Textbook Information

Math 143 GH – Pre-Calculus Mathematics
Spring 2016

The class's textbook policy is as follows. **Students must have a precalculus book (or a college algebra and a trigonometry book) but it does NOT have to be the official textbook designated for this course.** This policy is intended to lower textbook costs. Usually students can purchase a textbook for the course under $40. Please notice that for the first few weeks of the course, students will rather need an intermediate algebra text book as we will extensively review topics from that course. Most topics will be covered by lecture notes posted on the class's web site.

In order to lower textbook costs for students, the Mathematics Department has selected a free (also called open source) textbook. This textbook is **Precalculus, An Investigation of Functions**, written by David Lippman and Melonie Rasmussen (edition 1.4) and can be downloaded freely at the link

http://www.opentextbookstore.com/precalc/1.4/Precalc.pdf

Students may use other precalculus texts. These include any edition of precalculus textbooks written by:

Sheldon Axler, Michael Sullivan, Thomas W. Hungerford, Mark Dugopolski,
Earl William Swokowski, Ron Larson, Robert P. Hostetler and Bruce H. Edwards
Raymond A. Barnett and Karl E. Byleen, David Cohen, David Skiar and Theodore B. Lee,
Marvin L. Bittinger, Judith A. Beecher and David J. Ellenbogen
Margaret L. Lial, Gary K. Rockswold and John Hornsby

Contents of Textbook

Chapter 1 – Functions
1.1 Functions and Function Notation
1.2 Domain and Range
1.3 Rates of Change and Behavior of Graphs
1.4 Composition of Functions
1.5 Transformation of Functions
1.6 Inverse Functions

Chapter 2 – Linear Functions
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2.2 Graphs of Linear Functions
2.3 Modeling with Linear Functions
2.4 Fitting Linear Models to Data
2.5 Absolute Value Functions

Chapter 3 – Polynomial and Rational Functions
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3.5 Inverses and Radical Functions

Chapter 4 - Exponential and Logarithmic Functions
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5.3 Points on Circles using Sine and Cosine
5.4 The Other Trigonometric Functions
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Chapter 6 – Periodic Functions
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6.2 Graphs of the Other Trig Functions
6.3 Inverse Trig Functions
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Last revised: July 19, 2015