Math 121 - Calculus II, Section 1   Fall 2016 Syllabus

Professor Cindy McCabe	Office Hours	Class Meetings
Office: D354 Science Building Phone: 715-346-2085 Email: cmccabe@uwsp.edu www.uwsp.edu/mathsci	10:00-10:50am Mon, Th, Fri 8:00-8:50am Tuesdays 9:00-9:50am Wednesdays or *by appointment*	9:00 – 9:50 am M, Tu, Th, F A225 Science building

Text (rental): *Calculus: Single Variable with Early Transcendentals*, 8th Edition, by James
    Stewart, published by Cengage, ISBN 978-1-305-27033-6.
    Topics include most of Chapters 6, 7, 8, 9, and 11.

Clicker (lease): This class uses Clickers to do interactive polling. See details on the last
    page of this syllabus.

Optional Purchase Item: Using the online homework system *WebAssign* is an option.
    The free trial period will be discussed in class. An access code may be purchased at the
    University Bookstore.

Calculators: Daily access to a graphing calculator is required. Sharing is not permitted.
    Recommended calculators are the TI-83+ or TI-84 models. Computers, phones, and
    calculators with a "QWERTY" keyboard or internet access are not allowed during exams
    or quizzes.

Prerequisite: Math 120: Calculus I

Learning Outcomes for this course: Students will be able to
1) analyze regions and solids to decide how to integrate with respect to x or y to find area or volume, and complete the integration with exact methods or with approximations
2) recognize when to use these methods of integration and how to use them: Integration by parts, trigonometric integration, trigonometric substitution, and partial fractions
3) use limits to find the value of a convergent improper integral or to show that such an integral is divergent
4) integrate with respect to x or y to find quantities such as arc length, center of mass, and surface area of a surface of revolution
5) recognize which series test will be most helpful for a given series, and use it to determine whether the series is convergent or divergent, sometimes using estimates and computing error bounds
6) use power series (including Taylor series) to represent functions, sometimes finding radius and interval of convergence
7) verify solutions to differential equations, find equilibrium solutions, and use a direction field to visualize solutions to differential equations
8) solve separable differential equations, first order linear differential equations, and certain second order linear differential equations, classifying a given equation into these types
9) improve skills for communicating your ideas on all of these concepts using mathematical notation and language and using English sentences

Desire to Learn (D2L): Homework assignments, grade information, and other class announcements
can be found on the web in Desire to Learn (D2L), http://www.uwsp.edu/d2l/Pages/default.aspx .
To access D2L, use your regular campus logon ID and password, and then click on our course:
CALCULUS II... MATH 121 ... under SEM I 2016-17.

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

       100 points for in-class quizzes (best 4 at 25 pts each: lowest quiz score is dropped)

        40 points for participation with clickers

        81 points for in-class work, including HW checks (top 27 scores)

       100 points for Exam 1 (in-class on Tues. Oct. 11)

       100 points for Exam 2 (in-class on Tues. Nov. 15)

       130 points for the comprehensive Final Exam (Wed. Dec. 21, 2:45-4:45pm)

  Total: 551 points for this course

Course Grades at or above	93.3 514	90 496	86.7 478	83.3 459	80 441	76.7 422	73.3 404	70 385	66.7 367	60 330	% 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 back.
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. In order to do well in this course, you will need to understand these exercises and probably practice with more exercises similar to these. 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 in the areas of clicker questions, quizzes, and exams.

There will be **homework checks** about twice a week which will be part of your semester grade. You have the option of doing most of the work for these through the online homework system *WebAssign* (at a cost of under $40). Because not all exercises from the daily assignments are available online, there will be a small number which must be done on paper. Usually, your score on a homework check will be based on evaluations of *satisfactory work*, *partially complete*, or *not done*. The homework checks and other in-class work such as worksheets will be worth up to three points each. The top 27 scores will be used in your course grade, leaving at least four extras for days you had to miss class or come to class unprepared.

Also, we will use **clickers** in class, approximately two days each week, with questions to check your knowledge and comprehension. Two points will be recorded for each correct response you give, and 1.6 points for each incorrect response. At the end of each day we use clickers, your points for each question asked will be averaged and a score out of 2 points will go in the grade book. There will be at least 26 days on which you can receive points for in-class work, which means there are at least **six extra days** to cover days you missed or days you did not have a functioning clicker, or to make up for days with lower scores.

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 occur to you. 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!* You may also benefit from working with tutors in the Math Help Room in A113A SCI, where there is free drop-in tutoring for this course and others. There may be tutoring options available to you through the Tutoring-Learning Center as well. More specifics on tutoring will be provided in class when they become available.

Approximate Weekly Schedule – Fall 2016

Week	Approximate text sections to discuss this week	Events this week
1. Sept. 5 – 9	6.1, 6.2	*Labor Day – no class Monday*
2. Sept. 12 – 16	6.2, 6.3, 6.5, 7.1	
3. Sept. 19 – 23	7.1, 7.2, 7.3	Quiz 1 Tuesday
4. Sept. 26 – 30	7.3, 7.4, 7.5	
5. Oct. 3 – 7	7.5, 7.8, 8.1	Quiz 2 Tuesday
6. Oct. 10 – 14	Review, 8.2, 8.3	**Exam 1** Tuesday, Oct. 11
7. Oct. 17 – 21	8.3, 11.1, 11.2	
8. Oct. 24 – 28	11.3, 11.4, 11.5	Quiz 3 Tuesday
9. Oct. 31 – Nov. 4	11.5 – 11.8	
10. Nov. 7 – 11	11.8, 11.9	Quiz 4 Tuesday
11. Nov. 14 – 18	Review, 11.10, 11.11	**Exam 2** Tuesday, Nov. 15
12. Nov. 21 – 25	11.11, 9.1	*Thanksgiving – no class Th, Fri*
13. Nov. 28 – Dec. 2	9.1 – 9.4	
14. Dec. 5 – 9	9.4, 9.5, 17.1	Quiz 5 Tuesday
15. Dec. 12 – 16	17.1, Review	

Final Exam Day and Time: Wednesday, Dec. 21, 2:45 – 4:45pm

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 not be made up unless arranged with me ahead of time, and then only for sufficient reason. If a dire emergency occurs, contact me as soon as possible to see if an exception is in order.

For information on **accommodations** available to students with disabilities, visit the Disability and Assistive Technology Center in room 609 of the Learning Resources Center (715-346-3365) or their website: http://www.uwsp.edu/disability/Pages/default.aspx.

All students are expected to know the UWSP Community **Rights & Responsibilities** and the **Student Academic Standards and Disciplinary Procedures** found by clicking on "Community Standards" at http://www.uwsp.edu/dos/Pages/Information%20for%20Students.aspx . This is part of the Dean of Students webpage at UWSP.

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.

More details on Clickers: This class uses "Clickers" to do interactive polling. You are required to lease a clicker from the UWSP Help Desk for the semester. This semester lease fee of $8 will be added to your UWSP student bill. *Your clicker may be used in any class that requires clickers for the semester. You do not need to lease more than one clicker in a single semester.*

You will need to have your **UWSP Student ID** with you in order to lease a clicker.

> Clickers are available for check-out at UWSP's IT Help Desk, located in room 027 in the basement of the LRC (the campus library).
> For their hours, see http://www.uwsp.edu/infotech/Pages/HelpDesk/default.aspx .

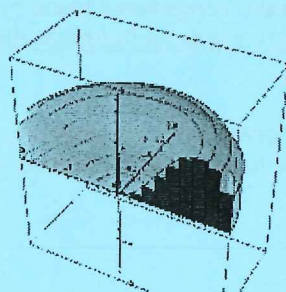Please bring your clicker to class every day except on exam days.

Returning clickers: Clickers must be returned to the Help Desk before the end of finals week. Students with unreturned clickers will be billed a late fee and/or may be billed the replacement cost of the clicker.
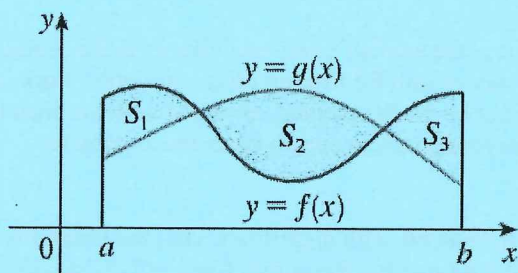
Integrating to find exact areas

Slicing to estimate volume

What type of slicing works here?