Math 90-7 Syllabus (Fall, 2018)

Instructor: Eric Watson

Office: B152 Phone: ext. 3183 Email: <u>Eric.Watson@uwsp.edu</u>
Office hours: Tuesday and Thursday 9:30 AM to 10:30 AM or by appointment

Classroom {B348 Monday, Tuesday, Wednesday} {CCC 302 Thursday}

Time 4:00PM to 4:50 PM

Bulletin description: Math 90, Beginning Algebra. 3 cr. Real numbers, solving linear equations, exponents, polynomials, rational expressions. Algebra for those with low placement test scores who need practice in fundamental math skills. Does not count toward a degree.

Required Text: Elementary and Intermediate Algebra 5th edition, Tussy and Gustafson

Disability Statement: UWSP provides students with disabilities reasonable accommodation to participate in educational programs, activities or services. Students with disabilities requiring accommodations to participate in class activities or meet course requirements should contact me as early as possible. If you have a disability or acquire a condition during the semester where you need assistance, please contact the Disability and Assistive Technology Center on the 6th floor of Albertson Hall (library) as soon as possible. DATC can be reached at 715-346-3365 or DATC@uwsp.edu.

Teaching Methods:

- I will use a variety of methods to teach this course including traditional lecture, class discussion, and presentation of videos.
- A variety of assignments will be used for application of the material including objective quizzes, tests, and a final exam.
- No phones and phone calculators are to be used with the course
- Calculators: You may use any four-function, scientific, or graphing calculator,
- Invalid calculators including pocket organizers, handheld or laptop computers, electronic writing pads or pen-input devices (the Sharp EL 9600 is permitted), calculators built into cellular phones or other wireless communication devices, calculators with a typewriter keypad with keys in QWERTY format (calculators with letter keys not in QWERTY format are permitted), calculators with built-in computer algebra systems, prohibited calculators in this category include: Casio: Algebra fx 2.0, ClassPad 300, and all model numbers that begin with CFX-9970G, Texas Instruments: All model numbers that begin with TI-89 or TI-92, and TI-Nspire CAS, Hewlett-Packard: hp 48Gll and all model numbers that begin with hp 40G or hp 49G. Calculators which have been modified such as calculators with paper tape (remove the tape), calculators that make noise (turn off the sound feature), calculators that can communicate wirelessly with other calculators (completely cover the infrared data port with heavy opaque material, such as duct tape or electrician's tape (includes Hewlett-Packard HP-38G series and HP-48G)).

Course Objectives/Student Objectives:

As a result of being enrolled in this course, students will be exposed to information that covers the following topics. Thus, students will be expected to demonstrate an understanding of the following:

| To Simplifying Algebraic Expressions using Properties of Real Numbers. |
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| To solve equations and inequalities. |
| To Graph Linear Equations and Inequalities in two variables and three forms. |
| To be able to add, subtract, multiply, and divide polynomials. |
| To be able to factor trinomials. |

 \Box To be able to use the quadratic formula to solve quadratics with rational values.

Student Expectations:

It is expected that you will attend class, read the chapters in a timely fashion, and actively participate in your own learning. However, I do not grade on attendance, or dramatic improvements in your test scores.

I also expect that you will let me know when I am not clear, or you are having difficulty understanding the material. Silence will be interpreted as "understanding." I view learning as a partnership among the students and the instructor. We can also benefit from each other, and we all have valuable contributions.

Special Assistance:

Please let me know early if you are having difficulty with the course content. We can arrange to meet as often as needed or use a math tutor via the department.

Getting the most out of the course:

Studying and learning styles are very personal. Use your personal skills to get the most out of this course. I suggest taking notes, doing daily work.

Approximate Points Available for the class

| Test 4 @ 100 | approximately points each | 400 | | | | |
|---|---------------------------|-----|--|--|--|--|
| Quiz 3 @ 40 | approximately points each | 120 | | | | |
| Other work including small quizzes and assignments100 | | | | | | |
| Total class points will be approximately 620-650 | | | | | | |

Grading Scale:

A: 95-100% A-: 91-94% B+ 87-90% B 84-86% B- 80-83% C+ 77-79%

C 74-76% C-: 70-73% D+ 67-69% D 64-66% D- 62-63% <62% = F.

*I will consider "rounding up" if you are within .05 of the next highest grade AND actively participated in class, attended regularly, etc.

Tentative Outline:

The instructor reserves the right to adjust the outline according to the needs of the class. This information will be communicated either in class or via email. I attempt to adhere to the sequence of topics presented in each chapter during class discussion/lecture.

| CH 1 | Sept 4,5 | 1.1 Language of Algebra |
|------|--------------|--|
| | 1 | 1.2 Fractions |
| CH 1 | Sept 10, 11, | 1.3 The Real numbers |
| | 12 | 1.4 Adding real numbers |
| | | 1.5 Subtracting real numbers |
| CH 1 | Sept 17,18, | 1.6 Multiplying and Diving real numbers |
| | 19 | Sept. 18th Quiz sections 1.1 to 1.6 |
| | | 1.7 Exponents and order of operations |
| CH 1 | Sept 24,25 | 1.8 Algebraic Expressions |
| | • | 1.9 Simplifying Algebraic expressions using Properties of real numbers |
| CH 1 | September 26 | TEST 1 on Chapter 1 |
| CH 2 | October | 2.1 Solving Equations using the properties of equality |
| | 1,2,3 | 2.2 More about solving equations. |
| | | 2.3 Applications of percent |
| | | |
| CH 2 | October | 2.4 Formulas |
| | 8,9,10 | 2.5 Problem solving |
| | | 2.6 More about problem solving. |
| CH 2 | Oct 15 | Test Ch 2 |
| CH 3 | Oct 16,17, | 3.1 Graphing using the rectangular coordinate system. |
| | 22 | 3.2 Graphing linear equations |
| | | 3.3 Intercepts |
| CH 3 | Oct 23 | Quiz on CH 3 |
| CH 5 | Oct 24 | 5.1 Rules for exponents |
| CH 5 | Oct | 5.2 Zero and negative exponents |
| | 29,30,31 | 5.3 Scientific notation |
| | | 5.4 Polynomials |
| CH 5 | Nov 5 | Quiz |
| CH 5 | Nov 6, 7 | 5.5 Adding and subtracting polynomials |
| | | 5.6 Multiplying polynomials |

| CH 5 | Nov 12, 13, | 5.7 Special Products. |
|----------|-------------|---|
| | | 5.8 Dividing polynomials |
| CH 5 | Nov 14 | Test Chapter 5 |
| CH 6 | Nov | 6.1 Greatest common factor, factor by grouping |
| | 19 ,20,21 | 6.2 Factoring trinomials $x^2 + bx + c$ |
| | | 6.3 Factoring trinomials $ax^2 + bx + c$ |
| CH 6 | Nov | 6.4 Factoring Perfect-Square Trinomials and difference of two squares |
| | 26,27,28 | 6.6 A factoring Strategy |
| | | 6.7 Solving Quadratic Equations by factoring |
| CH 6 | Dec. 3 | Test CH 6 |
| Ch 10 | Dec 4 | 10.2 The quadratic formula |
| CH 7 | Dec 5, 10 | 7.1 Simplifying rational expressions |
| | | 7.8 Proportions and similar triangles |
| CH 7 | Dec 11 | Quiz 7 & 10 |
| All | Dec 12 | Review for exam |
| chapters | | |
| All | Dec. 17 | Final will cover Chapters 1,2,3,5,6,7,10. |
| chapters | 5-7 PM | Final Exam on Dec 17 th 5-7 PM |

Professional Behavior in the Classroom: Laptops and cell phones are not allowed. Turn you cell phones OFF and put them out of sight. If you have an emergency and need your cell phone let me know before class. Cell phone use is rude and distracting and associated with poor academic performance http://www.medicalnewstoday.com/articles/269882.php http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1595375

http://www.degruyter.com/view/j/sigtem.2011.4.issue-1/v10195-011-0039-0/v10195-011-0039-0.xml

I also find it rude and distracting when students are obviously attending to material not related to this class; this includes reading other books, writing in planners, and sneaking looks at cell phones, etc. If you don't want to be in class, don't come. I will also stop class and ask you to put your cell phone, planner, etc., away if I do see it in use.