Calculus II -- Spring 2018

MTH 230 - Calculus with Analytic Geometry II. Applications of the integral, techniques of integration, and infinite series. A study of conic sections, polar coordinates, and parametric equations. (PR: MTH 229 or IST 230)

- Time and Place: 2:00 pm 2:50 pm MTWR at 516 Smith Hall.
- Instructor: <u>Peter Saveliev</u> (call me Peter).
- Office: Smith Hall 713.
- Office Hours: MW 4:00, TR 3:00, or by appointment.
- Office Phone: x4639.
- E-mail: saveliev@marshall.edu.
- Class Web-Page: <u>math01.com</u>.
- Prerequisites: excellent algebra skills, good understanding of limits, the derivative, and the integral, fluent differentiation -- <u>Calculus I</u>.
- Text: <u>Calculus by Stewart</u> and the <u>lecture notes</u>.
- Outcomes: the student will learn to integrate and apply integration, use infinite series to approximate functions, become familiar with introductory multivariable calculus.
- Computer Restrictions: graphic calculator TI-83 or TI-83+.
- Activities: the student will practice each outcome via the homework given in the textbook and online.
- Evaluation: the student achievement of each outcome will be assessed via:
 - o in-class quizzes: taken from the textbook's exercise sets;
 - online quizzes: based on the course material, provided by Webwork, <u>http://webwork.marshall.edu/webwork2/S18-Math-230-Saveliev/;</u>
 - o in-class tests: based on the textbook's exercises;
 - o projects: written applications of calculus in science and engineering.
- Grade Breakdown:
 - participation: 5%,
 - quizzes: 25%,
 - project: 20%,
 - midterm: 20%,
 - final exam: 30%,

i.e., the total score is the following weighted average of the five scores:

TOTAL = $.05 \times P + .25 \times Q + .20 \times P + .20 \times M + .30 \times F$.