

Syllabus

Fall 2018

Precalculus Algebra - Math 118, Section 1

Professor Cindy McCabe Office: D354 Science Building Phone: 715-346-2085 Email: cmccabe@uwsp.edu www.uwsp.edu/mathsci	Office Hours 2:00 – 2:50 pm Mondays 9:00 – 9:50 am Tuesdays 12:00 – 12:50 pm Wed & Thurs 10:00 – 10:50 am Fridays <i>or by appointment</i>	Class Meets: Mon – Thurs Sec. 1: 8:00 – 8:50am CCC 304 (Collins Classroom Center)
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Text (rental): *Precalculus: Mathematics for Calculus*, 7th Edition, by Stewart, Redlin, & Watson (Publisher Cengage), ISBN 978-1-305-07175-9. Topics include most of those in Chapters 1 – 4 and a selection from Chapters 10 – 12.

Optional Purchase Item: Access code for *WebAssign* online homework and e-book, under \$50. Please wait before purchasing until you hear about the free trial period to be discussed in class.

Calculators: A graphing calculator is required and should be brought to class daily. Recommended calculators are the TI-83 or TI-84 models. You may not share resources during exams since I want to know what you can do and allow each of you to show what you can do. Computers, phones, smartwatches, and devices with internet access are not allowed during exams or quizzes. They must be stowed out of sight, set to a silent mode, and not used at these times.

Desire to Learn (D2L): Homework assignments, course grade information, and other class announcements will be in Desire to Learn (D2L), <http://www.uwsp.edu/d2l/Pages/default.aspx>. To access D2L, use your regular campus login ID and password. Check D2L weekly.

Prerequisites: MATH 100 or MATH 107 or suitable placement test score. Please verify that you have met the prerequisites so you are prepared to have a successful semester. Feel free to ask questions about your preparation or mathematical background.

Learning Outcomes for this course: Students will be able to

- solve equations algebraically and graphically.
- solve inequalities involving rational functions via sign charts.
- use definitions and properties of functions, including algebraic combinations of functions, inverses, average rates of change, and partial fraction decompositions, with polynomial, rational, exponential, and logarithmic functions.
- use graphs to locate intercepts and asymptotes, and relate these back to an equation for the graph and to the Fundamental Theorem of Algebra.
- solve systems of linear equations using matrix methods.
- connect the types of conic sections with their equations, graphs, and properties.
- become familiar with basic types of sequences and series, and use sigma notation to describe arithmetic and geometric series.
- communicate conclusions and justifications using mathematical notation and language and using English sentences (in addition to symbolic mathematical sentences).
- develop the endurance and grit to engage with longer and more complex mathematical situations than were required in the prerequisite mathematics courses.

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GEP (General Education Program) Quantitative Literacy Learning Outcomes

- Select, analyze, and interpret appropriate numerical data used in everyday life in numerical and graphical format.
- Identify and apply appropriate strategies of quantitative problem solving in theoretical and practical applications.
- Construct a conclusion using quantitative justification.

Evaluation: Course grades will be determined by the following:

- 60 points for in-class quizzes (three of them, at 20 pts each)
- 40 points for in-class quizlettes (group quizzes; 8 points each; top 5 scores used)
- 60 points for sustaining work, including HW checks (3 points each; top 20 scores used)
- 100 points for Exam 1 (in-class on *Thurs. Oct. 4*)
- 100 points for Exam 2 (in-class on *Thurs. Nov. 8*)
- 120 points for the comprehensive Final Exam (*Wed. Dec. 19, 8:00 – 10:00am*)

Total: 480 points for this course

Course Grades at or above	93.3 448	90 432	86.7 416	83.3 400	80 384	76.7 368	73.3 352	70 336	66.7 320	60 288	% Points
will receive at least a grade of	A	A -	B +	B	B -	C +	C	C -	D +	D	

I reserve the right to exercise discretion in raising a student’s grade if the final course grade does not appear to reflect the student’s achievement (for example, because of one low exam score early in the course). I will not use discretionary judgments to lower a student’s final grade.

Three regular **quizzes** and three **exams** are listed in the schedule on page 4. There will also be approximately six short group quizzes, called “quizlettes.” The lowest quizlette grade(s) will be dropped at the end of the semester, and the highest five scores will be used in your course grade.

Almost every day, a list of **homework** exercises will be assigned in class. Students have the option of doing some of the exercises online in *WebAssign* and some on paper, or doing all of them on paper. When you are doing homework, either in *WebAssign* or from the text, take notes or do some work on paper for almost every exercise. Then bring that work to class so you are ready for discussions. Doing homework sustains your momentum and builds your skills! It is extremely important to your learning process, so make sure you stay on top of it and ask questions on whatever you don’t understand.

There will be **homework checks** at the beginning of class once or twice each week, **and other in-class activities** on some days. Usually, your score out of 3 points for one of these types of sustaining work will be based on evaluations of *Solid performance – 3 points*, *Substantial work done – 2 points*, *Partial understanding exhibited – 1 point*, or *No contribution – 0 points*. These scores will be based on your *WebAssign* work or your work done on paper, and your contributions during class that day. The top 20 scores for homework checks and other sustaining work will be used in your course grade, leaving at least **four extra days** to allow for times you had to miss class or come to class unprepared.

I do not anticipate other graded items, but if any arise, they will be announced in class and the course points will be adjusted.



Attendance Policy: Attendance is expected at every class meeting. It is the student's responsibility to make prompt arrangements with me for finding out what was missed and for making up any assigned work in the case of an absence. Quizzes and exams may only be made up in special circumstances, and normally only if arranged with me ahead of time. If a medical emergency occurs, contact the Dean of Students or the Disability & Assistive Technology office as soon as possible (contact info. below). Then we can see if an exception is in order.

Support is available:

- 1) Ask questions as they arise. Come to see me before or after class, stop by during my office hours, or schedule an appointment with me for another time. One of the great parts of my job is working with conscientious students!
- 2) Tutoring services are available through the Math Help Room where there is free drop-in tutoring in SCI A113A. Usual hours are 9am – 4pm and 7pm – 9pm, Mon – Thurs.
- 3) Tutoring services are also available through the Tutoring-Learning Center in ALB 018, including Supplemental Instruction with a tutor for this section of this class. To learn more about your options at the Tutoring-Learning Center, see <http://www.uwsp.edu/tlc/Pages/CA-tutoring.aspx>.



SET UP AN EXERCISE ROUTINE FOR
YOUR BRAIN. LET'S MAKE SOME
NEW PATHWAYS THIS SEMESTER!

UWSP is committed to providing reasonable and appropriate **accommodations** to students with disabilities and temporary impairments. If you have a disability or acquire an impairment or injury during the semester and you need assistance, please contact the Disability and Assistive Technology Center as soon as possible, on the 6th floor of Albertson Hall (library), at 715-346-3365, or at DATC@uwsp.edu. You may also want to visit <http://www.uwsp.edu/disability/Pages/default.aspx>.

All students are expected to know the UWSP student **responsibilities** found on the Dean of Students webpage. Information on Academic Concerns is available at <https://www.uwsp.edu/dos/Pages/stu-academic.aspx>. Information on Conduct Concerns and on Personal Concerns are also available on the Dean of Students site.

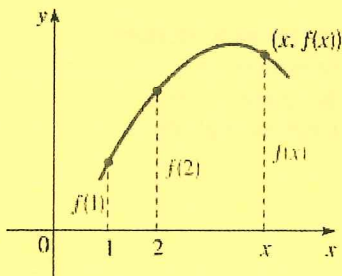
Incompletes: A grade of incomplete may be given when circumstances arise which are beyond the student's control, and which result in the student being unable to complete the course. A grade of incomplete will only be used if the student is passing when the circumstances arise.



Weekly Schedule - Fall 2018

Week	Approximate text sections to discuss this week	Events this week
1. Sept. 3 – 7	Review on early Ch. 1, 1.8	No class Monday - Labor Day
2. Sept 10 - 14	1.9 – 1.11	
3. Sept. 17 – 21	2.1 – 2.4	Quizlette 1 early this week
4. Sept. 24 – 28	2.5 – 2.7	Quiz 1 Tuesday
5. Oct. 1 – 5	Quizlette 2, Sec. 2.8, Review	Exam 1 Thursday, Oct. 4
6. Oct. 8 – 12	3.1 – 3.3	
7. Oct. 15 – 19	3.4 – 3.6	Quizlette 3 early this week
8. Oct. 22 – 26	3.6, 3.7, 4.1, 4.2	Quiz 2 Tuesday
9. Oct. 29 – Nov. 2	4.3 – 4.5	
10. Nov. 5 – 9	Quizlette 4, 4.5, 4.7, Review	Exam 2 Thursday, Nov. 8
11. Nov. 12 – 16	10.1, 10.2	
12. Nov. 19 – 23	Quizlette 5, Sec. 10.3	No class Thursday - Thanksgiving
13. Nov. 26 – 30	10.7, 10.8, 11.1 – 11.3	Quiz 3 Thursday
14. Dec. 3 – 7	11.4, 12.1, 12.2	Quizlette 6 late this week
15. Dec. 10 – 14	12.3, 12.6, Review	

Final Exam: Wednesday, Dec. 19th, 8:00-10:00am



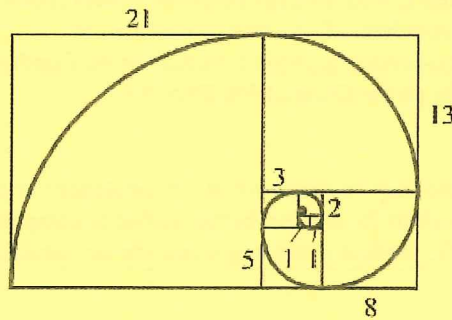
Ellipse



Parabola



Hyperbola



1, 1, 2, 3, 5, 8, 13, 21,... and the Fibonacci Spiral

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