MATH 151 – Fall 2013

Course Syllabus

Instructor: Megan Schoessler
Office: 16C
Time: 10:30 a.m. – 11:20 a.m. daily
Office Hours: 1:30 p.m. to 2:30 p.m. daily
Office Phone: 509-527-4617
Email: megan.schoessler@wwcc.edu
Website: web.wwcc.edu/meganschoessler

Course Description and Objectives

MATH 151 is the first in a sequence of four courses for students who are planning to major in engineering, mathematics, or the sciences. Graphic analysis of concepts is emphasized through the use of technology. Topics include limits and continuity, derivatives and their applications, and an introduction to the definite integral (optional).

Prerequisites and Class Policy

MATH 151 has a prerequisite grade of C or higher in MATH 142 or permission of the Mathematics Department. (Formerly MATH 124, Calculus with Analytic Geometry I.)

Office Hours

Monday through Friday, 1:30 p.m. to 2:30 p.m.; In addition to my scheduled office hour, you may stop by any time to make an appointment with me. You may also contact me by email or phone. Your cell phone is not a necessity for class and therefore will not be used during class. If this is an issue, you may be asked to leave.

Office Phone: 509-527-4617

MATH 151 is the first in a sequence of courses for students who are planning to major in engineering, mathematics, or the sciences. Non-calculus computer activity as well as cell phone use are prohibited during class.

Technology

The software is installed on the computers in our classroom and in the Tutoring and Learning Center. WVC has a site license for the complete package. Mathematica has been installed in the classrooms in our classroom and in the Tutoring and Learning Center. The software is available at the desk in the classroom. WWCC has a site license for Mathematica. This software is also available at the desk in the classroom. The software is available at the desk in the classroom. The software is available at the desk in the classroom. The software is available at the desk in the classroom. The software is available at the desk in the classroom. The software is available at the desk in the classroom. The software is available at the desk in the classroom. The software is available at the desk in the classroom. The software is available at the desk in the classroom. The software is available at the desk in the classroom. The software is available at the desk in the classroom. The software is available at the desk in the classroom.

Textbook

Calculus for Scientists and Engineers: Early Transcendentals, by Briggs, Cochran, Gillett, and Schulz. A MyMathLab access code is required for the course. You may choose to purchase only the MyMathLab access code and use the electronic version of the text book, or you may choose to purchase a hardcopy of the book to use alongside the accessed code. This book is used for MATH 151, 152, 153, and 254. If you purchased a MyMathLab access code for MATH 124 within the last two years, you may use that MyMathLab access code for MATH 151. If you purchased a MyMathLab access code for MATH 124 within the last two years, you may use that MyMathLab access code for MATH 151.

Attendance

Daily, punctual attendance at every class session is expected. If you should miss a class, you are responsible for all announcements made concerning the course, for the material discussed in class, and for the homework assignments. You should also be prepared for class and study each of the sections of the book that we cover.

Office

16C

Email: megan.schoessler@wwcc.edu
Website: web.wwcc.edu/meganschoessler

Course Schedule

MATH 151 - Fall 2013
Homework
Assignments are to be completed in MyMathLab. Due dates are listed in MyMathLab. There will be two assignments per section covered. The first assignment is for “Practice” and will include several problems from the section so that you may practice your skills. The second assignment is a “Skills Check” assignment. The “Skills Check” assignment will include only a few problems and will check to see that you have mastered the material. For the “Skills Check” assignments you will not be allowed access to the “View an Example” and “Help Me Solve This” tools. Please attempt assignments by the following class period so that you may ask questions before they are due. You have the opportunity to earn 50% on any problems that were not completed prior to the due date, but this opportunity expires at the end of each section covered. The percentage of your grade will be based on the following:

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<tr>
<th>Grade</th>
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<tr>
<td>A</td>
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<td>A-</td>
<td>88% - 92%</td>
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Grading Procedure

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<th>Category</th>
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<tbody>
<tr>
<td>Homework/Notebook</td>
<td>20%</td>
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<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>Midterm Exams</td>
<td>45%</td>
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<td>Final Exam</td>
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<td>Total</td>
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Final Exam
The Final Exam will be given Tuesday, December 10th from 10:30 a.m. to 12:30 p.m. You may begin the exam as early as 9:30 a.m. You will receive a zero score and will not be allowed to make up the quiz.

Quizzes
Quizzes will be given frequently throughout the quarter. If you are absent on a day that a quiz is given, you will receive a zero score and will not be allowed to make up the quiz.

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Grading Procedure
**Academic Integrity**

Academic dishonesty (cheating) is not tolerated and will result in a 0 grade.

**Accommodations**

A student with a documented disability may request accommodations by contacting Claudia Angus, Coordinator of Disability Support Services, by phone at 527-4262 or by email at claudia.angus@wwcc.edu.

**Notes**

Plan to spend at least two hours outside of class each day reading the textbook, watching videos, completing homework assignments, etc.

6) You are now registered in MyMathLab and can begin reading through the textbook, completing class notes and recordings posted in MyMathLab.

5) Now you will be asked to either purchase an access code online or enter in the access code that you have already purchased. If you have used MyMathLab previously, click "Create" to create a username if you do not have a username. Then click "Continue".

4) If you have already used MyMathLab previously for any other course, enter in your username and password. Then click "Continue".

3) Enter the Course ID: **schoessler56678**, and then click "Continue".

2) Under "Register", click on "Student". Go to this website: www.pearsonmylab.com

1) To Register in MyMathLab

**Course ID**

Ultimately, YOU are in charge of your own success.

- Contact me via email/phone or ask questions during the office hours.
- Class notes and recordings posted in MyMathLab.
- MyMathLab TLC (Open M-Th from 7:30-4:30 pm and Fri. from 7:30 a.m. to 4:30 p.m.)
- The textbook needs to be your first resource.
- Studying and doing math. Here are some essential resources:

**Chadlaungs & Wccedu**

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Intended Learning Outcomes

• Analyze the following families of functions. Special attention should be given to each function’s individuality: the shape of its graph, characteristic properties, comparative growth rates, and general uses.

  a. Linear functions.
  b. Power and root functions.
  c. Exponential and logarithmic functions.
  d. General polynomial functions.
  e. Rational functions.
  f. Trigonometric functions.
  g. Inverse functions.

• Successfully apply the following actions to functions from each family listed above.

  a. Read graphs and think graphically.
  b. Read tables and think numerically.
  c. Algebraic skills.
  d. Model the real world.
  e. Read graphs and think graphically.
  f. Read tables and think numerically.
  g. Algebraic skills.

• Successfully apply the following actions to functions from each family listed above.

  a. Calculate the derivative of a function in its own right.
  b. Understand local linearity.
  c. Derivative as a function.
  d. Understand local linearity.
  e. Understand the derivative as a function in its own right.
  f. Read graphs and think graphically.
  g. Read tables and think numerically.

• Successfully apply the concept of a definite integral to functions from each family listed above.

  a. Properties of the definite integral and its interpretation as area.
  b. Evaluate definite integrals numerically.
  c. Compute the definite integral in general.
  d. Compute the definite integral numerically.
  e. Connection between derivative and the definite integral.
  f. Understand local linearity.
  g. Compute the definite integral in general.

Optional:

• Successfully apply the following actions to functions from each family listed above.

  a. Read graphs and think graphically.
  b. Read tables and think numerically.
  c. Algebraic skills.
  d. Model the real world.
  e. Read graphs and think graphically.
  f. Read tables and think numerically.
  g. Algebraic skills.

• Successfully apply the symbolic methods of differentiation to each of the families of functions.

  a. Chain rule.
  b. Product rule.
  c. Quotient rule.
  d. General polynomial formulas for derivatives.
  e. Implicit differentiation.
  f. Powers and polynomials.
  g. Logarithmic and exponential functions.

• Successfully apply the following actions to functions from each family listed above.

  a. The arithmetic operations: addition, subtraction, multiplication, and division.
  b. Function composition.
  c. Transformations and translations of the type \( f(bx + C) + D \) where \( f \) is a function.
  d. Function composition.
  e. The arithmetic operations: addition, subtraction, multiplication, and division.
  f. An algebraic concept as well as graphical concept.

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