COURSE SYLLABUS - MATH 243A
Ordinary Differential Equations
TR 11:00 – 12:15, HSSB 1223

PROFESSOR Thomas Sideris, South Hall 6506
Office Hours: Tuesday, Thursday 13:00-14:30
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COURSE DESCRIPTION This course is the first of three quarters on the theory of ordinary differential equations and dynamical systems. During this quarter we will cover the basic existence and uniqueness theory for first order systems of ODEs: Picard’s existence and uniqueness theory, fundamental matrices, Floquet theory, Liapunov stability, dependence on initial conditions and parameters, etc. The goal will be to prepare you for the qualitative theory of nonlinear systems to come in the next two quarters.

PREREQUISITES Math 118ABC or equivalent. A solid grounding in linear algebra is strongly recommended.

GRADING Homework 34%
Midterm Exam 33%
Final Exam 33%

EXAMS Midterm To be announced.
Final Exam Thursday, December 7, 12:00-15:00
REFERENCES


Books marked with an asterisk (*) are more accessible than the others.