MATH 203 – Calculus for Business and the Social Sciences (3 Credits)
CRN 61171

INSTRUCTOR: Jody-Lynn Storm
OFFICE: Mana‘opono 105, WCC campus
OFFICE HOURS: MW 11:30 am – 12:30 pm
TR 9:00 am – 10:00 am
F 10:00 am – 11:00 am
And by appointment

TELEPHONE: (808) 236-9277
EMAIL: jstorm@hawaii.edu (preferred method of communication)
WEBSITE: www.jodystorm.com
EFFECTIVE DATE: Fall 2012

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT
Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai‘i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O‘ahu’s Ko‘olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

CATALOG DESCRIPTION
Basic mathematical concepts, topics in differentiation and introductory integration of algebraic, exponential and logarithmic functions. Related applications to management, finance, economics and social science will be considered. (3 hours lecture)

Pre-Requisite(s): Grade of “C” or better in MATH 135 or equivalent, satisfactory math placement test score or consent of instructor.

WCC: FS

STUDENT LEARNING OUTCOMES

- Understand and use the intuitive definition of limits and apply them in limit calculations and in determining continuity.
- Demonstrate proficiency in determining derivatives and apply different interpretations of the derivative.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.
- Use calculus techniques to analyze and solve applied problems.
- Use derivatives to analyze graphs and sketch graphs.
- Demonstrate proficiency in determining antiderivatives and integrals.
- Utilize integration in applied problems.
- Utilize techniques of differentiation with functions of several variables.
*Note: All SLOs assessment are embedded in class activities, homework, quizzes, or exams*

**Foundations Hallmarks**

Math 203 fulfills the three credits General Education Requirement for Foundations Symbolic for both the AA degree at WCC and a Bachelor's degree at UH Manoa as well as UH West Oahu. Consequently, it meets the hallmarks of the symbolic reasoning requirement.

- Students will be exposed to the beauty, power, clarity and precision of formal systems.
- Instructors will help students understand the concept of proof as a chain of inferences.
- Instructors will teach students how to apply formal rules or algorithms.
- Students will be required to use appropriate symbolic techniques in the context of problem solving, and in the presentation and critical evaluation of evidence.
- The course will not focus solely on computational skills.
- Instructors will build a bridge from theory to practice and show students how to traverse this bridge.

**LEARNING RESOURCES**

**COURSE MATERIALS**

1) MyMathLab access code (see Additional Information)

2) A TI-83, TI-83 Plus, TI-84, or TI-84 Plus calculator (see Additional Information)

**COURSE TASKS & GRADING**

The student will demonstrate competency in the objectives via assignments, unit exams, and a final exam over concepts and skills covered in the entire course. Grades will be posted on the MyMathLab homepage.

Grades for this course are based on the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 exams @200 pts</td>
<td>600 pts</td>
<td>(60% of possible pts)</td>
</tr>
<tr>
<td>Homework</td>
<td>170 pts</td>
<td>(17% of possible pts)</td>
</tr>
<tr>
<td>Final Exam</td>
<td>230 pts</td>
<td>(23% of possible pts)</td>
</tr>
<tr>
<td>Total</td>
<td>1000 pts</td>
<td></td>
</tr>
</tbody>
</table>

Each letter grade for the course will be assigned according to the level of achievement as provided below:
<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percent</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90% - 100%</td>
<td>900 +</td>
</tr>
<tr>
<td>B</td>
<td>80% - 89%</td>
<td>800 – 899</td>
</tr>
<tr>
<td>C</td>
<td>70% - 79%</td>
<td>700 – 799</td>
</tr>
<tr>
<td>D</td>
<td>60% - 69%</td>
<td>600 – 699</td>
</tr>
<tr>
<td>F</td>
<td>Less than 60%</td>
<td>0 – 599</td>
</tr>
<tr>
<td>N</td>
<td>See Below</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>Official Withdrawal</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Incomplete - given when a student has failed to complete a SMALL part of the course due to circumstances beyond his/her control.</td>
<td></td>
</tr>
</tbody>
</table>

N Grade Definition: The student has worked conscientiously, finished all work, fulfilled course responsibilities, and has made measurable progress. However, either the student has not achieved the minimal student learning objectives and is not yet prepared to succeed at the next level, or the student has made consistent progress in the class but is unable to complete the class due to extenuating circumstances, such as major health, personal, or family emergencies.

Note: W grade is given only when the student officially withdraws from the course at the Admissions Office by the posted deadline.

SUCCESS IN THIS COURSE DEPENDS ON….

- **A reliable high-speed Internet connection.** All homework assignments are completed online.

- **Adequate computer skills.** You must be able to send/receive emails and download email attachments in PDF.

- **Proficiency with MyMathLab.** Some exams may be administered online through MyMathLab - they will be timed. You must be comfortable with the process of entering answers and using the special menu keys. Completing the homework assignments will allow you to become adept at entering answers in a timely manner.

- **Self-motivation.** You are responsible for keeping up with the homework assignments and exams.

ADDITIONAL INFORMATION

COURSE MATERIALS

An access code to the Course Compass MyMathLab online program is required. You may purchase the access code in two ways.

1. Purchase the access code directly through the publisher at [http://www.coursecompass.com/html/student_buy_access.html](http://www.coursecompass.com/html/student_buy_access.html). The

2. The textbook bundle. The bundle includes a MyMathLab access code along with the textbook Calculus for Business, Economics, Life Science, and Social Sciences, 12th ed., by Barnett, Zigler, and Byleen. The textbook bundle may be purchased directly at the WCC Campus Bookstore http://windward.hawaii.edu/Bookstore/ or order online at http://www.bookstore.hawaii.edu/wcc/home.aspx (shipping is available). Note: the textbook is not required as MyMathLab comes with the eBook.

GETTING STARTED

2. Enter the Course ID storm67836 when required.  
3. Follow the online instructions to complete the registration process.  
4. For a video tutorial go to http://tours.pearsoncmg.com/smscc/index.html  
   • You may need to turn off your pop-up blocker so that some plug-ins can be installed.  
   • For technical support: call (800) 677-6337 or visit http://www.mymathlab.com/student-support or http://247pearsoned.custhelp.com/

EXAMS

There will be 3 paper & pencil exams and a computerized final exam through MyMathLab. A review will be provided before each exam. You will have 5 days to complete the exams. There are no retests for exams. The final exam is cumulative.

All exams will be taken at the nearest proctoring site determined by your location. You must confirm your preferred testing site within the first week of class. A valid picture ID is required to take an exam at a testing site.

• On Oahu: Available testing sites are located at the four community colleges: WCC, HCC, LCC, and KCC. Tests will not be available at LCC at Waianae, UH West Oahu, or UH Manoa. Site information can be found at http://www.hawaii.edu/dl/faculty/prep/proctor_office.html  
• Outer Islands: for a list of available locations go to http://www.hawaii.edu/dl/faculty/prep/proctor_office.html .  
• Mainland: You are responsible for locating an approved proctoring site. You will need to email your site location to me within the first week of classes for approval.
HOMEWORK

Homework is assigned online via the Course Compass program, MyMathLab. After registering, login to the Course Compass homepage http://www.coursecompass.com/. Click on the “HOMEWORK” link to access assignments.

Each homework assignment is worth 5 points. You have unlimited attempts on any homework assignment as long as you have not passed the due date. Your highest score will be recorded. Assigned homework is due by 11:59 pm the following Sunday unless otherwise specified. There is a 20% per day point deduction for late homework. The deduction only applies to questions that have not been completed.

As this is an online course, there is no lecture. You are responsible for reading the assigned sections and completing the assignments. However, the MyMathLab program is extremely comprehensive and provides both PowerPoint presentations and short videos for each section. Keep in mind that you may have to do more than what is assigned to fully understand a concept.

EXTRA CREDIT

There may be opportunities for extra credit.

MAKE-UP POLICY

If you miss an exam, you will receive a zero for that exam. In the case of an emergency, documentation must be provided before a make-up exam is scheduled. The instructor has the right to determine if the reason is justified. There are no make-up opportunities for missed homework.

CALCULATORS

You will need a graphing calculator for some of the homework problems. A TI-83, TI-83 Plus, TI-84, or TI-84 Plus calculator is recommended. Two online graphing calculators are available on the MyMathLab webpage under “Tools for Success.” Calculator use will also be allowed on some exams. However, you may not use a TI-89 or an Nspire calculator as they have additional features that are not allowed on exams.

HELP & COMMUNICATION

Seek help immediately if you are encountering problems:

• On Oahu, you may drop by during my office hours or make an appointment to meet with me.
• Off Oahu, the preferred method of communication would be via email.
• Post a question on the MyMathLab Discussion Board.
• Send messages to me or your fellow students via MyMathLab Message Board.
• Talk to a live tutor:
  o Pearson Tutoring Center (http://media.pearsoncmg.com/cmg/pmmg/pmmg_mml_shared/mtc_ph.html). Registration is required.
  o http://manoa.hawaii.edu/ola - Provides free live interactive tutoring during weekdays.
  o Smarthinking online tutoring. Information can be found at http://windward.hawaii.edu/smarthinking/
• View YouTube videos at http://www.khanacademy.org
• If a crisis comes up that interferes with the class, communicate with me as soon as possible.

**DISABILITIES ACCOMMODATION STATEMENT**
If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale ʻAkoakoa 213 for more information.
<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATES (Mon – Sun)</th>
<th>READING ASSIGNMENT by SECTION</th>
<th>MYMATHLAB HOMEWORK</th>
<th>HW DUE (Sundays)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/20 – 8/26</td>
<td>1.2, 2.3, 2.5</td>
<td>1.2, 2.3</td>
<td>8/26</td>
</tr>
<tr>
<td>2</td>
<td>8/27 – 9/2</td>
<td>2.6, 3.1</td>
<td>2.5, 2.6, 3.1</td>
<td>9/2</td>
</tr>
<tr>
<td>3</td>
<td>9/3 – 9/9</td>
<td>3.2, 3.3</td>
<td>3.2, 3.3</td>
<td>9/9</td>
</tr>
<tr>
<td>4</td>
<td>9/10 – 9/16</td>
<td>3.4, 3.5</td>
<td>3.4, 3.5</td>
<td>9/16</td>
</tr>
<tr>
<td>5</td>
<td>9/17 – 9/23</td>
<td>3.6, 3.7</td>
<td>3.6, 3.7</td>
<td>9/23</td>
</tr>
</tbody>
</table>

**EXAM 1**  Available 9/24 – 9/28  
(1.2, 2.1, 2.3, 2.5, 2.6, Ch 3)  

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATES (Mon – Sun)</th>
<th>READING ASSIGNMENT by SECTION</th>
<th>MYMATHLAB HOMEWORK</th>
<th>HW DUE (Sundays)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>9/24 – 9/30</td>
<td>4.1, 4.2</td>
<td>4.1</td>
<td>9/30</td>
</tr>
<tr>
<td>7</td>
<td>10/1 – 10/7</td>
<td>4.3, 4.4</td>
<td>4.2, 4.3, 4.4</td>
<td>10/7</td>
</tr>
<tr>
<td>8</td>
<td>10/8 – 10/14</td>
<td>4.5, 4.6</td>
<td>4.5, 4.6</td>
<td>10/14</td>
</tr>
<tr>
<td>9</td>
<td>10/15 – 10/21</td>
<td>4.7, 5.1</td>
<td>4.7, 5.1</td>
<td>10/21</td>
</tr>
<tr>
<td>10</td>
<td>10/22 – 10/28</td>
<td>5.2, 5.3</td>
<td>5.2, 5.3</td>
<td>10/28</td>
</tr>
</tbody>
</table>

**EXAM 2**  Available 10/29 – 11/2  
(Ch 4, 5.1 – 5.3)  

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATES (Mon – Sun)</th>
<th>READING ASSIGNMENT by SECTION</th>
<th>MYMATHLAB HOMEWORK</th>
<th>HW DUE (Sundays)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>10/29 – 11/4</td>
<td>5.4, 5.5</td>
<td>5.4</td>
<td>11/4</td>
</tr>
<tr>
<td>12</td>
<td>11/5 – 11/11</td>
<td>5.6, 6.1</td>
<td>5.5, 5.6, 6.1</td>
<td>11/11</td>
</tr>
<tr>
<td>13</td>
<td>11/12 – 11/18</td>
<td>6.2, 6.3</td>
<td>6.2, 6.3</td>
<td>11/18</td>
</tr>
<tr>
<td>14</td>
<td>11/19 – 11/25</td>
<td>6.4, 6.5, 7.2</td>
<td>6.4, 6.5</td>
<td>11/25</td>
</tr>
</tbody>
</table>

**EXAM 3**  Available 11/26 – 11/30  
(5.4 – 5.6, Ch 6)  

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATES (Mon – Sun)</th>
<th>READING ASSIGNMENT by SECTION</th>
<th>MYMATHLAB HOMEWORK</th>
<th>HW DUE (Sundays)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>11/26 – 12/2</td>
<td>7.3, 8.1, 8.2</td>
<td>7.2, 7.3</td>
<td>12/2</td>
</tr>
<tr>
<td>16</td>
<td>12/3 – 12/9</td>
<td>8.3, Review for Final Exam</td>
<td>8.1, 8.2, 8.3</td>
<td>12/9</td>
</tr>
</tbody>
</table>

**FINAL EXAM**  Available 12/10 – 12/14  
(Cumulative)  

**IMPORTANT DATES**  
08/24/2012 Last day to receive 100% tuition refund  
09/10/2012 Last day to receive 50% tuition refund  
09/10/2012 Last day to drop (No "W" on transcript)  
10/29/2012 Last day to withdraw from class ("W" on transcript)