Math 95, Sections 8 and 12   Intermediate Algebra   Fall 2020 Syllabus

Jeff Strick Email: jestrick@uwsp.edu	**Virtual Office Hours** **(thru Zoom in Canvas)**	**Final Exam:** **Thursday, October 22, 5-7pm**
	Mondays at 4:00-4:45, Wednesdays at 4:45-5:30, NOTE: Other office hours by appointment.	

MATH 95   Intermediate Algebra   2 credits

Linear equations including graphing, exponents, radicals, function notation, and quadratic equations.

Prerequisite: Math 90 or suitable placement score.

Learning Outcomes: Upon the successful completion of this course you will depart with the understanding that:

1. Algebraic expressions can be rewritten in an equivalent simplified form.
2. Solving equations/inequalities is a process where to find value(s) that yield a true statement.
3. There are several methods to use in solving equations/inequalities so analysis of the problem will determine the appropriate method to use.

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

Structure of the Course: This course will be taught virtually online. I have organized the course week by week in Canvas. Each week you will have video lessons to watch, followed by homework assignments to complete in WebAssign. In addition to watching the lesson videos, you should also read your textbook, and copy all the examples given, so you understand the steps required to work each problem. Then you will be better prepared to do your homework. After week one, each week will also include a quiz or a unit exam.

Due Dates: It is your responsibility to make every effort to keep up with the scheduled work. Only in rare cases will I extend a homework due date beyond the automatic extension period. <u>Quizzes and exams may not be made up unless arranged with me ahead of time, and then only for sufficient reason.</u> You may reach out for help at any time! You may work ahead; however, the quizzes and tests must be taken on the scheduled days. Dates for the quizzes and exams, and due dates for the assignments are in the calendar in Canvas, and are also at the end of the syllabus.

Calculators: You may use any four-function, scientific, or graphing calculator, *except* calculators including pocket organizers, handheld or laptop computers, electronic writing pads, pen-input devices or *calculators built into cellular phones or other wireless communication devices*, calculators with a typewriter keypad with keys in QWERTY format, 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

Homework will be assigned daily and will consist of problems you will complete in WebAssign. You will have five tries to answer each question. There are 29 equally weighted assignments (including the "Getting Started Using WebAssign" one), and the three lowest grades will be dropped. Each assignment is due by 11:59pm on its respective due date (except for the very last assignment). The average number of questions is 18, and the average estimated time to complete an assignment is 48-50 minutes. Remember that for each hour we would be meeting in class if we were meeting in person, you should expect to spend about two hours studying and completing homework. So you should plan to invest about 12 hours per week on this class.

When you do your homework, it is advisable to do your work <u>on paper</u> in an <u>organized</u> way (I suggest keeping a notebook so all your work is together), just as you would do if you were doing the problems directly from the textbook and handing it in to be graded. Your exams and quizzes will be in WebAssign, but I will also have you submit your written work for them, and I expect to have well written and organized work to grade, so take my advice and develop that skill when doing the homework! I will model for you what "organized, well written work" means in a video which I will post in Canvas for you. (Your final exam will be in Canvas, not WebAssign.)

Late Penalties for WebAssign Assignments:
• If an extension is requested (via WebAssign) within one week of the due date, 24 hours will be granted with a 20% penalty (on any points earned after the original due date).
• All other extensions will be at the discretion of the instructor.

Quizzes and Exams: You will have four quizzes, and three unit exams. They will be made available only on the scheduled dates, and be open from 7am until 11:59pm. They will have time limits, and so plan to complete your quiz or test in one sitting. Unlike homework, you cannot start and stop, and come back later to finish it. **YOU WILL BE SUBMITTING YOUR WORK,** so as you take the quiz or test, you will do your work (neatly!) on paper, and then submit that work through Canvas in addition to submitting your answers in WebAssign. **A QUIZ OR EXAM GRADE EARNED IN WEBASSIGN MAY BE LOWERED IF YOUR SUBMITTED WORK IS INADEQUATE, MISSING, SLOPPY, OR INACCURATE. (WE MAY DOING OUR QUIZZES AND EXAMS IN A DIFFERENT ONLINE PROGRAM, MORE DETAILS TO COME)**

Final Exam: the comprehensive final exam is scheduled for **Thursday, October 22, 5-7pm.** You will be taking it in Canvas, not WebAssign. **BE SURE TO KEEP THIS TIME SLOT OPEN AND AVAILABLE IN YOUR SCHEDULE!!** (You will not be required to submit your work for the final.)

Evaluation: Your final course grade will be determined by the following weights:
26% for daily homework   42% for Exams – 14% each
16% for quizzes – four quizzes, 4% each   16% for the comprehensive final exam

Grading Scale:

A:	≥ 92%	A – :	≥ 90% but < 92%		
B + :	≥ 88% but < 90%	B :	≥ 82% but < 88%	B – :	≥ 80% but < 82%
C + :	≥ 78% but < 80%	C :	≥ 74% but < 78%	C – :	≥ 72% but < 74%
D + :	≥ 69% but < 72%	D :	≥ 65% but < 69%	F :	< 65%

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.

For Help: 1) Ask questions as they arise. You can use the "Ask the Instructor" option in WebAssign, or just send me an email. 2) Drop in to one of my virtual office hours. (In Canvas, select Zoom in the menu, and join the meeting for that day and time. 3) Make use of the MathPad. 3) Tutoring services (through the TLC) are available for this course. More specifics for options 3 and 4 will be provided in Canvas when they become available.

General Course Policies:
1) UWSP is committed to providing reasonable and appropriate accommodations to students with disabilities and temporary impairments. 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.
2) You should be fully aware of your rights and responsibilities as a UWSP student. Refer to http://www.uwsp.edu/dos/Pages/Student-Conduct.aspx for more information regarding the UWSP Community Bill of Rights and Responsibilities, the UWSP Student Academic Disciplinary Procedures, and the Non-Academic Standards and Disciplinary Procedures.

TOPICS Covered:

Note. The order of the sections listed below is not the order in which they are covered.

5.   Exponents and Polynomials
5.1   Rules for Exponents

5.2   Zero and Negative Exponents

8.   Transition to Intermediate Algebra
8.2   Functions

8.6   Review of Factoring Methods: GCF, Grouping, Trinomials

8.7   Review of Factoring Methods: The Difference of Two Squares; the Sum and Difference of Two Cubes

6.   Factoring and Quadratic Equations
6.6   A Factoring Strategy

6.7   Solving Quadratic Equations by Factoring

9.   Radical Expressions and Equations
9.1   Radical Expressions and Radical Functions

9.2   Rational Exponents

9.3   Simplifying and Combining Radical Expressions

9.4   Multiplying and Dividing Radical Expressions

9.5   Solving Radical Equations

9.6   Geometric Applications of Radicals

10. Quadratic Equations, Functions, and Inequalities
10.1   The Square Root Property and Completing the Square

10.2   The Quadratic Formula

10.3   The Discriminant and Equations That Can Be Written in Quadratic Form

Math 95 WebAssign Homework

Assignment	# questions	estimated time	# points
getting started	22	22	25
5.1 Rules for Exponents 1	20	46	44
5.1 Rules for Exponents 2	20	45	23
5.2 Zero and Negative Exponents	30	70	42
8.6 Review of Factoring Methods: GCF, Grouping, Trinomials 1	18	43	21
8.6 Review of Factoring Methods: GCF, Grouping, Trinomials 2	14	49	14
8.7 Review of Factoring Methods: The Difference of Two Squares; the Sum and Difference of Two Cubes 1	15	45	18
8.7 Review of Factoring Methods: The Difference of Two Squares; the Sum and Difference of Two Cubes 2	11	43	13
6.6 A Factoring Strategy	23	64	23
6.7 Solving Quadratic Equations by Factoring	23	45	25
10.1 The Square Root Property	12	27	16
10.1 Completing the Square	12	49	15
10.2 The Quadratic Formula 1	13	49	19
10.2 The Quadratic Formula 2	10	43	14
10.3 The Discriminant and Equations That Can Be Written in Quadratic Form	13	50	13
8.2 Functions 1	20	38	39
8.2 Functions 2	14	49	16
9.1 Radical Expressions and Radical Functions 1	28	39	30
9.1 Radical Expressions and Radical Functions 2	30	66	45
9.2 Rational Exponents 1	25	36	34
9.2 Rational Exponents 2	21	52	22
9.3 Simplifying and Combining Radical Expressions 1	16	37	27
9.3 Simplifying and Combining Radical Expressions 2	18	50	18
9.3 Simplifying and Combining Radical Expressions 3	18	57	22
9.4 Multiplying and Dividing Radical Expressions 1	19	60	22
9.4 Multiplying and Dividing Radical Expressions 2	23	58	23
9.5 Solving Radical Equations 1	16	45	28
9.5 Solving Radical Equations 2	14	51	17
9.6 Geometric Applications of Radicals	18	57	27
on average:	18	48	24