# Math 107, Section 2 Math for PreCalculus Fall 2022 Syllabus Monday/Wednesday 6-7:50pm. Science Building SCI A210

	Office Hours	Final Exam:	
George Adams	Before/After Class or by Appt. Virtually	Monday,	
Email: gadams@uwsp.edu	Mondays and Wednesdays: 5:30pm and	December 19,	
preferred method of contact	·		
	NOTE: Other office hours by appointment.	3-7 piii, 301 A210	

#### MATH 107 Math for PreCalculus 2 credits

Factoring and simplifying rational expressions, interval notation, solving absolute value equations, linear inequalities, rules of exponents and logs, solving exponential equations, functional notation, evaluation of functions and graphs.

Prerequisite: Math 95 or suitable placement score.

**Required Text**: Elementary & Intermediate Algebra, 5th Ed., by Alan S. Tussy and R. David Gustafson, customized for UWSP. Available as a textbook rental from the campus bookstore.

**Course 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.

You will meet the outcomes listed above by completing homework, quizzes and tests, submitting your written work for the quizzes and tests, and by taking a final exam.

#### **Expected Instructor Response Times**

- I will attempt to respond to student emails within 24 hours. If you have not received a reply from me within 24 hours please resend your email.
- I will attempt to grade written work for tests and quizzes within 72 hours.

#### **Course Structure**

This course will be delivered entirely in-person.;

**Homework:** You will be working problems in the book. Homework is checked every Monday.

**Quizzes/Exams:** There will be a quiz or exam, in-person, every Wednesday that we meet. If we do not meet, there will be a pdf of the quiz/exam sent out via email that will be due to turn in the following Monday.

**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. Quizzes and exams may not be made up unless arranged with me ahead of time, and then only for sufficient reason. 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 course calendar and may be subject to change if circumstances require the change.

**Important Note:** This syllabus, along with course assignments and due dates, are subject to change. It is the student's responsibility to attend class to be aware of corrections or updates to the syllabus. Any changes will be clearly noted in a course announcement in Canvas!

#### **Student Expectations**

In this course you will be expected to complete the following types of tasks.

- communicate via email
- view online videos
- complete homework, quizzes and tests in person and in class.
- stay on task and meet the due dates
- contact your instructor via email

#### **Technology**

#### **Protecting your Data and Privacy**

UW-System approved tools meet security, privacy, and data protection standards. For a list of approved tools, visit this website. https://www.wisconsin.edu/dle/external-application-integration-requests/

Tools not listed on the website linked above may not meet security, privacy, and data protection standards. If you have questions about tools, contact the UWSP IT Service Desk at 715-346-4357.

Here are steps you can take to protect your data and privacy.

- Use different usernames and passwords for each service you use
- Do not use your UWSP username and password for any other services
- Use secure versions of websites whenever possible (HTTPS instead of HTTP)
- Have updated antivirus software installed on your devices

#### **Course Technology Requirements**

• View this website to see <u>minimum recommended computer and internet configurations for</u> Canvas.

### **UWSP Technology Support**

- Visit with a <u>Student Technology Tutor</u>
- Seek assistance from the IT Service Desk (Formerly HELP Desk)
  - o IT Service Desk Phone: 715-346-4357 (HELP)o IT Service Desk Email: techhelp@uwsp.edu



#### **Canvas Support**

Click on the Help button in the global (left) navigation menu and note the options that appear:

Support Options	Explanations
Ask Your Instructor a Question Submit a question to your instructor	Use <b>Ask Your Instructor a Question</b> sparingly; technical questions are best reserved for Canvas personnel and help as detailed below.
Chat with Canvas Support (Student) Live Chat with Canvas Support 24x7!	Chatting with Canvas Support (Student) will initiate a text chat with Canvas support.  Response can be qualified with severity level.
Contact Canvas Support via email Canvas support will email a response	Contacting Canvas Support via email will allow you to explain in detail or even upload a screenshot to show your particular difficulty.
Contact Canvas Support via phone Find the phone number for your institution	Calling the Canvas number will let Canvas know that you're from UWSP; phone option is available 24/7.
Search the Canvas Guides Find answers to common questions	Searching the <u>Canvas guides</u> connects you to documents that are searchable by issue. You may also opt for <u>Canvas video guides</u> .
Submit a Feature Idea Have an idea to improve Canvas?	If you have an idea for Canvas that might make instructions or navigation easier, feel free to offer your thoughts through this <b>Submit a Feature Idea</b> avenue.

All options are available 24/7; however, if you opt to email your instructor, she may not be available immediately.

• Self-train on Canvas through the <u>Self-enrolling/paced Canvas training course</u>

**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 the textbook. Remember that for each hour we meet in class, you should expect to spend about 2-3 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.

**Quizzes and Exams:** You will have four quizzes, and three unit exams, one on each Wednesday. They will be made available only on the scheduled dates.

**Final Exam:** the comprehensive final exam is scheduled for **Monday, December 19, 5-7pm. BE SURE TO KEEP THIS TIME SLOT OPEN AND AVAILABLE IN YOUR SCHEDULE!!** 

**Evaluation:** Your final course grade will be determined by the following weights:

28% for daily homework 32% for Exams

20% for quizzes 20% for the comprehensive final exam

#### **Grading Scale:**

A:  $\geq 92\%$  A -:  $\geq 90\%$  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%

#### **Build Rapport**

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that we can help you find a solution.

#### 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) Come early or stay late of office hours.
- 3) Make use of the MathPad; CCC302, available just for Math 095 and Math 107 students.
- 4) FREE Tutoring services (through the TLC) are available for this course.
- 5) Drop in Math Tutoring is available in Room 150 of the new Chemistry Building.

#### **Understand When You May Drop This Course**

It is the student's responsibility to understand when they need to consider unenrolling from a course. Refer to the UWSP <u>Academic Calendar</u> for dates and deadlines for registration. After this period, a serious and compelling reason is required to drop from the course. Serious and compelling reasons includes: (1) documented and significant change in work hours, leaving student unable to attend class, or (2) documented and severe physical/mental illness/injury to the student or student's family.

#### **Incomplete Policy**

Under emergency/special circumstances, students may petition for an incomplete grade. An incomplete will only be assigned if 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. All incomplete course assignments must be completed within 8 weeks.

#### Inform Your Instructor of Any Accommodations Needed

If you have a documented disability and verification from the <u>Disability and Assistive Technology Center</u> and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of disability to Disability Services and meet with a Disability Services counselor to request special accommodation *before* classes start.

The Disability and Assistive Technology Center is located in 609 Albertson Hall and can be contacted by phone at (715) 346-3365 (Voice) (715) 346-3362 (TDD only) or via email at datctr@uwsp.edumailto:datctr@uwsp.edu

#### **Statement of Policy**

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 in 609 ALB, or (715) 346-3365.

#### Commit to Integrity

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom.

### UWSP Academic Honesty Policy & Procedures Student Academic Disciplinary Procedures 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. Students who violate these standards must be confronted and must accept the consequences of their actions.

#### UWSP 14.03 Academic misconduct subject to disciplinary action.

- (1) 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.
- (2) Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

#### **Religious Beliefs**

Relief from any academic requirement due to religious beliefs will be accommodated according to UWS 22.03, with notification within the first three weeks of class.

### **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

### 6. Factoring and Quadratic Equations

6.1 Factor by Grouping

### 7. Rational expressions and equations

- 7.1 Simplifying Rational Expressions
- 7.2 Multiplying and Dividing Rational Expressions
- 7.3 Adding and Subtracting with Like Denominators
- 7.4 Adding and Subtracting with unlike Denominators
- 7.5 Simplifying Complex Fractions
- 7.6 Solving Rational Equations

### 8. Transition to Intermediate Algebra

- 8.2 Functions
- 8.3 Graphs of Functions
- 8.4 Solving Compound Inequalities
- 8.5 Solving Absolute Value Equations and Inequalities
- 8.6 Review of Factoring Methods: GCF, Grouping, Trinomials
- 8.7 Review of Factoring Methods: Difference of Squares, Sum/Diff of Cubes

### 9. Radical Expressions and Equations

9.2 Rational Exponents

### 11. Quadratic Equations, Functions, and Inequalities

- 11.1 Algebra and Composition of Functions
- 11.2 Inverse Functions
- 11.3 Exponential Functions
- 11.4 Logarithmic Functions
- 11.5 Base e Exponential and Logarithmic Functions
- 11.6 Properties of Logarithms
- 11.7 Exponential and Logarithmic Equations

**Tips for Success/How to Study:** You should expect to spend about 2-3 hours studying for each hour of class time, on average. For this course, that means at least 8-12 hours a week should be spent studying math! Here are my tips for success:

- Take complete and neat notes as you watch the lesson videos. Note any questions you have and send me an email, drop in to an office hour, or ask to meet with me in Zoom.
- After watching a lesson, read the relevant section in the textbook/ebook, with paper and pencil handy. Write down all the key points (usually in boxes in the book!).
- Carefully copy out the textbook examples. Try to understand why each step is taken.
- NOW you are ready to do your homework.
- Keep a notebook with all your math homework.
- Stay organized.
- Write out the problem/question on your paper, then do the work required before you input your answer(s). SHOW ALL YOUR WORK!! Do not skip any steps.
- Do not cram your work into a small space. Neatness is very important. I will model for you what organized, well written work is when I show examples in the videos.
- When you have questions about homework problems, I expect to be able to see the work you have done so far so that I can identify where you need help.
- If you need more practice, your book has review exercises and a practice chapter test at the end of each chapter.
- You can only master math skills by practicing them. You cannot master them by watching me do problems; you must do the work and always ask for help if you need it!

### And finally...

"Math is hard," Barbie famously declared. Well, Barbie was right, but math is not uniquely hard. Playing the violin is hard, hitting a baseball is hard, and learning a second language is hard. What seems to make mathematics different from playing the violin or learning Chinese is that the struggle to play violin doesn't make people feel defeated and dumb. Somehow, when we encounter difficulties in mathematics, our natural tendency is to retreat, to think it's too hard, we're not smart enough, or we're not "math people." We allow ourselves to be defeated by the difficulty. We understand that learning to play the violin requires making many, many hours of horrible screeching sounds, that learning to speak Chinese means making error after error and not being understood. But, somehow, when it comes to mathematics, we fear making mistakes. We imagine that there are "math people" to whom it is all transparent and, if it doesn't come to us immediately, we must not be one of them. There are no such people. People who succeed in mathematics, like people who learn a musical instrument or a new language, spend a lot of time not understanding and feeling frustration. The path to understanding in mathematics necessarily involves, in the words of Steve Klee, being "willing to struggle." It is strange that people do not understand this about mathematics when it is commonplace in essentially every other field of human endeavor....

There are dangerous myths in mathematics. One of them is that there exist "math people," people to whom it all comes easily and is obvious. People who study the theory of learning are discovering that grit and persistence in the face of difficulty are much more important than any inherent talent in learning mathematics. Simply believing that study and struggle are more important to learning than innate ability leads (through productive study and struggle) to more learning and more understanding. There are no "math people," mathematical thinking is a fundamental part of every human's intellectual capacity. The people we label "good at math" are simply those who have taken the time and trouble to engage the struggle more deeply than others.

From the forward to <u>Living Proof – Stories of Resilience Along the Mathematical Journey</u>, produced and distributed by the American Mathematical Society and The Mathematical Association of America.

https://www.maa.org/sites/default/files/pdf/ebooks/pdf/LivingProof WEB.pdf

## Math 107, Sec 02, Fall 2021, Calendar

Monday	Wednesday
Oct. 31;	Nov 2:
8.4:17-59 odd,69	QUIZ 1: covering 8.4, 8.5, 9.2
8.5:19-69 odd,75,81,83,91	5.1: 29-85 odd, 103,105,107
9.2:17-55 odd,109-135 odd	5.2:15-79 odd, 89,91,107,109,111
NOV 7:	NOV. 3:
Collect HW from week 1	7.1: 11-15 odd, 23-33 odd, 43-65 odd
6.1: pg. 441: 41-99 odd	7.2: 19-37 odd, 47-63 odd
8.6: pp. 675-675: 19-97 every other odd: i.e. 18,23,27,31,	QUIZ 2: 5.1, 5.2, 6.1, 8.6, 8.7
8.7: 29-65 odd	
NOV 14:	NOV 16:
Collect HW from week 2	EXAM 1 Topics:
7.3: pg. 538: 21-29 odd, 77-89 odd	8.4-8.7
7.4: pg. 547: 15-43 odd, 55-65 odd	5.1, 5.2
	6.1
	9.2
NOV 21:	NOV 23: Happy Thanksgiving, No Class
Check In Class HW	
7.5: 9-45 odd	
7.6: 15-33 odd, 45-51 odd	

No. 400	
NOV 28:	NOV 30:
Check 7.5, 7.6 HW	11.1: 13-20 all, 29-55 odd,
8.2: 23-73 odd, 97-105 odd	11.2: 19-22 all, 27-30 all, 35-57 odd
8.3: 17-75 every other odd	11.3: 39-51 odd
	Quiz 3: 7.5, 7.6, 8.2, 8.3
Dec 5:	DEC 7:
11.4: 33-67 odd, 73-81 odd 11.5: 33-67 odd	EXAM 2 Topics
	7.5, 7.6
	8.2,8.3
	11.1-11.5
DEC 12:	DEC 14:
11.6: 19-41 odd, 87-101 odd 11.7; 21-59 odd	FINAL EXAM REVIEW
	QUIZ 4
DEC 19:	
FINAL EXAM	
IN-PERSON	
5-7PM	
SCI. A210	