Georgia Perimeter College
Campus
Pre-College Algebra
Semester: ____________

Course: MATH 98-_____ (CRN ______) (Days & Times) Room: _________
Credit Hours: 4
Prerequisites: Placement by examination

Instructor: ___________________________ E-mail: ______@gpc.edu
Tutoring and Advising hours for PT: Before and after class & by appointment
Tutoring and Advising hours for FT: list your office hours
Contact: Students should contact the Instructor only via e-mail from a GPC e-mail account.

ALEKS Help Call 714-619-7090 ALEKS web support: http://www.aleks.com/support

Important Dates: Midpoint of Semester: ________________
Final Exam Date & Time (Last day of classes): ________________
COMPASS Exit Exam: During the one week after classes end (TBA)

Course Description: This course is designed to prepare students for college level mathematics. Topics will include: real-number concepts, selected geometry concepts, linear equations and inequalities in one variable, problem solving involving linear or factorable quadratic equations as models, operations on polynomials, factoring polynomials, integral exponents, graphing linear and quadratic equations in two variables, rational expressions, function notation, integral and radical exponents, solving absolute value and quadratic equations and inequalities, solving rational and radical equations, problem solving involving linear equations, rational equations, quadratic equations, and systems of equations in two variables, and writing equations of lines, operations with radicals and complex numbers, geometric concepts, and calculator usage.

Note: Cell phones and other personal devices are not allowed to be visible in class. Cell phones cannot be used as calculators. Students cannot listen to music in class at any time.

Required Materials:
- 52-Week ALEKS 360 Access Code – may be purchased at the bookstore or online. The media-rich eTextbook is included with code. ALEKS (Assessment & Learning in Knowledge Spaces) is a computer-based learning system.
- Calculator (A TI-83/84 graphing calculator is recommended)
- Headphones: Students should bring a pair of headphones to class in order to watch and listen to the ALEKS animations and video explanations.
- Access to the internet & iCollege
- JAG Card (GPC ID)
- Four Blue (or Green) Examination Books for in-class Scheduled Assessments
ALEKS 360 Packaging and Support Policy to GPC Students
We are confident that students who spend 80 hours (~5 hours per week in a semester) in ALEKS in a term have an extremely high probability of successfully completing at least half of the Math 98 course material. In the event that a student needs more than one term to complete the Math 98 course and isn’t taking Math 98 in consecutive terms, they can suspend their access by selecting that option from within their account. If a student needs more than 52 weeks to complete Math 98, ALEKS will verify that they are a GPC student and will extend their account. The student can also choose to purchase 18 weeks of ALEKS 360 online. Should a student elect to purchase 18 weeks of access thinking they will finish in one semester and they don’t, it will be up to the student to purchase additional access. The ALEKS Support Policy will not extend 18-week accounts.

Math Lab (free tutoring)
Each campus has a Learning and Tutoring Center (LTC) which includes a Math Lab to help students. Students are welcome to visit any of them for assistance. http://depts.gpc.edu/~gpcltc/locations.htm

Final Exam Review
You can find a review for the MATH 98 final on www.gpc.edu/~dunmath
Please note: This review contains multiple choice problems; this does not mean the final exam will automatically by multiple choice.

COMPASS Exit Test Reviews
You can find reviews for the Exit Test on the LTC website: http://depts.gpc.edu/~gpcltc/alpha_math.htm

Learning Support Policies
Learning Support Policies associated with this course are located in the Comprehensive Course Guide found at http://lsupport.gpc.edu/. Students should familiarize themselves with the policies and this website.

Learning Support Attempts
Students must complete MATH 0098 in three attempts or they will be suspended from Georgia Perimeter College and all University System institutions for one (1) year. Attempts are cumulative within the Regent’s System.

Midpoint/Withdrawal
The midpoint of the semester is ___________. This is the last day that you can withdraw from the course with a grade of “W.”
- If you withdraw from MATH 98 before the midpoint, then you will automatically be withdrawn from ALL of your collegiate level classes (except GPCS 1010 and PHED courses).
- If you withdraw after the midpoint, you will receive a grade of “WF” that will count as an attempt, but you will not be withdrawn from your other classes.
- For more information on the policies for Learning Support classes, please visit this website: http://www.gpc.edu/~gpcls.

Course Attendance Policy
Although attendance is not use in your grade calculations, it is still important for you to attend class every day. The material builds upon itself, and absences may compromise your ability to be successful in this course. Also, by being in class you have access to your teacher if you get stuck or have questions. If absent, you are responsible for learning all material covered, obtaining handouts and any announcements made during class. There are no make-ups for missed in-class Scheduled Assessments.

Academic Respect
The College exists to foster educational excellence. To this end, a classroom atmosphere which supports learning must be maintained. Students are expected to be active, attentive participants in the class. Students are also expected to abide by class policies and procedures and to treat faculty and other students in a
professional, respectful manner. Students are expected to be familiar with the student conduct code published in the Student Handbook.

Course Grades
A = 90-100% course average and pass the COMPASS Exit Test if required to take it
B = 80-89% course average and pass the COMPASS Exit Test if required to take it
C = 70-79% course average and pass the COMPASS Exit Test if required to take it
IP = 60-69% course average or did not pass the COMPASS Exit Test if required to take it
F = 0-59% course average
W = Withdrawal by mid-term
WF = Withdrawal after mid-term

♦ Students who earn a grade of IP, F, W or WF must repeat the course.
♦ To pass the COMPASS Exit Test, you must score a 37 or higher.
♦ Students who scored at least a 400 on the SAT math (17 on the ACT math, or 37 on the Entrance Exam) and are not CPC deficient (i.e., had 4 years of high school mathematics) are exempt from taking the exit exam. GPC must have official transcripts of your SAT/ACT math scores before the midpoint of the semester to be eligible for exemption from the COMPASS.

Course Evaluation
Your final grade for the course will be calculated according to the following guidelines:

- **ALEKS PIE (20%)**: The percentage of topics learned in ALEKS as of the final exam start time will be used to calculate the ALEKS Pie grade.
- **ALEKS SCHEDULED ASSESSMENTS (40%)**: There will be four (4) in-class Scheduled Assessments used to determine this portion of your grade. Two of these will be progress assessments and the other two will be comprehensive assessments. Of the four assessments, the highest percentage of topics mastered on an in-class Scheduled Assessment will be used in the calculation of your grade. Notes will not be allowed on the in-class Scheduled Assessments. You will be allowed to use only the ALEKS calculator if it is available during in-class Scheduled Assessments.
- **BLUE BOOK (10%)**: For each of the in-class Scheduled Assessments, you are required to use a blue book to record all of the assessment questions and directions along with your work and answers. You will be graded on your ability to use mathematical notation and good mathematical form. Detailed information and examples regarding the blue book grading will be given to you prior to the first in-class Scheduled Assessment.
- **FINAL EXAM (30%)**: All students are eligible to take the cumulative final exam on the last day of classes, regardless of how many topics they have mastered. The final exam will be a written paper and pencil comprehensive exam. Students should bring their calculator, as cell phones WILL NOT be allowed to be used as calculators.

In-Class Scheduled Assessment Dates:
- In-Class Scheduled Progress Assessment 1: type date here
- In-Class Scheduled Comprehensive Assessment 2: type date here
- In-Class Scheduled Progress Assessment 3: type date here
- In-Class Scheduled Comprehensive Assessment 4: type date here

Final Exam (written comprehensive): type date here
**Students may finish the in-class portion of Math 98 Early**

If a student completes 100% of the ALEKS pie before the end of the semester, the instructor will schedule an in-class comprehensive assessment for that individual student. If the student scores less than 90%, then he/she will be allowed to progress back to 90% or more of the pie and have another in-class comprehensive assessment scheduled. When at least 90% is reached on the in-class scheduled comprehensive assessment, the student may take the Final Exam early. Taking the Final Exam early forfeits the right to take it at the end of the semester. If a grade of A, B, or C is earned, then the student will be allowed to take the COMPASS Exit Exam (and one Retest) before the end of the semester. Early course completion finals must be taken at least 15 calendar days before the last day of class. *(Add any campus specific details here.)*

**Note:** This is a suggested pacing of the course. Replace “Days 1-29” with the actual class date using the GPC Academic Calendar.

**Tentative Schedule: This schedule is subject to change at the instructor’s discretion.**

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**General Course Purpose:** To provide the student with the necessary skills and techniques to be successful in college level mathematics as well as to provide the student with skills to apply these concepts to real world problems.

**Course Content**

1. Real numbers, expressions, and equations
2. Exponents, polynomials, and function notation
3. Linear equations, inequalities, and functions in one variable
4. Factoring in expressions, equations, and functions
5. Linear equations in two variables plus geometric concepts in one and two variables
6. Rational expressions, equations, and functions
7. Quadratic equations and functions in one variable with parabolas and geometric concepts
8. Radical expressions, equations, and functions along with complex numbers
9. Absolute value equations, inequalities, and functions plus non-linear inequalities in one variable

**Entry Level Competencies**

Upon entering this course, the student should be able to do the following:

1. Define and identify the factors and multiples of a number
2. Determine the greatest common factor of two or more given numbers
3. Determine the least common multiple of two or more given numbers
4. Solve real world applications involving whole numbers, fractions, decimals, and percents
5. Find the perimeter of polygons
6. Find the circumference of a circle
7. Find the area of a square, rectangle, triangle, parallelogram, circle, and trapezoid
8. Recognize and apply angle relationships within triangles, quadrilaterals, vertical and alternate interior angles
9. Translate an English phrase into a mathematical expression and a mathematical expression into an English phrase.
10. Interpret results displayed in bar graphs, line graphs, or pie graphs

**Expected Educational Results**

As a result of completing this course, the student will be able to do the following:

1. Apply or recognize properties of real numbers (commutative, associative, and distributive).
2. Classify real numbers as integers, rational, or irrational.
3. Perform the four arithmetic operations with signed numbers.
4. Determine the absolute value of a numerical expression.
5. Construct correct expressions using algebraic symbols and notations from statements.
6. Use algebraic symbols and notation to make meaningful statements. Understand and use function notation.
7. Solve applications for which linear equations, quadratic equations and linear systems are mathematical models.
8. Add, subtract, multiply and factor polynomials. Divide a polynomial by a monomial.
9. Solve the following types of equations:
   a. Linear and linear literal
   b. Quadratic with real and non-real solutions
   c. Absolute value of the form: \( |\text{constant} | \) or \( \text{constant} \)
   d. Rational leading to linear or quadratic
   e. Polynomial of degree higher than two by factoring
   f. Radical leading to linear or quadratic
10. Solve inequalities, write the solution set in interval notation and graph the solution set on the number line:
    a. Linear
    b. Factorable quadratic
    c. Absolute value < or > constant
    d. Factorable polynomial of degree higher than two
11. Perform the following activities with lines:
    a. Graph linear equations in standard form and slope-intercept form
    b. Find the slope of a line
    c. Write the equation of a line
    d. State if lines are parallel or perpendicular
    e. Use the distance and midpoint formulas
12. Solve problems involving square roots, order of operations, and scientific notation with the aid of a calculator.
13. Apply properties of exponents with integral and rational exponents.
14. Solve geometric problems including area and perimeter of triangles, rectangles and circles. Find the volume of a box. Use the Pythagorean Theorem.
15. Recognize and apply angle relationships including vertical angles, supplementary and complementary angles, and those in triangles.
16. Add, subtract, multiply and divide rational expressions.
17. Solve a system of two linear equations in two variables (having no, one, or many solutions) by graphing, substitution or elimination.
18. Perform operations with complex numbers (excluding division).
19. Perform the four basic operations with radicals (excluding rationalizing).
20. Graph quadratic functions.
21. Use a graphing calculator.
No Show Policy
Each semester faculty must report those students who are on the class roll but have NEVER attended an on-campus class or logged in to an online class during the No Show period. This procedure is very important in order to keep the college in compliance with the laws regarding federal financial aid. More information on the No Show Policy and the dates for the No Show period can be found online at http://www.gpc.edu/~gpcem/registrar/no_show.html.

Americans With Disabilities Act Statement
If you are a student who is disabled as defined under the Americans with Disabilities Act and requires assistance or support services, please seek assistance through the Center for Disability Services. A CDS Counselor will coordinate those services.

Academic Honesty Statement (GPC MCSE Rev. 8/07)
As a community committed to learning, Georgia Perimeter College recognizes and specifies that students, whether working as individuals or in a group, shall always present to the instructor their own work for an honest grade assessment. Academic Honesty Procedures have been established by Georgia Perimeter College to insure due process in cases of cheating. A copy of procedures is in the Student Handbook. Cheating of any kind may result in a penalty ranging from a grade of zero for the work in question to a grade of "F" in the course AND will be referred to the College Court for assignment of penalty that may include suspension from the College. Referral to the College Court is required whether the student admits or denies the violation. A full statement of the Academic Honesty Policy can be found online at http://depts.gpc.edu/governance/policies/New100/101.pdf

Equal Opportunity Statement
No person shall, on the basis of age, race, religion, color, gender, sexual orientation, national origin or disability, be excluded from participation in, or be denied benefits of, or be subjected to discrimination under any program or activity of Georgia Perimeter College.

Affirmative Action Statement
Georgia Perimeter College adheres to affirmative action policies designed to promote diversity and equal opportunity for all faculty and students.

Military Outreach Center (MOC)
Georgia Perimeter College provides resources and support services for military, active duty, National Guard or Reserve, and veteran students, including spouses and dependents. The MOC actively maintains information regarding campus resources, communications, and contact with military and veteran students, as well as local VA support services. Georgia Perimeter College honors its military and veteran men and women returning to pursue their educational goals at GPC. Our goal is to assist each student with a comfortable transition to achieve academic success. More information can be found at: http://depts.gpc.edu/militaryoutreach/

Military Outreach Center locations:
Clarkston Campus, Suite 1300, Building CH, Phone: 678-891-3025
Dunwoody Campus, Suite 1300, Building NB, Phone: 770-274-5026