Syllabus

Math 1520 Calculus II

Spring 2019

Course MATH 1520 Section 4 meets MTWF 1:10-2:00 in RH 334

http://math.slu.edu/~clair/calc2

Instructor Dr. Bryan Clair

bryan@slu.edu

Ritter Hall 101 or 109. Department office is 977-2444.

Office Tu 12-1, W 2-3, F 10-11 or by appointment.

Hours When not on official office hours, I will often be in the department chair office RH 101.

Check for me there if I'm not in RH 109.

Texts The textbook for this course is *Calculus* (7ed), Hughes-Hallett, Gleason, McCallum et al. You will not need access to any electronic textbook resources for this class, so a paper copy

is acceptable. You can probably get by with the 6th edition, as well.

Technology A graphing calculator is recommended. The TI 83 or TI 84 are the calculators of choice. I allow calculator use on exams, but not the more advanced calculators that can do symbolic

manipulation. You are encouraged to use more advanced technology (such as Wolfram

Alpha) when it helps you learn.

Homework There will be two kinds of homework in this class: electronic homework on Webwork and written homework to be handed in on paper.

Webwork problems are generally routine computations you need to practice to become comfortable with the course material. You submit answers to these problems at the webwork site http://webwork.slu.edu and receive immediate feedback.

Written homework assignments will generally be due on Fridays, and will consist of more involved problems. Your work should be neat and legible, with plenty of blank space on your pages so I have room to write comments. Staple your homework!

I encourage you to work together on homework, but everyone should write up results separately. You should also feel free to check your homework by looking at solutions in the book or by using technology, and then making corrections.

I grade written homework as follows:

+ Most concepts well understood. Full credit.

✓ Most problems attempted. 80% credit.

Late 50% credit, no comments written.

0 Never handed in.

Late written homework is accepted no matter how late, but you will not get feedback.

Exams I give makeup exams only for severe and *documented* reasons.

Exam 1 Friday, February 15

Exam 2 Friday, March 29

Final Exam Monday, May 13 from 12-1:50pm

We will have a few take-home quizzes and generally a short in-class quiz each Friday.

Grading

Grading is on a straight scale (uncurved), with 90%,80%,70%,60% guaranteeing A,B,C,D respectively. Grading is weighted as follows:

Homework: 20% Quizzes: 20% Exam 1: 15% Exam 2: 15% Final Exam: 30%

Student Learning Outcomes

- 1. Students will be able to symbolically integrate functions using a variety of techniques.
- 2. Students will be able to find integrals numerically.
- 3. Students will be able to determine if an improper integral converges or diverges.
- 4. Students will be able to compute volumes of rotation
- 5. Students will be able to apply their knowledge of integration in an applied setting.
- 6. Students will be able to compute Taylor and McLaurin Series.
- 7. Students will be able to determine if a sequence converges or diverges
- 8. Students will be able to determine if a series converges or diverges
- 9. Students will be able to solve simple differential equations

Approx. Schedule

Integration review. 1 week.

Techniques of integration. Ch 7.1-7.4. 2 weeks.

Approximating integrals. Ch 7.5, 7.6. 1 week.

Improper integrals. Ch 7.7, 7.8. 1 week.

Applications of integration. Topics in Ch 8. 3 weeks.

Sequences and series. Ch 9. 3 weeks.

Approximating functions with series. Ch 10. 2 weeks.

Differential equations. Topics in Ch 11. 2 weeks.

Academic Integrity

In this course:

- 1. Homework: You are allowed to use any and all outside resources to help you complete your homework. Students who work together must write up results separately.
- 2. Take Home Quizzes: You may use your book and other references, such as the internet. You may not ask anyone besides Dr. Clair for help.
- 3. In-class Exams: No phone use of any kind. No communication with other students. Calculators are allowed, but not symbolic calculators. If you have questions during the exam, feel free to ask Dr. Clair.

Academic integrity is honest, truthful and responsible conduct in all academic endeavors. The mission of Saint Louis University is "the pursuit of truth for the greater glory of God and for the service of humanity." Accordingly, all acts of falsehood demean and compromise the corporate endeavors of teaching, research, health care, and community service via which SLU embodies its mission. The University strives to prepare students for lives of personal and professional integrity, and therefore regards all breaches of academic integrity as matters of serious concern.

The governing University-level Academic Integrity Policy was adopted in Spring 2015, and can be accessed on the Provost's Office website at:

https://www.slu.edu/provost/policies/academic-and-course/policy_academic-integrity_6-26-2015.pdf.

Additionally, each SLU College, School, and Center has adopted its own academic integrity policies, available on their respective websites. All SLU students are expected to know

and abide by these policies, which detail definitions of violations, processes for reporting violations, sanctions, and appeals. Please direct questions about any facet of academic integrity to your faculty, the chair of the department of your academic program, or the Dean/Director of the College, School or Center in which your program is housed.

Student Success

The best source of help in this class is to come to Dr. Clair's office hours.

The department of mathematics and statistics provides drop-in tutoring for this class, in Ritter 111. Help sessions are staffed by mathematics graduate students, and no appointments are necessary. Check the department webpage for hours.

In recognition that people learn in a variety of ways and that learning is influenced by multiple factors (e.g., prior experience, study skills, learning disability), resources to support student success are available on campus. The Student Success Center assists students with academic-related services and is located in the Busch Student Center (Suite, 331). Students can visit https://www.slu.edu/life-at-slu/student-success-center/ to learn more about tutoring services, university writing services, disability services, and academic coaching.

Disability Services

Students with a documented disability who wish to request academic accommodations must contact Disability Services to discuss accommodation requests and eligibility requirements. Once successfully registered, the student also must notify the course instructor that they wish to access accommodations in the course.

Please contact Disability Services, located within the Student Success Center, at Disability_services@slu.edu or 314.977.3484 to schedule an appointment. Confidentiality will be observed in all inquiries. Once approved, information about the student?s eligibility for academic accommodations will be shared with course instructors via email from Disability Services and viewed within Banner via the instructor?s course roster.

Note: Students who do not have a documented disability but who think they may have one are encouraged to contact to Disability Services.

Title IX

Saint Louis University and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. If you have encountered any form of sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the University. If you speak with a faculty member about an incident of misconduct, that faculty member must notify SLU?s Title IX coordinator, Anna R. Kratky (DuBourg Hall, room 36; akratky@slu.edu; 314-977-3886) and share the basic facts of your experience with her. The Title IX coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus.

If you wish to speak with a confidential source, you may contact the counselors at the University Counseling Center at 314-977-TALK. To view SLU?s sexual misconduct policy and for resources, please visit the following web addresses:www.slu.edu/here4you and https://www.slu.edu/general-counsel.

Basic Needs Security

Students in personal or academic distress and/or who may be specifically experiencing challenges such as securing food or difficulty navigating campus resources, and who believe this may affect their performance in the course, are encouraged to contact the Dean of Students Office (deanofstudents@slu.edu or 314-977-9378) for support. Furthermore, please notify the instructor if you are comfortable in doing so, as this will enable them to assist you with finding the resources you may need.