ADMINISTRATIVE INFORMATION

Instructor: Kris Kissel  
Email: kkissel@greenriver.edu  
Phone: (253) 833 - 9111 Ext. 4506  
Office: SMT 331  
Office Hours: MW 8:00-8:50 a.m., TH 2:00-2:50 p.m., and by appointment

Class Meeting Time: MTWH 10:40 a.m. - 12:10 p.m.  
Class Meeting Place: SMT 221  

Instructor Web Site: www.instruction.greenriver.edu/kkissel  
Click on the link for this class under ‘Courses’.

Exams:  
Thursday, July 12  
Thursday, August 2  
Thursday, August 16 (Final Exam)

Prerequisite: Math 072, 085 or 116T with a grade of 2.5 or higher,  
or appropriate placement score, or instructor’s permission.

Calculator: A graphing calculator is required for this course.
COURSE DESCRIPTION

Study of the definition of a function, graphs and solutions of linear equations and inequalities, graphs and solutions of quadratic, rational, radical, and literal equations; complex numbers, radical and literal equations, complex numbers, radical expressions, variations, and applications.

CALCULATOR

A graphing calculator is required for this course. I will be using the TI-83+ calculator for class demonstrations. I recommend a TI-83, TI-83+, or TI-84. If you buy another calculator, I will not be able to assist you with it’s use, and you’ll be expected to learn how to use it entirely on your own.

CLASS FORMAT

We will use all of the following in this course: lectures, exams, quizzes, in-class activities and student presentations. Students will also submit homework for grading.

Attendance is very important! Since there are no make-ups for missed work, your grade will be affected by absences. I expect you to be here and to be on time each day. Please make a decision today as to whether you can fulfill this obligation.

WORK OUTSIDE CLASS

I will assign daily homework exercises based on recent class material, and at the beginning of each class, students will be asked to write up solutions to the problems to share with the rest of the class. This is in addition to the homework problems that you submit for grading each week. The best strategy for succeeding in this course is to keep up with it by doing some work on your own every day.

I strongly encourage you to work together outside of class, but remember that all work you submit must be your own. “Over the phone” work sessions or outside study groups are strongly encouraged. (Part of what I want you to learn in this course is how to communicate with mathematics effectively, in both written and verbal modes.) Plan on getting together with your group on a regular basis!

BEHAVIOR

Absolutely no cheating or plagiarism will be tolerated in this class. At the very least, a grade of zero will be given on the assignment. The consequences may be even more severe, at the instructor’s discretion, up to and including a failing grade for the entire course.

Do not engage in any behavior that even makes the instructor suspect that you might be cheating, such as glancing at another student’s quiz, talking during an exam or passing a
note or calculator. The instructor may think you are cheating, but even if you are not, these would be unacceptable behaviors and subject to the same sanctions.

Respect of all others in this class is a necessity. Please refer to the GRCC Student Code of Conduct for rules governing appropriate behavior both inside and outside the classroom. Behavior that disrupts the class, or that is distracting to students or instructor, is not allowed. Such behavior will result in negative credit for the in-class activities component of the grade since it detracts from the learning environment. If disruptive behavior persists, the instructor may require students to change their seat, or to leave the classroom.

**ADA STATEMENT**

If you believe you qualify for course adaptations or special accommodations under the Americans With Disabilities Act, it is your responsibility to contact the Disability Support Services Coordinator in the LSC and provide the appropriate documentation. If you have already documented a disability or other condition through the GRCC Disability Support Services Office, which would qualify you for special accommodations, or if you have emergency medical information or special needs I should know about, please notify me during the first week of class. You can reach me by phone at 253-833-9111, x4506. Or, you can schedule an office appointment during my posted office hours or at another mutually determined time. If this location is not convenient for you, we will schedule an alternative place for the meeting. If you use an alternative medium for communicating, let me know well in advance of the meeting (at least one week) so that appropriate accommodations can be arranged.

**EVALUATION**

Your grade for this course will be based on homework, tests, quizzes, a portfolio and in-class activities.

**Exams:** You will be given three tests in this class covering most of chapters 2, 4, 5, 6, 7 and 8 from the textbook. Each exam will be worth 15% of the total grade for the course. There will be no make-up tests except for reasons of serious illness, religious reasons or issues of grave personal import, and any missed test will receive a grade of 0. However, if you know that you will miss class on the day of a test (or any assignment) due to an emergency, please notify me as soon as possible because sometimes arrangements can be made ahead of time. The final exam will be given in class on Thursday, August 16, from 10:40 a.m. to 12:10 p.m.. The final will be comprehensive.

**Homework:** There will be two types of homework in this class: daily exercises and weekly problems.

Short exercises will be assigned each day as practice for the recent material. Students are expected to complete those exercises by the next class and will receive credit for sharing their solutions with the class. Each student will be expected to share at least five essentially complete solutions over the course of the quarter, and this will make up 10 percent of the total grade for the course.
Students will also submit typewritten solutions on Monday of each week (starting the second week) for a smaller assignment of problems. These problem will usually be more involved than the daily exercises and will comprise 6 percent of the total grade for the course. The lowest score on this weekly assignment will be dropped. The written assignments will be submitted together (with corrections made after grading) as a portfolio (see below).

**Quizzes:** There will be a quiz at the beginning of class each Thursday, starting the first week, except for exam days. Quizzes will make up 15 percent of the total grade for the course. These quizzes will be *open notes, closed book*. The lowest quiz score will be dropped.

**Activities:** In-class activities will also count toward your grade. You must be in class to participate and there will be no way to make up any missed points. All together, these activities will comprise 15 percent of the total grade for the course. The lowest in-class activity score will be dropped.

**Portfolio:** At the end of the course, you will submit a portfolio containing all of the typed weekly homework problems from the previous weeks. You will also design a cover and write a brief introduction to this portfolio, describing your experience creating it, and an annotated table of contents that tells a reader what problems are contained in it and what algebra techniques they illustrate. This portfolio will become your own ‘Cliff’s Notes’ on algebra.

In addition to the homework grade you received for completing the weekly assignments, the complete portfolio will be worth an additional 9 percent of your grade.

**Notebinder for Extra Credit:** You will receive up to 3 percent extra credit at the end of the course for having maintained a binder with all of the following materials in it: the course syllabus; the daily homework exercises; the in-class worksheets; the quizzes and exams; and a cover sheet on which you have recorded all your scores throughout the course.

**INCLEMENT WEATHER AND OTHER CAMPUS EMERGENCIES**

If an assignment or test is scheduled for a day when classes are cancelled due to emergency, students should expect the assignment or exam to be due the next day that class actually meets. If classes are cancelled a day immediately or shortly before something is due, but not on the due date itself, students should expect the due date to remain unchanged. If classes are cancelled for several days before an assignment or test is due, the instructor reserves the right to make changes to due dates as he deems appropriate. Announcements of such changes will be made on the class web site.

**GRADING SYSTEM AND GRADES**

The breakdown of your grade by percentage is as follows:

- **Exam #1, Exam #2, Final Exam** 15% each
- **Daily Homework Exercises** 10%
- **Weekly Typed Homework Assignments** 6%
- **Quizzes** 15%
- **In-class Activities** 15%
- **Portfolio** 9%
- **Notebinder (Extra Credit)** 3%
If you wish to take this class “Pass/No-Credit”, you must fill out a form at the Registrar’s Office. If you are planning on taking another math class for which this is a prerequisite, you must receive a 2.0 or above in this class to continue. A “Pass” will not be sufficient to get you into the next course. You should also find out if there are any additional expectations for your program of study or at any institution to which you plan to transfer.

Here is a list of registration deadlines for the current quarter:

<table>
<thead>
<tr>
<th>Last Day for:</th>
<th>Date:</th>
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<tbody>
<tr>
<td>Withdrawal Without Grades Posted on Transcript</td>
<td>July 11</td>
</tr>
<tr>
<td>Pass/No-Credit Petition or Official Withdrawal</td>
<td>August 3</td>
</tr>
</tbody>
</table>

Decimal grades reported for this class will range from 4.0 to 0.0. Generally, a grade of “I” (incomplete) will only be given for emergency situations and only if at least 75% of the work has been completed with a passing grade. The minimum grades that will be assigned are as follow:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Decimal Grade</th>
<th>Percentage</th>
<th>Decimal Grade</th>
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<tr>
<td>89</td>
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LEARNING OBJECTIVES

Students will demonstrate the ability to:

1. develop and use problem solving skills: recognizing the applicability of previously learned solutions to a new problem, recognizing and applying reverse reasoning (given the answer, what is the question?), and developing an individual problem solving strategy;

2. work efficiently in small group settings: respecting others’ ways of thinking, having confidence in your own knowledge, sharing information, pooling knowledge, and listening effectively;

3. recognize that problems may have alternate solutions and that alternate techniques may be used to arrive at those solutions;

4. understand when the use of a calculator is appropriate and when its use may lead to misconceptions;

5. define a function;

6. graph linear and quadratic functions in various forms;

7. solve linear equations and inequalities graphically, symbolically, and numerically;

8. solve quadratic equations using factoring, graphing, completing the square, and the quadratic formula;

9. manipulate complex numbers using the rules which govern them;

10. solve problems involving ratios, proportions, and variation;

11. manipulate rational expressions (including simplifying, multiplying, dividing, adding, and subtracting);

12. solve equations involving rational expressions, exponents, and radicals;

13. apply exponent rules to real numbers and scientific notation;

14. manipulate rational exponents;

15. solve systems of equations using substitution, elimination, graphing, and (if time allows) matrices;

16. use mathematics to solve practical applications.
ASSESSMENT OUTCOMES

The following GRCC Assessment Outcomes are applicable in this course:

Quantitative/Symbolic Reasoning:

1. Student evaluates and interprets information and data.
2. Student recognizes which processes or methods are appropriate for solving a given problem, and correctly implements those processes.
3. Student demonstrates the ability to estimate a solution to a presented problem.
4. Student translates data into formats such as graphs, tables, formulas, and sentences.

Critical Thinking:

1. Student provides reasons for the conclusions they reach and assess the relevance and adequacy of those reasons.
2. Student connects past learning with current topics.