

Coverage of Midterm Exam in Math 331
October 17, 2016

Please review quizzes 1 and 2 and all the homework problems in homework sets 1–5. Also review the following sections in the course textbook *Advanced Engineering Mathematics*, tenth edition, by Erwin Kreyszig as well all the material covered in class on these topics.

Chapter 1. First-Order ODEs

Section 1.5 on linear ODEs

Section 1.3 on separable ODEs

Chapter 2. Second-Order Linear ODEs

Section 2.1 on homogeneous linear ODEs of second order

Section 2.2 on homogeneous linear ODEs with constant coefficients

Finally, review the document titled “Homogeneous-Linear-ODEs-of-2nd-Order.pdf”, which I prepared and which is posted on the course webpage. The material on nonhomogeneous ODEs is not on the exam. There are no proofs on the exam, only ODEs and initial value problems to solve.