

## Math 90–Fall 2019 General Course Information-(Sec 03C)

Alvin Schuller [aschulle@uwsp.edu](mailto:aschulle@uwsp.edu)

**M90 Sec 03C** 11:00 - 11:50 am.  
**M T W** in SCI A212  
**R** meet with tutor in CCC 302

**Office:** CCC 302A MathPad  
**Cellphone:** 715-572-3995  
**Office phone:** 715-346-2713

(If you leave a voicemail, then, please, also, send a text or an e-mail, if possible.)

### Office hours:

Mon: 12-12:50 p.m.  
Tues: 12-12:50 p.m.  
Wed: 12- 12.50 p.m.  
Thurs: 12-12:50 p.m.

I am available for hours other than these, so please, feel welcome to stop in with questions or to chat. I like getting to know my students.

### Math 90 - Beginning Algebra: 5 ed.

- Beginning Algebra is for those with low placement test scores who need practice in fundamental math skills. Does not count toward a degree.
- We will develop and practice math skills in the following areas: real numbers, problem solving, solving linear equations, graphing, exponents, polynomials, rational expressions. **(some material may be modified)**
- **IMPORTANT:** If you are placed into remedial/developmental coursework in mathematics you must restrict your coursework to a level that will allow for success.

**Text:** Elementary & Intermediate Algebra, 5<sup>th</sup> Ed., by Alan S. Tussy and R. David Gustafson, customized for UWSP.

**Supplementary Material:** An optional online study guide complements the text.

### Suggestions for success:

- **Behave appropriately and be responsible** for yourself and your own learning; and treat this course as your current job!
- **Read** the textbook and **review** examples and/or **review online resources**.
- **Develop effective study skills**
- **Attend** face-to-face lectures and **engage** your brain.
- **Do homework and assigned problems** (and practice problems) to understand concepts.
- **Communicate effectively and ask questions** before, during, and after class, or online, or at your convenience.
- **Visit** your instructor at his office to discuss coursework.
- **Utilize UWSP support resources** to get additional help.
- **Ask** classmates and likewise, **help** classmates when asked.



*" ... The true test of understanding a concept or skill is  
being able to teach it to someone else ... "*

**Course Outcomes:** Students should learn to understand and appreciate the following:

- Numbers and variables can be used to describe real life relationships.
- Laws and properties of algebra must be followed to maintain relationships between numbers and variables.
- Graphs provide a visual way to view and analyze relationships between variables.
- Problem solving skills allow us to approach real life problems, analyze how to solve them, and check our answers.
- Knowledge of exponents enables us to manipulate and solve polynomials.
  
- Mathematics can help them better understand and describe the world around them.
  
- Developing the potential and skills for finding or creating solutions for problems, which involves gathering and applying new knowledge, makes it possible for a person to solve problems in life.

**Critical Thinking Learning Objectives:**

This course is part of a pilot program that focuses on the intention to develop in students critical thinking skills across the disciplines.

In mathematics, critical thinking helps us identify mathematical problems, transform them into solvable problems, and then solve them using appropriate techniques.

The pilot program adds the following learning outcomes for students to the course:

- The intention is to have students learn to recognize critical thinking as a process of identifying, evaluating and constructing mathematical reasoning in deciding what conclusions to draw or what techniques to apply to resolve a problem
- The intention, also, is to have students learn to recognize that "perfect practice" and persistence are critical to developing and strengthening mathematical ability and acuity.
- The intention is to have students learn to demonstrate persistence, perseverance and resourcefulness in mastering mathematical concepts and techniques.

**Target Audience:** This **traditional section** is available for those seeking more explanations and examples. (However, the goal is for students to develop and have a working knowledge of the above topics and thus become highly motivated to study, independently, outside of face-to-face lectures.

**Success is not final,  
failure is not fatal:  
it is the courage  
to continue that counts"**

Winston Churchill



## Course Format & Expectations:

### Class Schedule

- **Monday:** Always face-to-face instruction. Attendance is expected. We will meet in the designated classroom for your section:  
**Section 03C:** 11am-11.50am SCI A212
- **Tuesday:** Always face-to-face instruction. Attendance is expected. We will meet in the designated classroom for your section:  
**Section 03C:** 11am-11.50am SCI A212
- **Wednesday:** Always face-to-face instruction. Attendance is expected. We will meet in the designated classroom for your section:  
**Section 03C:** 11am-11.50am SCI A212
- **Thursday:** Section 03C: A UWSP student tutor will be available during your scheduled tutoring time for assistance on homework as needed. Attendance is mandatory, especially, if any online homework is not complete at 90% or better. The class will meet in CCC 302.

### Attendance:

- Regular attendance is expected. Attend class regularly and be on time. You are allowed two absences without penalty.
- If you are absent more than twice, I will deduct 10 points for each absence.
- If you are absent 4 or more times, I will lower your final grade one letter grade.
- If you are late on a habitual basis, I will deduct 5 points for each tardy.
- E-mail or text me if you will be missing a class.
- Absences for serious illness, family emergencies, or University sponsored activities may be excused, provided you, adequately, notify the instructor (me), verbally or by e-mail, **prior** to intended absence or when you provide documentation of the emergency.
- **Tests will not be given later for unexcused absences. Arrangements must be made PRIOR to the test date if possible. Five {5} unexcused absences could result in an automatic failing grade.**
- I will deduct points at my discretion for use of cell phones, texting, talking, sleeping, and leaving early, etc.



**Canvas/D2L / WebAssign / UWSP E-mail:** All of these resources could be used for communication between the instructor and students. Students will be responsible for reading all messages and assignments posted on any of the above and/or written or vocalized in lectures.

**Netiquette:** Please read the article below and consider the rules for online discussions: <http://online.uwc.edu/technology/onletiquette.asp>. Violation of these rules will reduce participation points.

- **Homework:** Most homework will be completed online using WebAssign. Other assignments may be required via discussions in D2L, on paper, or other means.
- Missed in-class assignments won't be available to make up, unless you have an excused absence and may require your attendance in MathPad for completion.
- Late penalties may be assessed for late homework, unless absences were excused and documented as noted above.
- **Homework will not be accepted after two weeks beyond the due date (except at the discretion of the instructor).**
- Extra credit earned during class periods will be not be accepted late.
- **Online Homework Component forms 25% of your overall grade.** In this traditional course, it is expected that you will review classwork material and do online homework after face-to-face lectures. In-class lectures will cover content at a reasonable pace and self-motivation is expected. Expect to do some independent enrichment work.
- **Quizzes: will make up 25% of your grade**
- **Tests: will make up 20% of your grade**
- **Mid-Term Exam:** *date and time* to be announced ...
- **Final Exam:** The final is *a written (pencil, paper, scantron)* exam tentatively scheduled for **Monday, December 16, 5:00- 7:00 p.m.** (venue: **SCI A212**)

**Exams: cumulative mid-term and final scores make up 30% of your grade**

**Grading Scales:** Grades will be based on the following percentages:

Homework: 25%  
 Quizzes: 25%  
 Tests: 20%  
 Final Exam: 30%

93 - 100%	A	73 - 76.99 %	C
90 - 92.99	A-	70 - 72.99	c-
87 - 89.99	B+	67 - 69.99	D+
83 - 86.99	B	60 - 66.99	D
80 - 82.99	B-	0 - 59.99	F
77 - 79.99	c+		





No grading category will exceed 105% for purposes of calculating the final grade.

The instructor reserves the right to exercise discretion in raising a student's grade if he feels that the final weighted average does not properly reflect the quality of a student's work. The instructor will not use discretionary judgments to lower a student's final grade.

**Incompletes:** A grade of incomplete may be given when circumstances arise which are beyond the student's control and the student is unable to complete the course AND the student is passing when the circumstances arise.

**Electronics:** Cell phones **should be turned off** during class time. Exceptions may be made for unusual circumstances, if discussed with the instructor, prior to use.

Earphones/buds **may not be used** during a quiz or exam and will be considered as rude behavior during lectures.

**Calculators:** You may use any four-function, scientific, or graphing calculator, **except** calculators, pocket organizers, handheld or laptop computers, electronic writing pads, pen-input devices, smartwatches, or **calculators built into cellular phones or other wireless communication devices**, or calculators with a typewriter keypad with keys in QWERTY format, or 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,
- Hewlett-Packard: hp 48GII 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 a 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)], calculators that have power cords (remove all power/electrical cords) and they'll be acceptable.

***Sharing calculators or smartwatches during exams/quizzes is not allowed.***

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## **On-Campus Resources:**

**MathPad:** CCC 302. MathPad is both a classroom and tutoring lab for students enrolled in Math 90/95/100 courses.

**Math Tutoring Room:** A113A Science. UWSP students provide free tutoring on a drop-in basis. See <http://www.uwsp.edu/mathsci/Pages/tutoring.aspx> for details of services.

**The Tutoring Learning Center (TLC): LRC 018** - The Tutoring-Learning Center offers individual tutoring. If you are enrolled in support services on campus such as Disability Services, Multicultural Affairs, or Student Support Services there is no fee. If you aren't enrolled in these services, one-on-one tutoring is available for a fee.

**Disability Accommodations:** Information regarding Section 504 of the Rehabilitation Act or the Americans with Disabilities Act can be found at the UWSP Disability and Assistive Technology Center site <http://www.uwsp.edu/special/disability/>. To request any accommodations relevant to this class, you should first discuss the matter with the staff at the Center. Details regarding the documentation necessary to qualify for accommodation can be found at

<http://www.uwsp.edu/disability/Pages/toQualifyForDisabilityServices.aspx>.

**Community Bill of Rights and Responsibilities:** You should be fully aware of your rights and responsibilities as a UWSP student. These are detailed in the UWSP Community Bill of Rights and Responsibilities found at <http://www.uwsp.edu/dos/Documents/Community%20Rights%20and%20Responsibilities.pdf>.

In particular, this site includes links to the UWSP Student Academic Disciplinary Procedures, <http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap 14.pdf>

and to the Non-Academic Standards and Disciplinary Procedures,

<http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap 17. pdf>.

## **General Course Policies**

1. **Tests MUST be ONLY your own work.** You are encouraged to work together or ask for assistance on homework (unless otherwise specified), but it is your responsibility to understand and learn the content.
2. Generally, it is my policy to **not** allow make-up tests. An exception is likely to be made provided you make your request **in advance** of the test. The make-up date will need to be within a reasonable timeframe and at the convenience of the instructor.
3. Appeal of grading should be submitted in writing within 5 days of receiving the evaluation.



## Math 90 Syllabus Content Outline

Semester I Fall 2019

**\*Course content may be modified and streamlined as per the stipulations of the department**

ELEMENTARY AND INTERMEDIATE ALGEBRA, 5<sup>th</sup> EDITION.

**Tussy and Gustafson: MATH 90 Beginning Algebra 5<sup>th</sup> ed.**

We will develop and practice math skills in the following areas:

Real numbers, Problem solving, Unit conversions, Graphing, Linear equations, Exponents, Polynomials, Factoring, Quadratic equations, and Rational expressions.

**Prerequisite:** relevant placement test score

**Note.** *The order of the sections listed below is not necessarily the order in which they are covered.* However, the following order is recommended.

### CHAPTER 1 AN INTRODUCTION TO ALGEBRA

- 1.1 Introduction to the language of Algebra.
- 1.2 Fractions
- 1.3 The Real Numbers
- 1.4 Addition of Real Numbers
- 1.5 Subtraction of Real Numbers
- 1.6 Multiplying and Dividing of Real numbers
- 1.7 Exponents and Order of Operations
- 1.8 Algebraic expressions
- 1.9 Simplifying Algebraic expressions using Real Numbers

### CHAPTER 2 EQUATIONS, INEQUALITIES AND PROBLEM SOLVING

- 2.1 Solving equations using Properties of Equality
- 2.2 More about Solving Equations
- 2.3 Applications of percent
- 2.4 Formulas
- 2.5 Problem Solving
- 2.6 More about Problem Solving

### CHAPTER 3 METHODS OF GRAPHING LINEAR EQUATIONS

- 3.1 Graphing using the Rectangular Coordinate System
- 3.2 Graphing Linear Equations
- 3.3 Graphing using Intercepts



## CHAPTER 5 EXPONENTS AND POLYNOMIALS

- 5.1 Rules for exponents
- 5.2 Zero and Negative Exponents
- 5.3 Scientific notation
- 5.4 Polynomials
- 5.5 Adding and Subtracting Polynomials
- 5.6 Multiplying Polynomials
- 5.7 Special products
- 5.8 Dividing Polynomials

## CHAPTER 6 FACTORING AND QUADRATIC EQUATIONS

- 6.1 The Greatest Common Factor; Factoring by Grouping
- 6.2 Factoring Trinomials of the Form  $x^2+bx+c$
- 6.3 Factoring Trinomials of the Form  $ax^2+bx+c$
- 6.4 Factoring Perfect-Square Trinomials and Differences of Two Squares
- 6.5 Factoring the Sum and Difference of Two Cubes
- 6.6 A Factoring Strategy
- 6.7 Solving Quadratic Equations by Factoring

## CHAPTER 10 QUADRATIC EQUATIONS

- 10.2 Solving Quadratic Equations by Using the Quadratic Formula

## CHAPTER 7 RATIONAL EXPRESSIONS AND EQUATIONS

- 7.1 Simplifying Rational Expressions
  - 7.2 *Multiplying and Dividing Rational Expressions*
  - 7.3 *Adding and Subtracting Rational Expressions with Like Denominators; LCD*
  - 7.4 *Adding and Subtracting Rational Expressions with Unlike Denominators*
- 7.8 Proportions, Unit Conversions and Similar Triangles

