALOG DESCRIPTION, CREDIT HOURS.

MAT 1033 – Intermediate Algebra - AA **4 Credits**

This course is intended to prepare students for college level algebra courses needed to meet the state requirements for math competencies. This course should adequately prepare the student for MAC 1105 and provide a strong algebra foundation for higher level math. A graphing calculator is required for this course.

II. PREREQUISITES FOR THE COURSE:

Testing, MAT 9020 or MAT 9024.

III. GENERAL COURSE INFORMATION: Topic Outline

- Factoring
- Algebraic fractions
- Radicals and rational exponents
- Complex numbers
- Quadratic equations
- Rational equations
- Linear equations and inequalities in two variables and their graphs
- Systems of linear equations and inequalities
- Introduction to functions
- Applications of the above topics

IV. LEARNING OUTCOMES AND ASSESSMENT:

A. *General Education Competencies:*

General education courses must meet all the following outcomes. All other courses will meet one or more of these outcomes.

At the conclusion of this course, students will be able to demonstrate the following competencies:

Communication (COM): To communicate (read, write, speak, listen) effectively using standard English and apply effective techniques to create working relationships with others to achieve common goals: Students will fulfill this competency by answering questions in class using a variety of methods and by submitting the solution to an assigned problem which was solved through collaborative efforts.

Critical Thinking (CT): To demonstrate skills necessary for analysis, synthesis, and evaluation: Students will fulfill this competency by using algebraic skills to solve application problems.

Technology/Information Management (TIM): To demonstrate the skills and use the technology necessary to collect, verify, document, and organize information from a variety of sources: Students will fulfill this competency by demonstrating the use of a scientific or graphing calculator.

Global Socio-cultural Responsibility (GSR): To identify, describe, and apply responsibilities, core civic beliefs, and values present in a diverse society: Students will fulfill this competency by attending class on a regular basis or submitting assignments in a timely manner.

Scientific and Quantitative Reasoning (QR): To identify and apply mathematical and scientific principles and methods: Students will fulfill this competency by determining solutions to problems involving numeric data.

B. Additional Course Competencies:

At the conclusion of this course, students will be able to demonstrate the following additional competencies:

Learning Outcomes	Assessments
Students will be able to write sets and solution sets in various formats (i.e., roster, set-builder notation, interval notation, and as graphs on the number line).	Students will demonstrate competency via one or more of the following assessment techniques: Homework Labs Group assignments Projects Quizzes Tests Final examination
Students will be able to identify elements of and distinguish among subsets of the complex numbers.	
Students will be able to identify and apply properties of the complex numbers (i.e., commutative, associative, distributive, identity, and inverse properties).	
Students will be able to simplify expressions by using the order of operations.	
Students will be able to solve linear, rational and radical equations in one variable.	
Students will be able to solve linear inequalities in one variable.	

Students will be able to evaluate and solve equations that are formulas.	
Students will be able to develop a linear model as a solution to an application problem.	
Students will be able to solve systems of linear equations and inequalities in two variables.	
Students will be able to demonstrate the rules for integer and rational exponents.	
Students will be able to recognize, translate, and perform operations with numbers in scientific notation.	
Students will be able to perform operations with polynomial, rational, and radical expressions.	
Students will be able to factor polynomials using various methods (i.e., greatest common factor, grouping, trial-and-error, difference of squares, and u substitution).	
Students will be able to identify the domain of rational expressions.	
Students will be able to simplify rational and radical expressions.	
Students will be able to simplify complex rational expressions.	
Students will be able to evaluate the roots of real numbers both algebraically and by using a calculator.	
Students will be able to demonstrate rationalization of the denominator.	
Students will be able to solve quadratic equations by factoring, completing the square, and by using the quadratic formula.	
Students will be able to graph relations and linear inequalities in two variables in the coordinate plane.	
Students will be able to write the equation of a line in slope-intercept form.	
Students will be able to determine the slope of a line.	
Students will be able to state the domain and range of a relation.	
Students will be able to identify relations that are functions.	
Students will be able to evaluate functions for given domain values.	

V. DISTRICT-WIDE POLICIES

Programs for Students with Disabilities

Edison College, in accordance with the Americans with Disabilities Act and the college's guiding principles, offers students with documented disabilities programs to equalize access to the educational process. Students who need to request an accommodation in this class due to a disability, or who suspect that their academic performance is affected by a disability, should contact the Office of Adaptive Services at the nearest campus.

Lee Campus	Taeni Hall S-116A	(239) 489-9427
Charlotte Campus	Student Services SS-101	(941) 637-5626
Collier Campus	Admin. Bldg. A-116	(239) 732-3918
Hendry/Glades Ctr.	LaBelle H.S.	(863) 674-0408

Religious Observance

Per Section 1006.53, Florida Statutes, the Edison College policy on observance of religious holy days provides that students shall, upon notifying their instructors is excused from class to observe religious holy days of their faith. The student will be held responsible for any material covered during the excused absence, but will be permitted a reasonable amount of time to complete any work missed. Students who believe this policy has been improperly applied should address their grievances to an appropriate Dean or Associate Dean.

VI. REQUIREMENTS FOR THE STUDENT

- A. Online Homework is available immediately and will expire at the time of the class immediately after the class during which the material was presented. You may do the homework as many times as you want until the expiration time. Only the highest grade for each assignment will count.
- B. Online Quizzes are available at www.coursecompass.com. They will be available on the date that the material is covered in class and will expire on the test date. The Course Code is *schnackenberg78712*.
IMPORTANT NOTE: Points for corrections on Exams 1 and 2 will depend upon your quiz score average *at the time of the exams!* So although you have until the end of the semester to work on your quiz grades, there are two important check points along the way.
- C. Testing:
 1. All tests are closed book, and work must be included with the test where appropriate. You may bring one sheet of notes to each test, 8.5" by 11", hand-written, both sides.
 2. No make-up tests will be given. If you are going to be absent for a test, make arrangements at least 48 hours prior to the scheduled test time.
 3. At the end of the semester, if your final exam score is higher than the lowest score from your two midterm exams, then it will replace that score. This includes a score for any one test that may have been missed due to absence.

4. No computer algebra systems (i.e., TI-89's and TI-92's) or communication devices are permitted during tests.
- D. Final Exam:
1. The final exam is cumulative.

VI. ATTENDANCE POLICY

All students are expected to attend each class session.

VII. GRADING POLICY

A. Each student's course average will be composed of

In Class Worksheets	10%
Online Homework	10%
Online Quizzes	10%
Test Average	70%

B. Grades will adhere to the following scale:

90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
Under 60%	F

C. (Note: The "incomplete" grade ["I"] should be given only when unusual circumstances warrant. An "incomplete" is not a substitute for a "D," "F," or "W." Refer to the policy on "incomplete" grades.)

VIII. REQUIRED MATERIALS AND TECHNOLOGY

Required:

- A. Bittinger, Ellenbogen and Johnson *Intermediate Algebra Graphs and Models* Third Edition Addison Wesley **with Student Access Kit**. (NOTE: *MyMathLab* has the textbook online. If you do not want a hardcopy of the text, you may purchase just the *MyMathLab* Access Code.)
- B. A TI-83plus or TI-84 graphing calculator.
- C. *MyMathLab* : Log in at www.coursecompass.com. Your course id is ***schnackenberg78712***.

IX. RESERVED MATERIALS FOR THE COURSE

- A. Course-coordinated videotapes and DVD's are available to check out at Learning Resources (i.e., the library on the second floor of building J)
- B. Available for short-term check out at Learning Resources is a notebook that contains old test keys and some additional practice for selected sections.

X. CLAST COMPETENCIES

CLAST competencies covered in this course are listed in the current college catalog.

XI. CLASS SCHEDULE

The following is a tentative schedule of topics and assignments. Both are subject to change during the semester.

DATE	SECTION	HOMEWORK DUE DATE
Week 1: August 26	1.1, 1.2	9/2
August 28	1.3, 1.4	9/2
Week 2: Sept 2	1.5, 1.6	9/4
Sept 4	1.7	9/9
Week 3: Sept 9	2.1, 2.2	9/11
Sept 11	2.3	9/16
Week 4: Sept 16	2.4	9/23
Sept 18	Review	Pages 181-183 (corresponding sections)
Week 5: Sept 23	EXAM on Chapters 1 and Chapter 2	
Sept 25	3.1, 3.2	9/30
Week 6: Sept 30	3.8, 4.1	10/2
Oct 2	4.3, 4.5	10/7
Week 7: Oct 7	5.1, 5.2	10/9
Oct 9	5.3, 5.4	10/14
Week 8: Oct 14	5.5	10/16
Oct 16	5.6	10/23
Week 9: Oct 21	Review	Pages 291-294 (corresponding sections)
Oct 23	EXAM on Chapters 3, 4, 5	
Week 10: Oct 28	6.1, 6.2	10/30
Oct 30	6.3	11/4
Week 11: Nov 4	6.4	11/6
Nov 6	6.6, 6.8	11/11
Week 12: Nov 11	7.1, 7.2	11/13
Nov 13	7.3, 7.4	11/18
Week 13: Nov 18	7.5	11/20
Nov 20	7.6	11/25
Week 14: Nov 25	7.7	12/2
Week 15: Dec 2	7.8	12/9
Dec 4	Review for Final	Pages 530-532 (corresponding sections)
Final Exam Week: Tuesday, Dec 9	5:30 – 7:20	

XII. OTHER INFORMATION

A. Contact Information

1. Professor Richard Schnackenberg
2. Office: FGCU, Whitaker Hall 261
3. Office Phone: 239-590-7435
4. Fax: 239-590-7200
5. email: rschnack@fgcu.edu
6. website: <http://ruby.fgcu.edu/courses/rschnack>

B. Assistance Outside of Class

1. Office Hours: T R 10:00 – 12:00 at FGCU.
2. The math tutoring lab is located in Leonhardt Hall H-110. Check the door for current hours of operation.
3. The peer tutoring lab is located in Information Technology Building G-204. Check with peer tutoring for current hours of operation.

C. Withdrawal Policy

1. After two unsuccessful attempts at any course, a student must pay an extra tuition penalty in order to register in that course for a third time. Therefore, it is important for students who decide immediately that they don't wish to remain in a course to file a Course Withdrawal Form in the Registration Office by 4:30 p.m. on August 29th. By meeting this immediate withdrawal deadline, a student will not be recorded as having "attempted" the course, will not receive any course grade, and will be eligible for a full tuition refund. Students who withdraw **after** the August 29th deadline and before the October 30th deadline are not eligible for tuition refund, will be recorded as having attempted the course, and will receive a grade of W for the semester.
2. Students who find, after a time, that they are not able to attend class meetings should process a "Course Withdrawal" form as soon as possible. Professors are not permitted to initiate these forms; the action must be initiated by a student (or family member in the case of emergency or illness). **Important warning: Course Withdrawal forms must be processed before the last withdrawal deadline of October 30th, or the student's grade for the course becomes an automatic F.**