

# WEST HARPETH CHRISTIAN TUTORIAL

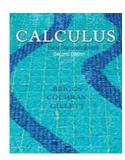
# Calculus

# **Tutor:**

Tom Carson tomcarson1967@gmail.com

### Prerequisites:

- · Precalculus
- Students scoring a B or better in prerequisites taken at WHCT are not required to take a placement test.
- All other students must pass a placement test prior to registration.



# **Course Description**

This course is an introduction to Calculus. It is the first course of the three-course college calculus sequence.

Topics include limits and continuity; the derivative; applications of the derivative; integrals; inverse functions and techniques of integration; and applications of the integral such as area under a curve and volumes of rotation.

#### **Books & Supplies**

- Calculus, Early Transcendentals, 2e Briggs, Cochran, Gillett
  - ISBN 9780321947345
- binder with tabs labeled Notes, Homework, Study Materials, Assessments.
- · Loose-leaf paper & Loose-leaf graph paper
- · pencils, blue pen, red pen
- · high-quality metal compass (not plastic)
- protractor
- · ACT-approved graphing calculator
  - TI-84+ preferred
- MathXLforSchools access code (provided via lab fee)

#### Commitment

- · This course meets on Tuesdays AND Thursdays.
- At the beginning of each quarter, students will receive the assignments and due dates.
  Assignments will be a mix of MathXL and textbook exercises. For each textbook exercise, students are expected to show appropriate work written neatly (the work should mirror the examples worked in class).
- Students are expected to check answers to oddnumbered textbook exercises in the back of the textbook.
- Even-numbered textbook exercises will be graded for accuracy.
- · Unit tests will be administered at home.
- · Specific expectations provided by Mr. Carson.

#### A typical class will look like...

A typical class will begin with a warm-up problem that students are to solve. The warm-up problem is designed to review foundational ideas and motivate the new lesson.

After working through the warm-up problem, we will go over the homework assignment focusing on the evennumbered problems (students do not have access to the answers for those exercises).

We will use the rest of the time to dig deeper into the new lesson, solving example problems like those assigned in the homework.