

MATH 266: Introduction to Ordinary Differential Equations: 3 credits

INSTRUCTOR	Artem Novozhilov
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LECTURE HOURS	MWF 1:00pm–1:50pm (NDSU Dolve Hall, Rm 118)
OFFICE HOURS	MWF 4:00pm–5:00pm (or by appointment)
TEXTBOOK	Martha L. Abell and James P. Braselton, <i>Introductory Differential Equations: With Boundary Value Problems</i> , 3d edition (October 19, 2009), Publisher: Academic Press, ISBN-10: 0123749352
PREREQUISITES	MATH 259 or 265. Corequisites: MATH 128, 129, or 429.
COURSE DESCRIPTION	Solution of elementary differential equations by elementary techniques. Laplace transforms, systems of equations, matrix methods, numerical techniques, and applications.
COURSE OBJECTIVES	Ordinary differential equations (ODE) are the main tool of applied mathematics that is used to model various processes in physics, engineering, economics, natural and social sciences. The purpose of the course is to learn the basics of the theory of ODE, get familiar with various methods of exact, numerical, and qualitative solutions of ODE, and to learn how to apply mathematical skills to various fields of study. The students will be exposed to both theoretical and applied points of view.
CLASS ATTENDANCE	Class attendance is expected. The students are solely responsible for missed handouts or announcements made during the lectures.
HOMEWORK	Homework problems will be posted on the course web page after each lecture. Some of the homework may be collected and graded (an announcement will be made). It is very important in this course to do the homework. If you have trouble with any of the assigned problems please see me as soon as possible. Group work on homework problems is encouraged. However, the final writing should be entirely your own. Joint work must be acknowledged. For the final grading one homework with the lowest score will be dropped.
QUIZZES	Except for the first and the last week of classes, there will be usually a quiz once a week covering the material from the previous week's lectures. There will be no make-up for the quizzes, and two lowest results will be dropped before the final grading.
EXAMS	There will be two in-class exams and a comprehensive final exam at the end of the semester. Make-ups for the midterm exams are possible in case of a legitimate (documented) excuse. Please contact me well in advance to arrange for a make-up. No make-ups for the final exam.

CALCULATORS Calculators will not be allowed during the quizzes and exams.

GRADING The weighting of grades will be the following:

- Homework/Quizzes average.....30%
- Exam 1.....20%
- Exam 2.....20%
- Final Exam.....30%

The student will get 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.

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 Disability Services Office as soon as possible.

You are welcome to discuss with me any questions or concerns about the course during my office hours or by appointment.