Math 1552-3 Summer 2011

1552
Calculus II
Monday-Thursday : 9:50 AM to noon, Lockett 276

INSTRUCTOR	Gestur Olafsson
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Office Hours	T-TH noon to 1 PM and by request
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Text:	***Calculus Early Transcendentals (2008)*** by Jon Rogawski

Detailed list of material that will be covered can be found bellow. Here are some important things to keep in mind:

- Classes begin June 6 and end July 25. The final exam is on July 28, 1:30-3:30 in Lockett 276.
- There will be three tests in class:
    - Monday, June 20, 11 AM - Noon.
    - Wednesday, July 6, 11 AM - Noon.
    - Wednesday, July 20, 11 AM - Noon.
    Each test counts 150 points towards the final grade.
- The final counts 300 points towards the final grade.
- We will be using *WebWork* for the homework. Each set of homework contains problems from two sections. Homework will be made available as soon as we have finished first of those sections and then stay open for **one** week and then the solutions will be made available. The only exception is if the first section is covered on Thursday and the second section of Monday. Then the problem set will be open until the following Monday. There is no extension possible for the homework!
- There are 15 homework sets. Each counts 16 points towards the final grade. Only the 12 best will be counted towards the final grade.
- To login to *WebWork* do the following:
    1. Go to the departmental webpage www.math.lsu.edu
    2. From the *Quick Links* on the right hand side choice *WebWork*.
    3. Locate your section *Math-1552-03-Summer2011*.
    4. Your login name is your PAWS e-mail name and the password in your ID number with no spaces or hyphens.
- New students are not loaded into the WebWork system, I have to do that manually. So please contact me (per email) if you are new in the class. Also, check online as soon as possible if you are able to access *WebWork*. Let me know if you have problems.
- We will assign homework from the book after each section. Those exercises will not be graded and do not count towards the final grade. But they are important to get used to the material and prepare for the tests and the final. Each test and the final will include some of those exercises. We will discuss the solution of some of those exercises in class.

GRADINGS

847 < A ≤ 942	752 < B ≤ 847	657 < C ≤ 752	562 < D ≤657	F ≤ 562

MATERIAL TO BE DISCUSSED IN CLASS

- **Chapter 7, Sections 7.1-7.7.**
  - Section 7.1: Numerical Integration.
  - Section 7.2: Integration by parts
  - Section 7.3: Trigonometric Integrals
  - Section 7.4: Trigonometric Substitutions
  - Section 7.5: Integrals of Hyperbolic and Inverse Hyperbolic Functions. This section will only be discussed if we are moving forwards according to plan. The material will not be covered on the tests.
  - Section 7.6: Partial Fraction Decomposition
  - Section 7.7: Improper Integrals
- **Chapter 10, Sections 10.1-10.6**
  - Section 10.1: Sequences. This is one of the most important material in this course!
  - Section 10.2: Summing an Infinite Series
  - Section 10.3 Positive Term Series: Note the integral test and the two comparison tests.
  - Section 10.4 Absolute and Conditional convergence
  - Section 10.5 The Ratio and Root Tests
  - Section 10.6: Power Series. We will not cover the material on solutions to differential equations.
  - Section 8.4: Taylor Polynomials:
  - Section 10.7: Taylor Series:
- **Chapter 11, Sections 11.1-11.5**
  - Section 11.1: Parametric Equations
  - Section 11.2: Arc Length and Speed
  - Section 11.3: Polar Coordinates
  - Section 11.4: Arc Length and Area in Polar Coordinates
  - Section 11.5 Conic Sections
- **Chapter 12, Sections 12.1-12.7**
  - Section 12.1: Vectors in the plane
  - Section 12.2: Vectors in Three Dimensions:
  - Section 12.3: Dot Products
  - Section 12.4: The Cross Product
  - Section 12.5: Planes in Three-Space
  - Section 12.6: Quadric Surfaces
  - Section 12.7: Cylindrical and Spherical Coordinates. We will only cover this material if there is enough time! It might be covered on a test but not on the final.
- **Chapter 13, Sections 13.1-13.5**
  - Section 13.1: Vector Valued Functions
  - Section 13.2: Calculus of Vector Valued Functions
  - Section 13.3: Arc Length and Speed
  - Section 13.4: Curvature
  - Section 13.5: Motion in Three-Space
- **Chapter 14, only section 14.3, Partial Derivatives**