

INTERMEDIATE ALGEBRA (MATH 137)  
CRN 30807  
INSTRUCTOR – BARBARA MAURICE  
FALL 2009  
ROOM E 225  
M/W 10:30-11:45  
OFFICE: C 206; OFFICE PHONE 383-5221  
OFFICE HOURS: MW: 11:45- 12:45; TR 1:45-2:45  
HOME PHONE – 887-6419  
E-MAIL: bmaurice@trcc.commnet.edu

### COURSE DESCRIPTION

A graphing calculator is required. Instructor will use a Texas Instrument calculator (TI83). This course continues the development of algebraic skills and concepts. The topics include: linear equations, functions and graphs, applications of systems of equations, inequalities, rational expressions and equations, operations of radicals and rational exponents, quadratic equations, exponential and logarithmic functions.

### PREREQUISITE

Acceptable placement score or Math 095 with a “C” grade or better.

### TEXTBOOK

Intermediate Algebra – A Graphing Approach by Martin-Gay/Greene (Fourth Edition).

### COURSE OUTCOMES

At the end of the course students will be able to:

1. Solve linear, quadratic, logarithmic, and exponential equations and inequalities.
2. Graph linear, quadratic, exponential and logarithmic equations in two variables.
3. Develop the equation of lines in standard form, point/slope form, and slope intercept form.
4. Solve systems of linear equations.
5. Understand functional notation and applications.
6. Solve rational and radical equations.
7. Perform operations on: polynomial-based expressions, expressions that contain integer and rational exponents, and rational and radical expressions.
8. Solve application problems that give rise to linear, quadratic, logarithmic, exponential, rational or radical equations.

### TENTATIVE SCHEDULE

W	8/26	Review of basics	1.5-1.6
M	8/31	Tables, formulas	1.7&3.1
W	9/2	Trigonometry	Handout
M	9/7	Labor Day – College closed	
W	9/9	Trigonometry	Handout

M	9/14	Graphing	2.1-2.5
W	9/16	Linear and compound inequalities	3.2-3.3
M	9/21	TEST #1 (CH. 1-2 & TRIG)	
W	9/23	Solving systems of equations	4.1-4.3
M	9/28	Exponents, polynomials	5.1-5.4
W	9/30	Factoring	5.5-5.8
M	10/5	Factoring	5.5-5.8
W	10/7	Rational expressions, complex fractions	6.1-6.3
M	10/12	TEST #2 (CH. 3 - 5)	
W	10/14	Rational expressions, equations with rational expressions, problem solving	6.5-6.6
M	10/19	Radicals, rational exponents, simplifying radical expressions	7.1-7.3
W	10/21	Radical equations, complex numbers	7.6-7.7
M	10/26	Quadratic equations	8.1-8.2
W	10/28	TEST #3 (CH. 6-7)	
M	11/2	Solving equations using quadratic methods	8.3
W	11/4	Quadratic functions	8.5-8.6
M	11/9	Composite and inverse functions, exponential functions	9.1-9.3
W	11/11	Veteran's Day – Classes not in session	
M	11/16	Logarithmic equations	9.4
W	11/18	Properties of logarithms	9.5
M	11/23	Common and natural logs, change of base	9.6
W	11/25	Instructor discretion	
M	11/30	Exponential and logarithmic equations	9.7
W	12/2	Equations (continued)	

M 12/7 Review  
W 12/9 TEST #4 (CH. 8-9)  
M 12/14 Make-up  
W 12/16 To be used as needed

12/31 Grades available on web (www.online.comnet.edu)

### Attendance/Homework/Requirements

It is strongly suggested that students make every effort to attend ALL classes. Homework will be assigned on a daily basis. All homework assignments must be completed. Students will be required to have a two-section math notebook. One section is to be dedicated to class notes while the other section will be dedicated to homework. The student's math notebook should be available to the instructor at each class. Students are allowed to use a calculator.

**CELL PHONES MUST BE TURNED OFF DURING CLASS.**

### Methods of Evaluation/Make-ups

Tests will be announced. Unannounced quizzes may be given at the discretion of the instructor. Tests that are missed for any reason cannot be made up (with the exception of snow conditions). If a student misses one of the first THREE tests, a make-up test will be given at the end of the semester. A student can also use this make-up test to improve their lowest test grade. Final grades will be assigned according to the following:

<u>CLASS AVERAGE</u>	<u>FINAL GRADE</u>
90 - 100	A- / A
80 - 89	B- / B+
70 - 79	C- / C+
60 - 69	D- / D+
Below 60	F

### College Withdrawal Policy

Students may withdraw, in writing at the Registrar's Office, for any reason until the end of the 10<sup>th</sup> week of classes. From the 11<sup>th</sup> week through the end of the 13<sup>th</sup> week, a student may withdraw with the signature of the instructor or advisor.

### Statement on Disabilities

If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact the Disabilities Counseling Service at 383-5240. To avoid any delay in the receipt of accommodations, you should contact the counselor as soon as possible. Please note that I cannot provide accommodations based upon disability until I have received an accommodation letter from the Disabilities Counselor. Your cooperation is appreciated.

**TENTATIVE HOMEWORK ASSIGNMENTS (\* eoo - every other odd)**

- 1.5 1 – 33 odd, 39,41, 47 – 67 odd
- 1.6 11, 13, 33–35, 41, 43
- 1.7 1 – 11 odd
- 1.8 1–23 odd
- 2.2 7 – 17 odd, 23 – 35 odd
- 2.4 1 – 69 eoo
- 2.5 1 – 70 eoo
- 3.1 1 – 5, 11, 13
- 3.2 23 – 49 odd, 55 – 67 odd
- 3.3 13 – 55 eoo
  
- 4.1 19–51 odd, 59, 63
- 4.2 5, 9,19
- 4.3 1, 7, 11, 17, 18
  
- 5.1 1 – 91 odd
- 5.2 1 – 67 odd
- 5.3 37 – 75 odd
- 5.4 1 – 39 odd
- 5.5 1 – 65 odd
- 5.6 1 – 33 odd, 43 – 87 odd
- 5.7 1 – 65 odd  
Pg. 385 – 387 odd
- 5.8 1 – 67 eoo, 77
  
- 6.1 1 – 53 odd
- 6.2 1 – 9 odd, 23 – 65 odd
- 6.3 1 – 31 odd
- 6.5 1 – 41 odd
- 6.6 1 – 13 odd, 31, 33, 39, 45
  
- 7.1 1 – 41 odd, 55– 81 odd
- 7.2 1 – 39 odd, 43 – 89 odd
- 7.3 1 – 27 odd
- 7.6 1 – 27 odd, 43, 47, 59, 61
  
- 8.1 1 – 13 odd, 17, 23, 27 – 33 odd, 35 – 55 odd
- 8.2 1 – 11 odd
- 8.3 1 – 13 odd, 19 – 27 odd
- 8.5 1 – 53 eoo
- 8.6 13 – 43 odd
  
- 9.1 15 – 19 odd
- 9.2 23 – 33 odd
- 9.3 21 – 35
- 9.4 1 – 61 odd
- 9.5 1 – 31 odd
- 9.6 17 – 31 odd, 51 – 59 odd
- 9.7 1 – 39 odd

INTERMEDIATE ALGEBRA (MATH 137)  
CRN 10340  
INSTRUCTOR – BARBARA MAURICE  
SPRING 2008  
MOHEGAN - RM. 314  
T/R 2:00-3:20  
OFFICE: SHOP WING; PHONE 383-5221  
OFFICE HOURS: MWTR 11:30 – 12:30  
HOME PHONE – 887-6419  
E-MAIL: bmaurice@trcc.commnet.edu

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### PREREQUISITE

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### TEXTBOOK

Intermediate Algebra – A Graphing Approach by Martin-Gay/Greene (Third Edition).

### TENTATIVE SCHEDULE

R	1/24	Review of basics	1.4-1.5
T	1/29	Tables, formulas	1.6-1.7
R	1/31	Trigonometry	Handout
T	2/5	Trigonometry	Handout
R	2/7	Graphing	2.1-2.5
T	2/12	Lincoln’s Birthday – Classes Not in Session	
R	2/14	Linear and compound inequalities	3.2-3.3
T	2/19	TEST #1 (CH. 1-2)	
R	2/21	Solving systems of equations	4.1-4.3
T	2/26	Exponents, polynomials	5.1-5.4

R	2/28	Factoring	5.5-5.8
T	3/4	Factoring	5.5-5.8
R	3/6	Rational expressions, complex fractions	6.1-6.3
T	3/11	TEST #2 (CH. 3-5)	
R	3/13	Rational expressions, equations with rational expressions, problem solving	6.6-6.7
	3-17-3/23	SPRING BREAK	
T	3/25	Radicals, rational exponents, simplifying radical expressions	7.1-7.3
R	3/27	Radical equations, complex numbers	7.6-7.7
T	4/1	Quadratic equations	8.1-8.2
R	4/3	TEST #3 (CH. 6-7)	
T	4/8	Solving equations using quadratic methods	8.3
R	4/10	Quadratic functions	8.5-8.6
T	4/15	Composite and inverse functions, exponential functions	9.1-9.3
R	4/17	Logarithmic equations	9.4
T	4/22	Properties of logarithms	9.5
R	4/24	Common and natural logs, change of base	9.6
T	4/29	Exponential and logarithmic equations Last Day to Withdraw from Classes	9.7
R	5/1	Equations (continued)	
T	5/6	Review	
R	5/8	TEST #4 (CH. 8-9)	
T	5/13	Make – up	
R	5/15	To be used as needed	

### Attendance/Homework/Requirements

It is strongly suggested that students make every effort to attend ALL classes. More than three absences during the semester will jeopardize the student's success in the course. Homework will be assigned on a daily basis. All homework assignments must be completed. Students will be required to have a two-section math notebook. One section is to be dedicated to class notes while the other section will be dedicated to homework. The student's math notebook should be available to the instructor at each class. Students are allowed to use a calculator. Cell phones may not be used as a calculator and must be turned off during class.

### Methods of Evaluation/Make-ups

Tests will be announced. Unannounced quizzes may be given at the discretion of the instructor. Tests that are missed for any reason cannot be made up (with the exception of snow conditions). If a student misses one of the first four tests, a make-up test will be given at the end of the semester. A student can also use this make-up test to replace their lowest test grade. Final grades will be assigned according to the following:

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### Class Cancellation

The Three Rivers web site provides a full listing of radio and television stations that alert students to school closings and delays. Go to: [www.trcc.commnet.edu](http://www.trcc.commnet.edu) and click on General Information and Weather Procedures.

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- 1.11 1 – 11 odd
- 1.12 1–23 odd
- 2.2 7 – 17 odd, 23 – 35 odd
- 2.4 1 – 69 eoo
- 2.5 1 – 70 eoo
- 3.4 1 – 5, 11, 13
- 3.5 23 – 49 odd, 55 – 67 odd
- 3.6 13 – 55 eoo
  
- 4.4 19–51 odd, 59, 63
- 4.5 5, 9,19
- 4.6 1, 7, 11, 17, 18
  
- 5.9 1 – 91 odd
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- 5.11 37 – 75 odd
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- 5.13 1 – 65 odd
- 5.14 1 – 33 odd, 43 – 87 odd
- 5.15 1 – 65 odd  
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- 6.4 1 – 53 odd
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- 6.7 1 – 13 odd, 31, 33, 39, 45
  
- 7.4 1 – 41 odd, 55– 81 odd
- 7.5 1 – 39 odd, 43 – 89 odd
- 7.6 1 – 27 odd
- 7.7 1 – 27 odd, 43, 47, 59, 61
  
- 8.4 1 – 13 odd, 17, 23, 27 – 33 odd, 35 – 55 odd
- 8.5 1 – 11 odd
- 8.6 1 – 13 odd, 19 – 27 odd
- 8.7 1 – 53 eoo
- 8.8 13 – 43 odd
  
- 9.1 15 – 19 odd
- 9.2 23 – 33 odd
- 9.3 21 – 35
- 9.4 1 – 61 odd
- 9.5 1 – 31 odd
- 9.6 17 – 31 odd, 51 – 59 odd
- 9.7 1 – 39 odd



