Engineering Mathematics II: Math 152H
Sections 201, 202, Fall 2012
Lecture MWF 12:40–1:30 p.m. in Blocker 117

Professor: Michael Anshelevich, Milner 326, manshel@math.tamu.edu.
Webpage: www.math.tamu.edu/~manshel/m152H/m152H.html.
Office hours: MW 2–3 p.m., T 11–12 p.m., or by appointment.
TA: Michael Causey. Recitation sections:
  • Section 201, T 12:45–1:35 in CE 223 and R 12:45–1:35 in BLOC 124.
  • Section 202, T 2:20–3:10 in ENPH 216 and R 2:20–3:10 in BLOC 124.

Course Description: (Credit 4) Differentiation and integration techniques and their applications (area, volumes, work), improper integrals, approximate integration, analytic geometry, vectors, infinite series, power series, Taylor series. Prerequisite: MATH 151 or equivalent. The course meets for three hours per week in lecture with your professor and for two hours per week in recitation section with your teaching assistant (TA).

Course Objectives: This course is to provide students with quantitative and problem-solving skills of integral calculus, power series, and 3-D vectors. At the conclusion of this course, students should be able to:
  ◦ Apply techniques of integration to a variety of applications, including engineering applications.
  ◦ Understand and explain convergence of sequences and infinite series.
  ◦ Apply power series to a variety of applications, including engineering applications.
  ◦ Understand and apply vector operations in 3-dimensions, including dot and cross product.


Grading: A total score of 90% or more guarantees an A, a score of 80% or more a B, 70% or more a C, 60% or more a D.
  Exam I, Thursday, September 27, 7:30–9:30 p.m. 
  Exam II, Thursday, October 25, 7:30–9:30 p.m. 
  Exam III, Tuesday, November 27, 7:30–9:30 p.m. 
  Final exam, Monday, December 10, 10:30–12:30 p.m. 
  Quizzes ................................................................. 10%
  Homework .......................................................... 5%
  Online homework ................................................. 5%
  Class participation .................................................. 5%

Exam make-up policy: If, under completely exceptional circumstances, you need to miss one of the tests, a make-up exam will be given. Only University-approved excuses will be accepted, and you have to let me know preferably in advance, and no later than 2 days after the exam. The exams
are closed book, closed notes, and calculators are not allowed. You should bring your ID to all tests. Copies of old exams are available on the web.

**Quizzes** will be given in recitation on the majority of Tuesdays. The lowest two scores will be dropped. There may be unannounced quizzes in class.

**Homework** will be *collected and graded* every Thursday. No late homework will be accepted, but the lowest two scores will be dropped. In addition, there will also be suggested homework problems, which will help you to master the material and prepare you for the tests.

**Online homework** will be due weekly on WebAssign. See the web page for more details. No late homework will be accepted, but 4 lowest section scores will be dropped.

**Class participation:** Students will accumulate class participation “checkmarks”. To obtain the first checkmark, come to the office hours (or make an appointment) to introduce yourselves. Other checkmarks may be obtained by asking (or answering) mathematical questions in class. In Thursday recitation, students will be divided into groups and assigned problems to work on. A member of each group will present the group solution on the board. The presenter will gain a checkmark. A minimum of 5 checkmarks is required to obtain the full class participation score.

**Scholastic Dishonesty:** Cheating of any form is not acceptable and it will be dealt with harshly. In particular, copying work done by others, either in-class or out of class, is an act of scholastic dishonesty and it will be prosecuted to the full extent allowed by university policy. Students are encouraged to discuss the course material outside of class, and work on the homework assignments together, however all the homework turned in, including online homework, must represent the result of individual effort. In particular, copying the homework from any sources is not allowed. For more information on university policies regarding scholastic dishonesty, see the University Student Rules.

**Aggie Honor Code:** “An Aggie does not lie, cheat, or steal or tolerate those who do.”

**Students with disabilities:** Come talk to me no later than the first week of classes. “The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe that you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Room 126 of the Koldus Building or call 845–1637.’’

**Attendance:** According to the University Student Rules, absence for three or more class days requires a University-approved excuse and documentation.

**Other important dates:** August 31 (last day to add or drop a course), November 2 (Q-drop), November 22-23 (Thanksgiving), December 3 (last lecture), December 4 (last discussion section).

**Keys to success:** Attend class (of course :) Solve *all* the homework problems, well before the exams. Spend more than seven hours per week working on the problems. Form study groups to discuss the course material and homework problems. Read ahead in the text.

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