Instructor Artem Novozhilov

Office Minard 408E32

E-MAIL artem.novozhilov@ndus.edu

WEB https://www.ndsu.edu/pubweb/~novozhil/

https://www.ndsu.edu/pubweb/~novozhil/Teaching/math166.html

LECTURE HOURS MWF 9:00am-9:50am, NDSU Minard Hall, Rm 230

Office hours MWF 10:00am-11:00am (or by appointment)

TEXTBOOK Calculus by Jon Rogawski, 4th edition via Macmillan's Achive interactive learning (re-

quired)

Prerequisites MATH 165: Calculus I

Attendance

Course Applications and techniques of integration; polar equations; parametric equation; se-

DESCRIPTION quences and series, power series.

COURSE This course is a continuation of Calculus I, and as such it builds heavily on the material from Calculus I, especially on the notions of limit, derivative and integral. In Calculus II

from Calculus I, especially on the notions of limit, derivative and integral. In Calculus II the students will be exposed to the further theory of definite integral. Also, in addition to differentiation and integration, a third big subtopic of Calculus — the theory of sequences and series, including power series, will be treated. Upon completion the course, the students will be able to understand both the theory and applications of integration, sequences and series, polar coordinates, and parametric equations. Through practice and computational problems the students will learn how to apply Calculus to

many real world problems.

CLASS According to NDSU Policy 333 (www.ndsu.edu/fileadmin/policy/333.pdf), atten-

dance in classes is expected. The students are solely responsible for missed handouts or announcements made during the lectures. Students who miss more than 20% of classes or more than 20% of assignments prior to the "Last day for no-record drop of classes"

may be administratively dropped from the course at the discretion of the instructor.

CLICKERS A student response system (clicker) is a helpful tool for communication in large courses.

Its most important functions are to give me feedback on your understanding in class so that I know whether to explain a concept in more detail and to give you feedback on your learning so you know what you most need to study. To answer clicker questions in this course, you will need a free PointSolutions (known originally as Turning Point) app for use on your cell phone, tablet, or laptop. NDSU has a campus wide license for Turning Technologies as our personal response (clicker) solution. You do not need to purchase a license for PointSolutions. See https://kb.ndsu.edu/page.php?id=101669 for ac-

count activation and further details.

Clicker questions will be used to gauge understanding of course material, support class discussions, provide understanding of new concepts, review concepts of previously taught material, and record participation points. You are responsible for registration, battery

life, getting assistance for problems, and bringing a device to class. Participation points will begin to be recorded using clickers starting the second week of class. Please bring your electronic device with the PointSolutions app the first week of class to make sure the connection works.

Homework

Online homework assignments will be available through Achieve learning environment. It will be posted after each lecture and will have a strict deadline, usually midnight of the next class day (e.g., first class is on Wednesday, hence the first online assignment will be due on Friday midnight). No makeups or extensions will be given. At the end of the semester 5 lowest scores will be dropped.

Quizzes

Once a week (with some exclusions), during a recitation, there will be a quiz covering the material studied previously. There will be no make-up for the quizzes, and the two lowest results will be dropped before the final grading.

EXAMS

There will be three in class 50 minutes midterm exams and one one hour long final exam. Makeups are possible in case of a legitimate documented excuse. Each test covers the material of a specific section of the course. No books or calculators are allowed. A standard 8 1/2 by 11 sheet paper with the students notes is allowed (one side only) for each test. The students are required to bring a clean blue book for each test (will be provided by the instructor).

Calculators

Calculators (including the cell phones) will not be allowed during the tests and exams.

Grading

The grading of the course will be based on the online homework (20%), exams (50% total), quizzes (20%), and participation points (10%). The final grade will be A/B/C/D/F with the thresholds 90/80/70/60.

ACADEMIC RESPONSIBILITY AND CONDUCT The academic community is operated on the basis of honesty, integrity, and fair play. NDSU Policy 335: Code of Academic Responsibility and Conduct applies to cases in which cheating, plagiarism, or other academic misconduct have occurred in an instructional context. Students found guilty of academic misconduct are subject to penalties, up to and possibly including suspension and/or expulsion. Student academic misconduct records are maintained by the Office of Registration and Records. Informational resources about academic honesty for students and instructional staff members can be found at www.ndsu.edu/academichonesty.

Any student found guilty of academic dishonesty will receive a grade of 0 for the homework assignment, or quiz, or exam in question. In addition, every such student will be reported to the Chair of Mathematics, the Dean of their major college, the Dean of the College of Science and Mathematics, the Provost, and the Registrar. The Registrar will add any such student to NDSU's Student Academic Misconduct Database. (Multiple entries in this database may result in additional sanctions from NDSU.)

Special Needs

Any students with disabilities or other special needs, who need special accommodations in this course are invited to share these concerns or requests with the instructor and contact the Center for Accessibility and Disability as soon as possible.

SCHEDULE

Note: This is a tentative schedule and subject to a change. Week 1 starts on Tuesday, August 22rd.

Week 1-2. Review of Calc I material. Applications of the integral. (Sections 6.1-6.3).

Week 3-4. Applications of the integral. (Sections 6.4-6.5). First midterm test. First midterm exam.

- Week 5-6. Techniques of integration. (Section 7.1-7.5)
- Week 7-9 Techniques of integration. (Sections 7.6-7.9). Second midterm test.
- Week 10-11. Further applications of the integrals. (Sections 8.1-8.4)
- Week 12-13. Parametric equations. Polar coordinates. (Sections 11.1-11.5). Third midterm test.
- Week 14-17. Infinite series. (Sections 10.1-10.7)
 - Week 18. Hour long final exam. December 13th, Wednesday, 10:30am.