Math125: Calculus II

Instructor:	Dr. Ramiro Lafuente	**Email:**	Ramiro.LafuenteRodri@usd.edu
Course Number:	MATH-125-U820T		
Class Meetings:	Online	**Semester:**	Summer 2019

Time: June 24 – August 2

Important Dates: Drop/Add by June 27, 2019 for full refunded. Drop with a W date: July 22, 2018

Instructional Method: This course will be instructed online via *WebAssign* which is online teaching Calculus at https://www.webassign.net/login.html and Desire2Learn which is abbreviated as D2L at http://d2l.sdbor.edu

Course Description
Math 125 Calculus II is a continuation of the study of calculus; it includes the study of techniques of integrations, applications of integrations, indeterminate forms, improper integrals; sequences and series, polar coordinates and parametric equations

Prerequisite
Math 123: Calculus I.

Course Goals
This class fulfills the following Goals of the South Dakota System General Education Requirements:

BOARD OF REGENTS GOAL #5: Students will understand and apply fundamental mathematical processes and reasoning.

Students will meet SD BOR goal by completing weekly assignment and assessment.

Required Course materials
WebAssign **Student Access Code:** Students need class key **usd 0096 1781.** Students need purchase access code, ISBN: 9781285858265, that include printed access code to WebAssign and an ebook. Students who complete MATH123 online from USD this summer will not be required to purchase another WebAssign access code to complete MATH 125 online from USD this summer. It is suggested to use a high-speed internet connection and either Macs or PC's and an internet browser. Once registered in *WebAssign* for Math 125 Calculus II course, you will have access to an interactive e-book, supplementary course materials to assist you in your study, homework, quizzes, unit tests, the final exam, and your course grades.

Optional Textbook: This is a hard copy of the textbook.

Calculus, 8th Edition 2016; by Stewart; Cengage; ISBN-9781285740621 (Text alone)

Those students who have completed the Math 123 Calculus I course and continue on to register for the online Math 125 Calculus II course in the summer of 2019 will be able to use their *WebAssign* access and the same textbook (if purchased) for the online Math 125 Calculus II course without additional purchase of *WebAssign* access or the textbook.

Calculators: A graphing calculator is required for the course. A TI-83 or TI-84 graphing calculator is recommended. Nevertheless, any calculator or device that does symbolic calculation will **not** be allowed (like TI-89, TI-92, TI-NSpire).

Expectations:

Students:
This is a very fast pace course. To get good results, your effort should be significant and sustained.
- Check D2L daily for messages, assignments, etc.
- Utilize D2L email to contact personally.
- Use the discussion board to post questions on class content and procedures.
- Complete all assignments in the required time frame, before the specified due date, and students are expected to work ahead of the recommended Course Schedule, submitting

each assessment at least one day before it is due to avoid potential conflicts. This is fast pace course, so it is very important to keep up with all assignments.
- Use proper email and chat etiquette when using D2L and during *Zoom* sessions. You can be expelled from the course for inappropriate behavior. See also policies implemented.
- Student may use Skype conference talk with instructor. Please send e-mail to Instructor ahead for this purpose.
- In case of serious emergencies that put you in the impossibility to complete assignments, I expect to be notified right away. Remember that you should expect to provide some proof regarding the occurrence of that event.

Instructor:
- Post notes covering the material of each section on D2L.
- Be available to answer students' questions, by promptly replying to your email (within at most 24 hours during weekdays, at most 48 hours during weekends).
- Fairness and honesty in all aspects of the course.
- Abide by all policies contained in this syllabus and those by the Online Student Handbook, The University of South Dakota, and the South Dakota Board of Regents.

Assessments

Because of the online nature of this course, it is important that students receive regular feedback on their progress. To that end, there will be homework, quizzes and chapter assessments to assure that ample feedback is provided, and that ample opportunity is provided to ask questions about the various course topics. All assessments completed in *WebAssign* will be given immediate feedback. Make-up assessments will only be available under conditions such as serious illness, family emergencies, etc., and will be provided solely at the discretion of the instructor.

Ungraded Assessments

During the first day of class, students will take a diagnostic test over basic concepts of calculus I on *WebAssign*. If a student scores less than 70% on this test, the student need to work harder to success in this Math 125 calculus II course. It is suggested that student need to review Calculus I or consult with the instructor for more helps in studying Calculus II. While the effort to review Calculus I will not contribute toward your course grade, it is required.

Graded Assessments: Homework

It is highly recommended that students complete each *WebAssign* interactive e-book section which is found within the "Interactive eBook" tab on *WebAssign* and view the section video recording (you may print off the PDF outline prior to viewing the video recording for ease in taking notes) before attempting homework on *WebAssign* for that section. This can save you a lot of stress and confusion over the material being presented.

Use the online *WebAssign* system to access the corresponding homework assignment for the particular section and enter homework solutions. The *WebAssign* system provides instantaneous feedback! Each homework problem allows up to five attempts. After five incorrect attempts, you must click on the "Similar Exercise" button to get a new version of that problem which you can solve to receive credit. If you are unhappy with your score on a homework assignment, you may reenter ANY *WebAssign* homework assignment at ANY time to rework some of the problems you missed. You must complete each chapter's homework assignments in order, as the first is a prerequisite for the second and so on. You must also complete all the chapter homework assignments before you are allowed to take the quiz over those sections.

Graded Assessments: Quizzes

Quizzes will be completed online within *WebAssign*. To complete a quiz, you must first complete the associated homework with at least 70% or better. There will be about two quizzes for each chapter (except Chapter 8 and Chapter 10). You are allowed up to three attempts on each quiz, and after submitting each attempt, you will be able to see your score and which questions were answered correctly and which questions were answered incorrectly. This provides you an opportunity to learn from your mistakes! *WebAssing* will only use your highest quiz score attempt for a particular quiz grade.

Please note that each quiz has a required due date and are due by midnight CENTRAL time on that date. Quizzes can be completed any time **before** the required due date. Since each quiz can only be completed after you have completed the corresponding homework with at least 70% or better and you are allowed up to three attempts on each quiz, you must plan your time appropriately, working as much as possible ahead of schedule so that you avoid not being able complete a quiz on time. It's a good practice to complete each quiz at least one day before it is due. By doing this, you have time to refer to the homework to clear up any mistake and have three opportunities to earn the best score you can on the quiz. Any quiz not completed by the required due date will be recorded as a zero.

Graded Assessments: Tests and Final Exam

Chapter tests and final exam will be completed online within *WebAssign*. To complete a chapter test, you must first complete the homework and quizzes associated with that chapter test. You must also complete all chapter tests before being allowed access to the final exam.

There are four required tests (one test for each chapter; but Chapter 8 and Chapter 10 will be combined for one test) and final exam (a total of five assessments). Your lowest score out of the

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five total assessments will be dropped. If you complete the four tests but do not complete the final exam, then the resulting final exam score of 0% will be dropped. In this way, by completing the four required tests, the final exam is optional.

Each chapter test and final exam must be taken within the week specified in the course outline and by each required due date. Each of the four tests and final exam are due by midnight CNETRAL time on that date. If you do not take the assessments by the due date, you must email your instructor to receive permission for an extension. An extension is at the instructor's discretion and thus may or may not be permitted. If an extension is permitted, that assessment may be reduced by 10%. If an extension is not permitted, then that assessment will be reduced as a zero.

You will be allowed up to two hours to complete four tests and final exam.

You will not be allowed to have any assistance, notes, books (in any form), cell phones, calculators which do symbolic manipulation, or any additional electronic resources.

Students are required to take four tests and final exam online within *WebAssign*'s Lockdown Browser in the presence of an approved proctor. Refer to the proctor/test form found on the course homepage of D2L or

at http://www.usd.edu/-/media/files/usd-online/proctor-form.ashx?la=en

Complete and submit each chapter test or final exam assessment at least one day before the due date to avoid potential conflicts and to avoid receiving a zero score.

The due dates for proctored assessments listed as follows:

Test 1 (Chapter 6) due by 11:59 pm CT, Saturday, July 6

Test 2 (Chapter 7) due by 11:59 pm CT, Saturday, July 13

Test 3 (Chapters 8 & 10) due by 11:59 pm CT, Tuesday, July 23

Test 4 (Chapter 11) due by 11:59 pm CT, Thursday, August 1

Final Exam (Optional Comprehensive) due by 4:59 pm CT, Friday, August 2.

> Students are required to take the chapter tests and final exam in the presence of an approved proctor or must use a testing center. Failure to verify your proctor's signature may result in a zero on the chapter test or final exam.
>
> Your proctor will be required to sign a certificate attesting that you took the chapter test or final exam in his/her presence.

The proctor form can be found on the homepage of D2L for this course or at http://www.usd.edu/-/media/files/usd-online/proctor-form.ashx?la=en and then click on "Proctor Form". Fill out this form and send it to the Continuing Education at the address (or fax number) provided by <mark>Thursday, June 27</mark>.

After verifying your proctor, the Continuing Education staff will e-mail a password to your proctor the week prior to each chapter test and final exam. It is your responsibility to contact your proctor to see if the password has arrived. When you take the chapter test or final exam, make sure that you have a reliable internet connection with the appropriate *WebAssign* downloaded programs available at your testing site. You should also have the entire two-hour time period available without interruptions. You will log on to your *WebAssign* account and click on the "Quizzes & Tests" tab ad then click on the appropriate chapter test or final exam. Your proctor will enter a password which allows you access to the chapter test or final exam. Your proctor may not give you any assistance in working the problems. You should work out the problems from the chapter test or final exam on paper. Use the generous two-hour time period provided to carefully work out each problem, take care in entering your solutions correctly on *WebAssign*, and follow all directions provided on each problem so that you receive full credit. Once you've started the assessment, do not exit out of the assessment as you will not be allowed to resume the assessment and you will be blocked from *WebAssign* homework and quizzes. Be sure to complete the assessment before the two-hour time limit is up and submit it (click the submit button). If you do not submit your solutions, access to all questions, homework, quizzes, and other *WebAssign* assessments is blocked. Your proctor will sign a certificate attesting that you completed the assessment in his/her presence.

The final exam is a comprehensive exam which included all the material from chapters 6, 7, 8, 10 and 11. The final exam is scheduled during the last week of class and must be taken no later than Friday, August 2.

Course Point Total

Homework for 5 chapters (40 points for each chapter from Chapters 6, 7 and 11; and 20 points for each chapter from Chapters 8 and 10)	160 Points
Quizzes (two for chapters 6, 7 and 11; one for Chapters 8 and 10; and 20 points for each quiz)	160 Points
One Test for each chapter from Chapters 6, 7 and 11. One test for Chapters 8 and 10 together. Four tests and a Comprehensive Final Exam. (These four tests are required for this class. Final exam is optional.)	480 Points
Total	800 points
Note: The weight for each category is as follows: 20% from homework, 20% from quizzes, 60% from tests/final.	

Grading

The final grade is determined using straight percentages:

Letter Grade	Percentage	Points (approx.)
A	90 – 100%	720 - 800
B	80 – 89.9%	640 – 719
C	70 – 79.9%	560 – 639
D	60 – 69.9%	480 – 559
F	Below 60%	Below 480

Students can check current grade at any time during the semester through D2L

Office Hours

Office hours will be facilitated via *Zoom*, the University's web-conferencing system, or Skype (ramiro.lafuente-rodriguez). Weekly office hours will be as follows. The following time schedules may change as I see the availability of the student enrolled in the course during the first week of classes. Students will have opportunity to directly address questions to me and listen to other students' questions. Attendance is not mandatory, but it is highly recommended. This is the best way to address questions. There will be a link about how to access these live

sessions on D2L. It is recommended using a ==USB multi-media headset (earphones with microphone)== so that you can ask questions instead of typing the questions. Students can also send email at any time to ask questions. The instructor will return your question within 24 hours during the weekday and 48 hours during the weekend. Students are also welcome to use Skype conference with instructor. Please send email to Instructor ahead for using Skype.

Week	Time Schedules
June 24 – June 28	June 25 (Tuesday) and June 27 (Thursday), 9:00am – 10:00am
July 1 – July 5	July 2 (Tuesday) 9:00am – 10:00am
July 8 – July 12	July 9 (Tuesday) and July 11 (Thursday), 9:00am – 10:00am
July 15 – July 19	July 16 (Tuesday) and July 18 (Thursday), 9:00am – 10:00am
July 22 – July 26	July 23 (Tuesday) and July 25 (Thursday), 9:00am – 10:00am
July 29 – August 2	Test 4 and Final Test Week

Attendance at the weekly live office hours is NOT a requirement. This is a resource for students to address math questions and students will be able to hear their instructor's response in real time.

If a student would like to have a particular questions from homework addressed during office hours, please let your instructor know via e-mail or D2L's discussion one day before the office hour schedule. Students can set up different time to have Skype conference with Instructor. Please send email to Instructor ahead for this purpose.

Technology Requirements

The University of South Dakota has established minimum technology requirements for attending the online courses. Students must read the "Technology Support and Requirements" section in the CDE online Orientation document in the Getting Started section of the D2L course homepage.

If you plan on participating in the live sessions, it is recommended that you purchase a USB multimedia headset—earphones with a microphone—so that you can ask questions instead of typing them.

Desire2Learn (D2L):

D2L will be used to facilitate the course. To access D2L, please visit the following URL: http://d2l.sdbor.edu/ Student Resources:

The University of South Dakota provides a number of useful services to students:

- CDE Online Student Handbook (see link in the Getting Started section of the course homepage):
  This contains very important information related to the services provided by the USD as well as the University policies. In this document, you will find such information as:
  1. Academic support services such as proctor and testing information, book purchasing, etc.
  2. Student support services such as advising and enrollment information and financial aid, etc.
  3. Technology support services like technology requirements, ITS Help Desk contact information, discounts on computers and software, etc.

- USD Portal (go to http://www.usd.edu and click my at top to login USD Portal)
  The USD Portal is your one-stop place for a majority of services offered to any student taking a USD course-like this cou-rse. You can access the following WeAdvisor and I.D. Weeks Library from the "Academics" tab in the portal.

Cheating/Plagiarism Policy (from official University Policy):

The College of Arts and Sciences considers plagiarism, cheating, and other forms of academic dishonesty inimical to the objectives of higher education. The College supports the imposition of penalties on students who engage in academic dishonesty, as defined in the "Conduct" section of the University of South Dakota Student Handbook.

No credit can be given for a dishonest assignment. At the discretion of the instructor, a student caught engaging in any form of academic dishonesty must be:

a. Given a zero for that assignment.

b. Allowed to rewrite and resubmit the assignment for credit.

c. Assigned a reduced grade for the course.

d. Dropped from the course.

e. Failed in the course.

The above policy was adopted by the faculty of the College of Arts and Sciences on December 2018.

Freedom in Learning:

Under Board of Regents and University policy student academic performance may be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards. Students should be free to take reasoned exception to the data or views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled. Students who believe that an academic evaluation reflects prejudiced or capricious consideration of student opinions or conduct unrelated to academic standards should contact the dean of the college or school that offers the class to initiate a review of the evaluation.

Disability Services:

Any student who feels s/he may need academic accommodations or access accommodations based on the impact of a documented disability should contact and register with Disability Services during the first week of class or as soon as possible after the diagnosis of a disability. Disability Services is the official office to assist students through the process of disability verification and coordination of appropriate and reasonable accommodations. Students currently registered with Disability Services must obtain a new accommodation memo each semester.

Please note: if your home institution is not the University of South Dakota but one of the other South Dakota Board of Regents institutions (e.g., SDSU, SDSMT, BHSU, NSU, DSU), you should work with the disability services coordinator at your home institution.

Ernetta L. Fox, Director
Disability Services, Room 119 Service Center
(605) 677-6389
Web Site: www.usd.edu/ds
E-mail: disabilityservices@usd.edu

Diversity and Inclusive Excellence:

The University of South Dakota strives to foster a globally inclusive learning environment where opportunities are provided for diversity to be recognized and respected. To learn more about USD's diversity and inclusiveness initiatives, please visit the website for the Office of Diversity.

Tentative Course Schedule:

Weekly Schedule: Summer 2016 (6/24 – 8/02)

Week	Date	Sections Due this Week	Quizzes Due	Tests Schedules
June 24	June 24	*Webassign* Orientation; Diagnostic Quiz		
	June 25	Section 6.1 Inverse Functions	Diagnostic Quiz due by 11:59 pm CT on 06/25/19	
	June 26	Section 6.2 Exponential Function & Derivatives		
	June 27	Sections 6.3 and 6.4 Logarithmic function & derivatives	End of add/drop period	
	June 28	Section 6.5 Exponential Growth and Decay	.	
	June 29 Saturday	Section 6.6 Inverse Trigonometric Functions		
	June 30 Sunday	Section 6.7 Hyperbolic Functions	Quiz 1 (Sections 6.1 - 6.4) due by 11:59 pm CT on 06/30/19	
July 01	July 01	Section 6.8		

		Indeterminate Forms and L 'Hospital's Rule		
	July 02	Section 7.1 Integration by parts	Quiz 2 (Sections 6.5 - 6.8) due by 11:59 pm CT on 07/02/19	
	July 03	Section 7.2 Trigonometric Integrals & Section 7.3 Trigonometric Substitution		
	July 04 Holiday			

	July 05	Review Test 1		
	July 06 Saturday			Test 1 (Ch. 6) must be taken on 07/06/19
	July 07 Sunday	Section 7.4 Integration of Rational Functions by Partial Fractions		
July 08	July 08	Continue on Section 7.4 and Finish Section 7.5 Strategy for Integration.		
	July 9	Section 7.7 Approximate Integration	Quiz 3 (Sections 7.1 – 7.4) due by 11:59 pm CT on 07/9/19	
	July 10	Section 7.8 Improper Integrals		
	July 11	Section 8.1 Arc Length	Quiz 4 (Sections 7.5 – 7.8) due by 11:59 pm CT on 07/11/19	
	July 12	Review Test 2		
	July 13 Saturday			Test 2 (Ch. 7) must be taken on 07/13/19
	July 14 Sunday	Section 8.2 Area of Surface of Revolution		

July 15	July 15	Section 8.3 & Section 8.4 Applications		
	July 16	Section 8.5 Probability		
	July 17	Section 10.1 Curve of Parametric Functions		
	July 18	Section 10.2 Calculus with Parametric Curves	Quiz 5 (Sections 8.1 - 8.5) due by 11:59 pm CT on 07/18/19	
	July 19	Section 10.3 Polar Coordinates		
	July 20 Saturday	Section 10.4 Areas and Lengths in Polar Coordinates		
	July 21 Sunday	Section 11.1 Sequences	Quiz 6 (Sections 10.1 – 10.4) due by 11:59 pm CT on 07/21/19	
July 23	July 22	Review Test 3		
	July 23			Test 3 (Ch. 8 & Ch. 10) must be taken on 07/23/18
	July 24	Section 11.2 Series		
	July 25	Section 11.3 Integral Test and Estimates of Sums		
	July 26	Section 11.4 Comparison Test & Section 11.5 Alternating Series		
	July 27 Saturday	Section 11.6 Absolute Convergence, and Ratio and Root Tests & Section 11.7 Strategy for Testing Series	Quiz 7 (Sections 11.1 – 11.5) due by 11:59 pm CT on 07/27/19	
	July 28 Sunday	Section 11.8 Power Series		
July 29	July 29	Section 11.9 Representations of functions as Power Series		

	July 30	Section 11.10 Taylor and Maclaurin Series & Section 11.11 Applications	Quiz 8 (Sections 11.6 – 11.11) due by 11:59 pm CT on 07/30/19	
	July 31	Review Test 4		
	August 1			Test 4 (Ch. 11) must be taken on 08/01/19
	August 2 (Friday)	Comprehensive Final Test (optional)		Final test (if you want to take final test, you must finish by August 2, 2019