

MATH 95 Intermediate Algebra

Fall 2020

Instructor: Dr. Sebastian Zamfir

Office: B-205 SCI Bldg.

Email: szamfir@uwsp.edu

MATH 95 - Intermediate Algebra

Description:

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

Prerequisites:

MATH 90 or suitable placement test score

2 cr.

Delivery Format: FACE-TO-FACE (a.k.a. IN-PRESON) in Champions Hall (MCCH) 110
with the caveat that the transition to fully online can happen at any time.

Meeting Information

Days & Times	Room	Instructor	Meeting Dates
MoTuWeTh 1:00PM - 1:50PM	Champions Hall (MCCH) 110	Nicolae Sebastian Zamfir	09/02/2020 - 10/23/2020

Office Hours: By appointment. Send me an email and I will be happy to schedule a Zoom meeting with you, as needed and requested.

Weekly Zoom Helping Sessions: I will host two one-hour Zoom session every week, open to the whole class: Monday & Thursday 2-3 PM. You will receive an invitation in email prior to each helping session.

Tutoring via TLC: The Tutoring-Learning Center (TLC) offers free group, drop-in, and individual tutoring to support you in your physics and astronomy classes. The tutors are UWSP students who have done well in their classes and who are here to share their successful study habits and content knowledge to help others succeed. Reviewing, discussing, and practicing concepts together clarifies and solidifies knowledge, and the tutors are eager to study with you. If you have questions about the schedules or would like to make an appointment, please contact the TLC via email (tlctutor@uwsp.edu) or phone (715-346-3568) for information.

Math and Science Tutoring – Fall 2020

What	Details	Schedule	Cost
Drop-In Tutoring	Via Zoom	https://www.uwsp.edu/tlc/Pages/dropInTutoring.aspx	Free
Group Tutoring	Via Zoom, based on course section	https://www.uwsp.edu/tlc/Pages/schedules.aspx	Free
One-on-One Tutoring	By appointment, via GoBoard. Weekly attendance required.	Complete online request form here: https://www.uwsp.edu/tlc/Pages/request-math-science-tutoring.aspx	Free

Textbook: Elementary and Intermediate Algebra 5ed., Tussy and Gustafson (*available at the store*)

Course website: <https://uwsp.instructure.com/courses/336043>. Log on using your UWSP login and password. ***This website may be used for posting grades, homework assignments, discussion sessions, etc. It is the main hub-interface for this course.***

Calculator:

- 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 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 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)).

Attendance rules:

- 1) You are required to use the same seat every time we meet for lecture in the classroom. We will keep a seat-chart and make sure each student is assigned a specific seat. We need to enforce this rule to help with contact-tracing in case of an unfortunate Covid-19 situation. I will take attendance every day we meet for class and recorded in CANVAS.
- 2) If you decide that in-person attendance is too risky for you or the other people in the room, please let me know ASAP and we will decide for on-line (CANVAS) test exam submission.
- 3) This Fall 2020 semester non-attendance will not count against you for grade purposes. However, you are responsible to keep up with the pace of the material covered by instructor in classroom, making use of resources posted on CANVAS, and submitting your work by indicated deadlines.

Chapter/Section(s)	Learning Objectives By the end of these sections, students will be able to...
Chapter 5 Exponents and Polynomials	<u>5.1 Rules for Exponents</u> <ul style="list-style-type: none">• Identify bases and exponents• Multiply and Divide exponential expressions that have like bases• Raise exponential expressions to a power• Find powers of products and quotients
	<u>5.2 Zero and Negative Exponents</u> <ul style="list-style-type: none">• Use the zero-exponent rule• Use the negative integer rule• Use exponent rules to change negative exponents in fractions of positive exponents• Use all exponent rules to simplify expressions
Chapter 8 Transition to Intermediate Algebra	<u>8.2 Functions</u> (Refer to Ch 3.4-3.6 for more depth in writing linear equations.) <ul style="list-style-type: none">• Define relation, domain, and range• Identify functions• Use function notation• Find the domain of a function• Graph linear functions• Write equations of linear functions• Evaluate polynomial functions

	<p style="text-align: center;"><u>8.6 Review of Factoring Methods: GFC, Grouping & Trinomials</u></p> <ul style="list-style-type: none"> • Factor out the greatest common factor (GCF) • Factor by grouping • Use factoring to solve formulas for a specified variable • Factor trinomials • Use substitution to factor trinomials • Use the grouping method to factor trinomials <p style="text-align: center;"><u>8.7 Review of Factoring Methods: The Difference of Two Squares; the Sum and Difference of Two Cubes</u></p> <ul style="list-style-type: none"> • Factor the difference of two squares • Factor the sum and difference of two cubes
<p style="text-align: center;">Chapter 6</p> <p style="text-align: center;">Factoring and Quadratic Equations</p>	<p style="text-align: center;"><u>6.6 A Factoring Strategy</u></p> <ul style="list-style-type: none"> • Use a general strategy for factoring polynomials <p style="text-align: center;"><u>6.7 Solving Quadratic Equations by Factoring</u></p> <ul style="list-style-type: none"> • Define quadratic equations • Solve quadratic equations using the zero-factor property • Solve third-degree equations by factoring
<p style="text-align: center;">Chapter 9</p> <p style="text-align: center;">Radical Expressions and Equations</p>	<p style="text-align: center;"><u>9.1 Radical Expressions and Radical Functions</u></p> <ul style="list-style-type: none"> • Find square roots • Find square roots of expressions containing variables • Graph the square root function • Evaluate radical functions • Find cube roots • Graph the cube root function • Find n-th root <p style="text-align: center;"><u>9.2 Rational Exponents</u></p> <ul style="list-style-type: none"> • Simplify expressions of the forms $a^{1/n}$ and $a^{m/n}$ • Convert between radicals and rational exponents • Simplify expressions with negative rational exponents

	<ul style="list-style-type: none"> • Use rules for exponents to simplify expressions • Simplify radical expressions
	<p style="text-align: center;"><u><i>9.3 Simplifying and Combining Radical Expressions</i></u></p> <ul style="list-style-type: none"> • Use the product rule to simplify radical expressions • Use prime factorization to simplify radical expressions • Use the quotient rule to simplify radical expressions • Add and subtract radical expressions
	<p style="text-align: center;"><u><i>9.4 Multiplying and Dividing Radical Expressions</i></u></p> <ul style="list-style-type: none"> • Multiply radical expressions • Find powers of radical expressions • Rationalize denominators • Rationalize denominators that have two terms • Rationalize numerators
	<p style="text-align: center;"><u><i>9.5 Solving Radical Equations</i></u></p> <ul style="list-style-type: none"> • Solve equations containing one radical • Solve equations containing two radicals • Solve formulas containing radicals
	<p style="text-align: center;"><u><i>9.6 Geometric Applications of Radicals</i></u></p> <ul style="list-style-type: none"> • Use the Pythagorean theorem to solve problems • Solve problems involving triangles with 30°, 60°, 45°, 90° • Use the distance formula to solve problems • Find the midpoint of a line segment
Chapter 10	<p style="text-align: center;"><u><i>10.1 The Square Root Property and Completing the Square</i></u></p> <ul style="list-style-type: none"> • Use the square root property to solve quadratic equations • Solve quadratic equations by completing the square

Quadratic Equations, Functions, and Inequalities	<u>10.2 The Quadratic Formula</u>
	<ul style="list-style-type: none"> • 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
	<u>10.3 The Discriminant and Equations That Can Be Written in Quadratic Form</u>
	<ul style="list-style-type: none"> • Use the discriminant to determine number and type solutions • Solve equations that are quadratic in form • Solve applications using quadratic equations

Grading Policies: You will have the following contribution to your final grade:

Three midterm exams each 15%
Final exam 20%
WebAssign Homework 20%
Canvas Homework 15%

TOTAL: 100%

Your current grades will be kept updated as often as possible on CANVAS. If you have any questions/confusions on the listed grades, please contact me immediately so any errors can be corrected.

The final letter grade will be assigned according to the following scale:

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

Midterm Exams: There will be **three** midterm in-class exams during the semester. They will be scheduled during the regular lecture hours. There will be specific dates selected for each midterm exam. Each midterm is worth 15% of your final grade and is based on the material covered in lecture, labs, and homework over the past weeks. Each midterm will cover a distinct segment of the overall material.

Tentative dates: Exam 1 – Monday, Sept. 14, Exam 2 – Monday, Sept. 28, Exam 3 – Monday, Oct. 12

Final exam: A **comprehensive** 2-hr final exam will be given on October 22. It is worth 25% of your final grade. It will be a CANVAS (online exam).

My Exam Schedule > 2020 Fall > UW-Stevens Point			
Class	Class Title	Exam Date	Exam Time
MATH 95-10 (82360)	Intermediate Algebra (Lecture)	10/22/2020, Thursday	5:00PM - 7:00PM

WebAssign Homework: I will post a new web-assign homework assignment on the course website twice a week. I will clearly announce when the homework is available on the website and emphasize the due date. Homework assignments will be **submitted online** by the due date/time. **The two lowest grades (only two) of all homework assignments will be dropped.** All homework will account for 15% of your final grade.

How to Register for Your Math 95 10 Course:

1. Go to [GetEnrolled.com](https://www.getenrolled.com)
2. Enter this Course Key: UWSP16919775
3. Follow the on-screen instructions to complete your *WebAssign* registration

CANVAS Homework: Approximately every week I will post a short assignment on CANVAS (not related to Web-assign). You will be asked to submit your hand-written or typed detailed solution to a few exercises, in an electronic file. It will be worth 15% of your final grade.

Suggestions for Studying:

1. **Study regularly and constantly.**

There is a lot of material covered. It becomes more and more difficult to keep up with the flow of the course if you do not grasp the new concepts as they arise. Postponing study for the night before an exam rarely pays off.

2. **Do not hesitate to ask questions in class. Do not hesitate to ask for guidance and help via email or requesting a Zoom meeting with me.**
3. **Try to attend actively.**
4. **Find someone in the class to study with.**

Get to know your classmates well enough so that you can ask for lecture notes, get together (virtually) to study for exams, etc.

Absences due to Military Service: You will not be penalized for class absence due to unavoidable or legitimate required military obligations, or medical appointments at a VA facility, not to exceed two (2) weeks unless special permission is granted by the instructor. You are responsible for notifying faculty members of such circumstances as far in advance as possible and for providing documentation to the Office of the Dean of Students to verify the reason for the absence. The faculty member is responsible to provide reasonable accommodations or opportunities to make

up exams or other course assignments that have an impact on the course grade. For absences due to being deployed for active duty, please refer to <https://www.uwsp.edu/veteran-services/Pages/Call-Up-Guidelines.aspx> .

Equal Access for Students with Disabilities: Students with special needs should contact the Office of Disability Services as soon as possible (<http://www.uwsp.edu/disability/Pages/default.aspx>) in order to request suitable accommodation. UW-Stevens Point will modify academic program requirements as necessary to ensure that they do not discriminate against qualified applicants or students with disabilities. The modifications should not affect the substance of educational programs or compromise academic standards; nor should they intrude upon academic freedom. Examinations or other procedures used for evaluating students' academic achievements may be adapted. The results of such evaluation must demonstrate the student's achievement in the academic activity, rather than describe his/her disability.
If modifications are required due to a disability, please inform the instructor, and contact the Disability and Assistive Technology Center to complete an Accommodations Request form. Phone: 346-3365 or Room 609 Albertson Hall.

Religious Beliefs Accommodation: It is UW System policy to reasonably accommodate your sincerely held religious beliefs with respect to all examinations and other academic requirements.

You will be permitted to make up an exam or other academic requirement at another time or by an alternative method, without any prejudicial effect, if:

- There is a scheduling conflict between your sincerely held religious beliefs and taking the exam or meeting the academic requirements; and
- You have notified your instructor within the first three weeks of the beginning of classes (first week of summer or interim courses) of the specific days or dates that you will request relief from an examination or academic requirement.

Academic Honesty: Students are expected to maintain the highest standards of academic integrity. More information on your rights and responsibilities are available at: http://docs.legis.wisconsin.gov/code/admin_code/uws/14.pdf

UWSP 14.01 Statement of principles

The board of regents, administrators, faculty, academic staff and students of the University of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the University of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors.

UWSP 14.03 Academic misconduct subject to disciplinary action.

Academic misconduct is an act in which a student:

- (a) Seeks to claim credit for the work or efforts of another without authorization or citation;
- (b) Uses unauthorized materials or fabricated data in any academic exercise;
- (c) Forges or falsifies academic documents or records;
- (d) Intentionally impedes or damages the academic work of others;
- (e) Engages in conduct aimed at making false representation of a student's academic performance; or
- (f) Assists other students in any of these acts.

Help Resources:

Tutoring	Advising	Safety and General Support	Health
Tutoring and Learning Center helps with Study Skills, Writing, Technology, Math, & Science. 018 Albertson Hall, ext 3568	Academic and Career Advising Center, 320 Albertson Hall, ext 3226	Dean of Students Office, 212 Old Main, ext. 2611	Counseling Center, Delzell Hall, ext. 3553. Health Care, Delzell Hall, ext. 4646

UWSP Service Desk: The Office of Information Technology (IT) provides a Service Desk to assist students with connecting to the Campus Network, virus and spyware removal, file recovery, equipment loan, and computer repair. You can contact the Service Desk via email at techhelp@uwsp.edu or at (715) 346-4357 (HELP) or visit: <https://www.uwsp.edu/infotech/Pages/ServiceDesk/default.aspx>

I will post short video-lectures on CANVAS:

Lecture materials and recordings for Math95 are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

In case of emergency: In the event of a medical emergency call 9-1-1 or use Red Emergency Phone. Offer assistance if trained and willing to do so. Guide emergency responders to victim.

In the event of a tornado warning, proceed to the lowest level interior room without window exposure. See www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx for floor plans showing severe weather shelters on campus. Avoid wide-span structures (gyms, pools or large classrooms).

In the event of a fire alarm, evacuate the building in a calm manner. Meet at DUC. Notify instructor or emergency command personnel of any missing individuals.

Active Shooter/Code React – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Call 9-1-1 when it is safe to do so. Follow instructions of emergency responders.

See UW-Stevens Point Emergency Procedures at www.uwsp.edu/rmgt/Pages/em/procedures for details on all emergency response at UW-Stevens Point.

Final note: Common courtesy dictates that students attending a class should be mindful of their classmates. While in class, students should refrain from using phones, music players, headphones, etc. and should also refrain from gossiping/chatting while the professor is lecturing, and other students are listening and taking notes.

Face Coverings:

- At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the [Disability and Assistive Technology Center](#) to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. **This is university policy and not up to the discretion of individual instructors.** Failure to adhere to this requirement could result in formal withdrawal from the course.

Other Guidance:

- Please monitor your own health each day using [this screening tool](#). If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor and contact Student Health Service (715-346-4646).
 - As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus.
- Maintain a minimum of 6 feet of physical distance from others whenever possible.
- Do not congregate in groups before or after class; stagger your arrival and departure from the classroom, lab, or meeting room.
- Wash your hands or use appropriate hand sanitizer regularly and avoid touching your face.
- Please maintain these same healthy practices outside the classroom.