Department of Mathematical Sciences

University of Wisconsin-Stevens Point

Instructor Hurlee Gonchigdanzan

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Office: B246 Sci Phone: (715) 346-4114

Email: hurlee@uwsp.edu

Office Hours

9:00 - 11:00

Mon, Tue, Thu.

1:00-1:50

Mon, Tue, Wed, Thu.

or by appointment

Room

8:00am-8:50am, Mon, Tue, Wed, Thu – A202 Sci

Text

Elementary and Intermediate Algebra, Fifth Edition Alan S. Tussy, R. David

Gustafson

Course Goal

Learning linear equations including graphing, exponents, radicals, function notation, and quadratic equations. See the Course Outline for more details of the course content. Visit the class webpage in CANVAS http://canvas.uwsp.edu

Prerequisites

Math 90 or suitable placement test score.

Calculator

A 'scientific' calculator is recommended. Graphing calculator is ok. However, any type of computers, phones, and calculators with "QERTY" keyboard such as TI-89, TI-92, and TI-Nspire CAS are NOT allowed during the test and exam.

Cell phones and other electronic devices except for dedicated calculators must be turned off and put away during the test and exam.

Attendance

Attendance is required and will be taken. Students are expected to attend every single class and read the textbook and come to class prepared. In case of absence, it is your responsibility to catch up the missed class.

Homework

Homework will be assigned on regular basis and will be graded. It will be posted in the class webpage in CANVAS http://canvas.uwsp.edu.

Late homework will NOT be collected or graded regardless of the reason. Three (3) assignments with the lowest percent will be dropped.

Separate sheets must be stapled together when you turn it in.

Besides assigned homework it is highly recommended to read the examples in the textbook.

Test

We will have three (3) in-class tests. MAKE-UP test will NOT be given unless it

is noticed in advance. If there is an unavoidable reason to miss it, you MUST

document your absence.

Final Exam

The final exam will be comprehensive. The time and date will be announced.

Grading

Tests and Final exam are weighed as follows:

Course letter grades will be assigned based upon the following table:

$93\% \le "A" \le 100\%$	$87\% \le "B+" < 90\%$	$77\% \le "C + " < 80\%$	$65\% \le "D+" < 70\%$
90% < "A-" < 93%	$83\% \le "B" < 87\%$	73% ≤ "C" < 77%	$60\% \le "D" < 65\%$
70,0 = 11	80% ≤ "B-" < 83%	70% ≤ "C-" < 73%	$0\% \le "F" < 60\%$

FOR HELP

- Ask questions at any time as they arise.

- See me before or after class

- Come to see me during the office hours

- Schedule an appointment for another time.

TUTORING SERVICES

- MathPad 302 CCC
- The MathRoom A113A Scince Building
- The Tutoring and Learning Center (TLC): http://www.uwsp.edu/tlc/

DISABILITIES

If special accommodations are required for exams, you need to contact the Disability & Assistive Technology Center (DATC) datctr@uwsp.edu DATC website: https://www.uwsp.edu/datc/Pages/default.aspx

RIGHTS AND RESPONSIBILITIES

- Student Academic Standards and Disciplinary Procedures, UWS/UWSP Chapter 14: https://www.uwsp.edu/dos/Documents/UWS%2014-1.pdf
- The general Rights and Responsibilities: https://www.uwsp.edu/stuhealth/Pages/Patient%20Information/Rights-Responsibilities.aspx

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CHAPTER 5 Exponents and Polynomials 347

5.1 Rules for exponents 348

OBJECTIVES

- Identify bases and exponents.
- Multiply exponential expressions that have like bases.
- Divide exponential expressions that have like bases.
- Raise exponential expressions to a power.
- Find powers of products and quotients.

5.2 Zero and Negative Exponents 359

OBJECTIVES

- Zero exponent rule.
- Negative integer exponent rule.
- Exponent rules to change negative exponents in fractions to positive exponents.
- Exponent rules to simplify expressions.

9.1 Radical Expressions and Radical Functions 728

OBJECTIVES

- Square roots.
- Square roots of expressions containing variables.
- Graphing the square root function.
- Evaluating radical functions.
- Finding cube roots.
- Graphing the cube root function.
- Finding the *n*-th roots.

9.2 Rational Exponents 743

OBJECTIVES

- Simplify expressions of the form $a^{\frac{1}{n}}$.
- Simplify expressions of the form $a^{\frac{m}{n}}$.
- Convert between radicals and rational exponents.
- Simplify expressions with negative rational exponents.
- Use rules for exponents to simplify expressions.
- Simplify radical expressions.

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9.3 Simplifying and Combining Radical Expressions 754 OBJECTIVES

- Product rule to simplify radical expressions.
- Prime factorization to simplify radical expressions.
- Quotient rule to simplify radical expressions.
- Add and subtract radical expressions.

9.4 Multiplying and Dividing Radical Expressions 765 OBJECTIVES

- Multiply radical expressions.
- Find powers of radical expressions.
- Rationalize denominators.
- Rationalize denominators that have two terms.
- Rationalize numerators.

Test #1

9.5 Solving Radical Equations 777 (Monday, September 17) OBJECTIVES

- Equations containing one radical.
- Equations containing two radicals.
- Formulas containing radicals.

9.6 Geometric Applications of Radicals 788 (Tuesday, September 18)

OBJECTIVES

- Pythagorean theorem to solve problems.
- Problems involving 45°-45°-90° triangles.
- Problems involving 30° 60° 90° triangles.
- Distance formula to solve problems.
- Midpoint of a line segment.

6.6 A Factoring Strategy 477 (Thursday, September 20)

OBJECTIVES

- The greatest common factor of a list of terms.
- Factoring out the greatest common factor.
- Factoring by grouping.

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- 6.7 Solving Quadratic Equations by Factoring 482 (Monday, September 24) OBJECTIVES
 - Quadratic equations.
 - Solving quadratic equations using the zero- factor property.
 - Solving third-degree equations by factoring.

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- 10.1 The Square Root Property and Completing the Square 826 (Tuesday, September 25) OBJECTIVES
 - Use the square root property to solve quadratic equations.
 - Solve quadratic equations by completing the square.
- 10.2 The Quadratic Formula 838 (Wednesday, September 26) OBJECTIVES
 - Derive the quadratic formula.
 - Solve quadratic equations using the quadratic formula.
 - Write equivalent equations to make quadratic formula calculations easier.
 - Use the quadratic formula to solve application problems.
- 10.3 The Discriminant and Equations That Can Be Written in Quadratic Form 851 OBJECTIVES (Thursday, September 27)
 - Use the discriminant to determine number and type of solutions.
 - Equations that are quadratic in form.
 - Applied problems using quadratic equations.

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Test #	3
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