**INTERMEDIATE ALGEBRA**

**MAT 1033 - 1633**

**INSTRUCTOR:**

Name: Don D. Drew

Contact Information: drew.don@spcollege.edu, 727-341-4680

Office Hours: MW 8:30 – 9:30, 10:45 – 12:30, TTH 8:30 – 9:30

Office Location: SA 218

**ACADEMIC DEPARTMENT:**

Academic Chair: David Kolonoski

Office Location: SA 215

Office Number: 727-341- 4757

**COURSE INFORMATION:** MAT 1033 Intermediate Algebra Math Department

**Requisites:**

Prerequisite: Appropriate math score on the SPC placement test or

Prerequisite: completion of required developmental education coursework

**Course Description:**

Major topics include: 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, and applications. 47 credits

**Learning Outcomes and Objectives:**

1. The student will apply concepts of solving equations and inequalities by:

a. identifying the slope and y-intercept of a line graphically and algebraically.

b. writing the equation of a line given two points or one point and the slope.

c. solving systems of linear equations in two variables graphically and algebraically.

d. solving systems of linear inequalities in two variables by graphing.

e. translating applied problems from their verbal descriptions into linear equations and solving the problem.

f. solving literal equations.

2. The student will apply concepts of solving nonlinear equations and simplifying nonlinear expressions by:

a. solving quadratic equations by factoring.

b. solving quadratic equations using the quadratic formula.

c. solving quadratic equations that result in complex number solutions.

d. solving application problems which require the use of quadratic equations.

e. simplifying and performing arithmetic operations with radical expressions.

f. multiplying and dividing exponential expressions with rational exponents.

g. solving radical equations involving one radical expression (square root).

3. The student will perform the methods of factoring by:

a. factoring polynomials including the sum and difference of cubes.

b. factoring using the greatest common factor.

c. factoring by grouping.

4. The student will apply concepts of rational expressions by:

a. performing arithmetic operations on algebraic fractions including monomial, binomial, and trinomial denominators.

b. simplifying rational expressions.

c. solving rational equations.

5. The student will perform the basic concepts of functions by:

a. using functional notation to evaluate a function.

b. graphing a linear function.

c. applying the vertical line test.

d. identifying the domain and range of a function.

**REQUIRED TEXTBOOK & OTHER RESOURCE INFORMATION:**

Required Text, **Intermediate Algebra, 7/E**
**John Jr Tobey**, *North Shore Community College*
**Jeffrey Slater**, *North Shore Community College*

ISBN-10: 0131490788
ISBN-13:  9780131490789

Publisher:  Prentice Hall
Copyright:  2006
Format:  Paper; 800 pp
Published:  02/03/2005

Calculator: Scientific or Graphing, No cell phone calculator (if used during quiz/test/final exam, you will receive a zero)

**MEETING INFORMATION:**

Course Location: SA 217

Meeting Days: MW

Class Times: 2:00 PM – 3:15 PM

**DISCIPLINE SPECIFIC INFORMATION:**

St. Petersburg College has an Academic Honesty policy. It is your responsibility to be familiar with the policies, rules, and the consequences of violations. Read about the policy at: [**http://www.spcollege.edu/webcentral/admit/honesty.htm**](http://www.spcollege.edu/webcentral/admit/honesty.htm)**.** There is no tolerance for cheating and academic dishonesty. Discipline can range from a zero on that specific assignment to expulsion from the class with a grade of F. Note that copy/pasting published information, whether it's from your textbook or the Internet, without citing your source is plagiarism and violates this policy. Even if you change the words slightly, the ideas are someone else's, so you still have to cite your sources. Cheating, plagiarism, bribery, misrepresentation, conspiracy and fabrication are defined in Rule [6Hx23-4.461](file:///D%3A%5CFaculty%20Manual%5CRules%20Procedures%20Pictures%5C4_461.doc), Student Affairs: Academic Honesty Guidelines, Classroom Behavior.

**ATTENDANCE:**

**The college-wide attendance policy is included in the Syllabus Addendum** <http://www.spcollege.edu/webcentral/policies.htm>**. The policy notes that each instructor is to exercise professional judgment and define “active participation” in class (and therefore “attendance”), and publish that definition in each syllabus. For this class, attendance is defined as……….. Due to the progressive nature of the course content, attendance at all class meetings is strongly and enthusiastically encouraged. Attendance will be taken the first two weeks and after the 60% point of the semester. Note: Attendance will be taken for all veterans throughout the semester.**

**TARDY POLICY: Please arrive to class on time or TWO POINTS will be deducted for every time you are tardy. Tardiness disrupts the flow of class, distract others, and will cause you to miss important information. POINTS will be deducted from your test scores. Refusal to sign sheet = double the points.**

**CELL PHONE POLICY: All cell phones must be turned off before entering the classroom. Ringing or vibrating cell phones disrupt the flow of class, distract others, and will cause you to lose points. You cannot use your cell phone before, during, or after class while in the classroom. Also, no recording or videotaping. FIVE POINTS will be deducted from your test score for every time your cell phone rings, vibrates, or is used in the classroom. For all emergencies, please have the call made to the math office at 341 – 4605.**

**GRADING:** **Tests = 50 %( lowest test score replaced by final exam if higher)**

 **Quizzes = 30 %( lowest quiz score replaced by final exam if higher)**

 **Final Exam = 20 %( exempt if average 90% and above)**

**No make-up test/quiz (1st time) will be given. If you miss a test/quiz (1st time), the final exam will replace this test/quiz. You must have legal documentation from a doctor, court, etc., to make up all other missed tests/quizzes or receive zero. Note: No letters from your parents. Any test, quiz, or assignment turned in late will result in a 25% deduction. All tests/quizzes/assignments must be done in pencil. The first time = 25% deduction and receive a zero on all others. Note: That includes your name also.**

A = 90 to 100

 B = 80 to 89

 C = 70 to 79

 D = 60 to 69

 F = below 60

**STUDENTS’ EXPECTATIONS AND INSTRUCTOR’S EXPECTATIONS**

All students should conduct themselves in a professional matter at all times while in the classroom. All students should respect the instructor, fellow classmates, and any guest speakers at all times while in the classroom. Please do not disturb the class or you will be asked to leave.

NOTE: **Students are responsible for all course material in the syllabus.**

The instructor reserves the right to make changes in the syllabus as needed.

**TENTATIVE SCHEDULE**

**DATES SECTIONS/QUIZZES/REVIEWS/TESTS**

**8 – 17 2.1, 2.2**

 **19 2.3, 2.4**

 **24 2.5, 2.6**

 **26 2.7, 2.8, REVIEW #1**

 **31 TEST #1**

**9 – 2 3.1, 3.2**

 **7 LABOR DAY – COLLEGE CLOSED**

 **9 3.3, 3.4**

 **14 3.5, REVIEW #2**

 **16 TEST #2**

 **21 5.4, 5.5**

 **23 5.6, 5.7**

 **28 5.8, REVIEW #3**

 **30 TEST #3**

**10 - 5 6.1, 6.2**

 **7 6.3, 6.4**

 **12 6.5, REVIEW #4**

 **14 TEST #4**

 **19 7.1, 7.2**

 **21 7.3, 7.4**

 **26 7.5, 7.6, REVIEW #5**

 **28 TEST #5**

**11 – 2 8.1, 8.2**

 **4 8.3, 8.4**

 **9 8.5, REVIEW #6**

 **11 VETERAN’S DAY – COLLEGE CLOSED**

 **16 TEST #6**

 **18 4.1, 4.3**

 **23 4.3, 4.4, REVIEW #7**

 **25 COLLEGE CLOSED**

 **30 TEST #7**

**12 – 2 FINAL EXAM REVIEW**