Math 222 – Calculus III Syllabus Fall 2018

Professor Cindy McCabe	Office Hours	Class meets
Office: D354 Science Building Phone: 715-346-2085 Email: cmccabe@uwsp.edu www.uwsp.edu/mathsci	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 *or by appointment*	Mon, Wed, Th, Fri **Sec. 1:** 9:00 – 9:50am CCC 304 **Sec. 2:** 1:00 – 1:50pm Science A207

Text (rental): *Multivariable Calculus*, 8th Edition, by James Stewart, published by Cengage, ISBN 978-1-305-26664-3. Topics include most of Chapters 10, 12, 13, 14, and 15.

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.

Prerequisite: Math 121: Calculus II

Learning Outcomes for this course: Students will be able to

1) work in 3 dimensions with equations of curves, surfaces, and their linearizations, and find relationships between them, such as angle at an intersection.
2) analyze qualities of curves, such as arc length, speed, and curvature.
3) analyze qualities of surfaces, such as slope (from partial derivatives and gradients) and locations of maximum and minimum points.
4) determine formulas for and values of areas, volumes, and other applications, using double and triple integrals in multiple coordinate systems.
5) recognize and classify new problems into one or more known problem types.
6) improve skills for communicating these concepts using mathematical notation and language and using English sentences, reaching a level above the beginner's level.
7) develop the endurance and grit to engage with longer and more complex mathematical situations than were required in prerequisite mathematics courses.

These objectives align with the following Program Learning Outcomes of the Department of Mathematical Sciences:

1) Problem Solving – Students can apply problem solving techniques in new situations.
2) Mathematical Techniques – Students will demonstrate a set of mathematical techniques and be able to use them in appropriate situations.
3) Patterns – Students can recognize, characterize, and generalize patterns using mathematical language.
4) Communication – Students can accurately interpret, clearly write, and orally express mathematical concepts in a variety of settings.

EXPLORE → MAKE CONNECTIONS → SEE NEW STRUCTURES

Evaluation: Final course grades will be determined by the following:

100 points for in-class quizzes (best 4 at 25 pts each: lowest score is dropped)
72 points for sustaining work, including HW checks (top 24 scores)
100 points for Exam 1 (in-class on Wed. Oct. 10)
100 points for Exam 2 (in-class on Wed. Nov. 14)
130 points for the comprehensive Final Exam (Thurs. Dec. 19. See next page for time.)
Total: 502 points for this course

Course Grades at or above	93.3 468	90 452	86.7 435	83.3 418	80 402	76.7 385	73.3 368	70 351	66.7 334	60 301	% 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 weighted average does not appear to reflect the quality of a student's work (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.

Five regular **quizzes** and three **exams** are listed in the schedule on the next page.
The lowest one of the five regular quiz grades will be dropped at the end of the semester.

Almost every day, a list of **homework** exercises will be assigned. These are the regular workouts for your brain, to build your strength and mathematical power. You have the option of doing some of the exercises online in *WebAssign* and some on paper, or of 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. Homework 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. Doing well with your homework should also help your grades on quizzes and exams.

There will be **homework checks** at the beginning of class once or twice each week, **and other in-class activities** on some days, possibly done in groups. 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 participation in class that day. The top 24 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.

Support is available. 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!

Approximate Weekly Schedule - Fall 2018

Week	Approximate text sections to discuss this week	Events this week
1. Sept. 3 – 7	10.1, 10.2	No class Monday - Labor Day
2. Sept 10 - 14	10.2 – 10.4	
3. Sept. 17 – 21	10.5, 12.1, 12.2	Quiz 1 Wednesday
4. Sept. 24 – 28	12.3 – 12.5	
5. Oct. 1 – 5	12.5, 12.6	Quiz 2 Wednesday
6. Oct. 8 – 12	Review, 13.1, 13.2	**Exam 1** Wednesday, Oct. 10
7. Oct. 15 – 19	13.2 – 13.4	
8. Oct. 22 – 26	14.1, 14.2	Quiz 3 Wednesday
9. Oct. 29 – Nov. 2	14.3, 14.4	
10. Nov. 5 – 9	14.5, 14.6	Quiz 4 Wednesday
11. Nov. 12 – 16	Review, 14.7	**Exam 2** Wednesday, Nov. 14
12. Nov. 19 – 23	15.1, 15.2	No class Th. & Fri. - Thanksgiving
13. Nov. 26 – 30	15.2 – 15.4	
14. Dec. 3 – 7	15.5 – 15.8	Quiz 5 Wednesday
15. Dec. 10 – 14	15.9, Review	

Final Exam Times: Section 1: Thursday, Dec. 20, CCC 304, 10:15am – 12:15pm
Section 2: Thursday, Dec. 20, Science A207, 10:15am – 12:15pm

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.

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.