MATH 205 – CALCULUS I - 4 credits
MWF 8:30 – 9:45 a.m.

INSTRUCTOR: Jean Okumura
OFFICE: Mana’opono 112A
OFFICE HOURS: MW 10:00 – 11:00 a.m. TR 10:00 – 10:30 a.m.
Other Hours by Appointment
TELEPHONE: 236-9282
FAX NUMBER: 247-5362 Attention: Jean Okumura
EMAIL ADDRESS: jokumura@hawaii.edu
EFFECTIVE DATE: Fall 2012

MYMATHLAB (MML) COURSE ID: okumura04155

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 and trigonometric functions. Applications of differentiation and integration will be demonstrated. (4 hrs lecture)

PREREQUISITES: Grade of "C" or better in Math 140 or equivalent, satisfactory placement test score, or consent of instructor.

WCC: FS

Suggested Basic Skills

Good study skills and habits; Competency with Math 135 (PreCalculus: Elementary Functions) and Math 140 (PreCalculus: Trigonometry and Analytic Geometry).

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 ‘Akoakoa 213 for more information.
Learning Resources and Materials

Required Text: Single Variable Calculus, by Briggs & Cochran

Required Technology Tool: TI-83, TI-83+, TI-84, or TI-84+ calculator

Required Material: MyMathLab (MML) access code

MyMathLab (MML) Course ID: okumura04155

MATH LAB: La’akea 226

THE TESTING CENTER (TTC): La’akea 228 – phone number 235-7498

UH Manoa Online Learning Academy: http://manoa.hawaii.edu/ola/
   Free online tutorial assistance from 9 am to 10 pm

Smarthinking: http://windward.hawaii.edu/smarthinking
   Free online tutorial assistance

MyMathLab (MML)

This course will utilize MML for many homework assignments. The new textbook purchased from the WCC bookstore is packaged with MML. If you purchase the textbook from elsewhere, be sure that it comes with the MML access code.

The MML access code also provides an e-book so if you prefer, you may purchase just the MML access code online for $82.

Activities Required at Scheduled Times Other Than Class Times

Homework; quizzes; consultation with instructor.

It is expected that students spend, at the minimum, 12 hours per week outside of class time studying, attending Supplemental Instruction sessions, and doing homework and readings for this class.

Email and Laulima Website

You are responsible for checking your UH email regularly for important announcements. You are also expected to check the Math 205 Laulima site for important resources for the course.
STUDENT LEARNING OUTCOMES

These student learning outcomes will be assessed via course activities (homework, in-class work, and/or additional assignments) and via tests or quizzes.

1. Understand and use the formal and intuitive definitions of limits and apply them in limit calculations and in determining continuity.

2. Demonstrate proficiency in determining derivatives and apply different interpretations of the derivative.

3. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

4. Use Calculus techniques to analyze and solve applied problems.

5. Use derivatives to analyze and sketch graphs and/or to solve related problems.

6. Demonstrate proficiency in determining antiderivatives and integrals.

7. Utilize integration in applied problems.

Course Goals

1. To engender the learning of the fundamental precepts, concepts and properties of differential calculus and introductory integral calculus.

2. To nurture the student's problem solving skills.

3. To facilitate the student's comprehension of the nature of proofs through logical, deductive means, and to simultaneously augment the student's understanding through intuitive means.

4. To inculcate the relevance of calculus through applications.

5. To prepare the student for endeavors which have calculus as a prerequisite.
Math 205 fulfills the 3 credits General Education requirement for Foundations: Symbolic for both the A.A. degree at WCC and a Bachelor’s degree at UH Manoa and UH West Oahu. Consequently, it meets the following hallmarks of the symbolic reasoning requirement:

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

Responsibilities of Students

Success in this course will be enhanced by:

1. A positive, inquiring attitude toward mathematics;
2. Setting aside adequate time for studying, working on problems, and careful cogitation of the material;
3. Reading the text carefully and making use of other learning materials whenever necessary;
4. Seeking assistance from the instructor and the Math Lab whenever necessary;
5. Regularly attending class and, notifying the instructor of an absence and responsibly obtaining and completing assignments by the designated date.
Academic Honesty

All quizzes and exams are closed books and notes and must be done by your individual effort. You may not consult with any classmates while taking quizzes or exams. You are not allowed to tell a friend the type of questions on the quiz or exam, the answers, or help a classmate in any way (e.g. by explaining how to solve the problem). This would fall under the guidelines of academic integrity and any evidence of cheating will result in a score of 0 for all parties involved. Also keep in mind that we are assessing your knowledge and understanding of the concepts and strategies – attempting to find the answers online or through other sources is not in the spirit of academic honesty. An “F” will be assigned to students involved in cheating and will be reported to the Dean.

Graded assignments that apply to the course activities portion of your grade may be discussed with your classmates and you may seek guidance from the instructor, the Math Lab tutors, or the Trio tutors (if you are a Trio client), however, the write up of the solution for each problem must be done on your individual effort unless otherwise specified by the instructor. Graded assignments are not group assignments where all members of the group write the same responses for each problem. Any evidence of plagiarism will result in a score of 0 for all parties involved. If plagiarism persists, then an “F” will be assigned to the students involved in plagiarism and will be reported to the Dean.

All students are required to follow the Student Conduct Code described at http://www.hawaii.edu/apis/ep/e7/e7208.pdf.

Disruptive Behavior

Disruptive Behavior leads to a loss of learning time. Examples are activated beepers and cell phones, texting messages, making offensive remarks, packing books before class is over, making noise, leaving class early, coming to class late, sleeping in class, prolonged chattering, reading other materials not relevant to this class, etc. If a student takes part in disruptive behavior, the instructor reserves the right to exclude the student immediately from the class meeting, and will be marked absent.

Remember that class time is learning time. Also, be respectful of others and their learning time.
Course Tasks and Grading Information

Grades for this course are based on the following course tasks:

- 3 exams @150 pts = 450 pts (60% of possible pts)
- Course Activities = 100 pts (13⅓% of possible pts)
- SI participation/activities = 25 pts (3⅓% of possible pts)
- Final Exam = 175 pts (23⅓% of possible pts)
- Total points = 750 pts

Course activities may include but are not limited to:

- MML Homework
- Mini-projects
- Journal entries (writing assignments)
- Presentations
- Other Assignments (Activity Sheets, etc.)

Most course activities will be MML homework, in-class assignments or other assignments`. Although there are points associated only with graded work for the course activities portion of the grade, it is expected that students do additional problems from the text, MML study plan, or on handouts that have answers provided as a way to practice the strategies learned. Not doing additional problems for practice and/or waiting to work on additional practice problems until right before an exam generally results in poor exam results and a lack of success in this course.

Each letter grade for the course will be assigned according to the level of achievement as provided in the table below:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90% - 100% of the cumulative points possible</td>
</tr>
<tr>
<td>B</td>
<td>80% - 89% of the cumulative points possible</td>
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<tr>
<td>C</td>
<td>70% - 79% of the cumulative points possible</td>
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<tr>
<td>D</td>
<td>60% - 69% of the cumulative points possible</td>
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<tr>
<td>F</td>
<td>Less than 60% of the cumulative points possible</td>
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<tr>
<td>Cr</td>
<td>70% - 100% of the cumulative points possible</td>
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<tr>
<td>NC</td>
<td>Less than 70% of the cumulative points possible</td>
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<tr>
<td>W</td>
<td>Official Withdrawal</td>
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<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>
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</tbody>
</table>

Note: Cr/NC grades require written instructor consent. Students must apply for Cr/NC grading option at the Admissions Office by the posted deadline. If a student does not apply for Cr/NC grading option at the Admissions Office by the required deadline and if s/he does not withdraw, a letter grade (A, B, C, D, F) will be assigned for the course.

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

1. **ABSENCES:**

   It is your responsibility to attend class. If you are absent, borrow a classmate's notes and copy them for the day you were absent. You are responsible for those topics and examples discussed on the day of your absence. Furthermore, you are responsible for any important announcements or homework assignments given during the class you missed. Frequent absences can negatively affect your grade.

2. **MAKE-UP POLICY:**

   There are no make-up opportunities for any quizzes, graded assignments, or graded in-class activities that you miss due to absences or tardiness. A few opportunities for some extra credit may be available for the course activities portion of your grade. You will have 2 same day late graces (SDLG) and 3 one day late graces (1DLG) for course activities.

   If you are unable to attend class on an exam day, discuss your situation with the instructor as soon as possible before the exam day. It may be possible for you to take the exam earlier than the specified day/time. IF YOU UNEXPECTEDLY MUST BE ABSENT ON AN EXAM DAY, NOTIFY THE INSTRUCTOR BY THE END OF THAT EXAM DAY. YOU CAN LEAVE A VOICE MAIL MESSAGE FOR THE INSTRUCTOR (236-9282) OR EMAIL THE INSTRUCTOR. BE SURE TO STATE THE REASON FOR THE ABSENCE. If no notification is received by the day of the exam or if the reason is not justified, then you will receive a 0 for that exam and no make-up will be allowed. If notification is received and the reason is justified then a make-up exam will be scheduled. You must take the make-up exam as soon as possible after you return to school. The instructor has the right to request documentation of the student’s absence and determine if the reason for the absence is justified. FOR EACH STUDENT, NOT MORE THAN ONE MAKE-UP EXAM MAY BE TAKEN.

3. There are NO RETESTS for this course.

4. **FINAL EXAM:** The final exam is cumulative.

5. **CALCULATOR:**

   A TI-83, TI-83+, TI-84, or TI-84+ calculator is required for this class. The calculator is required for some parts of the exams and assignments and not allowed for other parts.
**Additional Information (continued)**

6. **HOMEWORK:**

   Read the sections to be covered in a class session prior to that class session. As you read each section, write down terminology or symbols and its definition and properties/rules that are important. This will become helpful additional notes. Try to do problems from the textbook or study plan. Also look at the in-class examples and try to do as much of those problems as possible.

   After the class lecture/discussion on a section, you should complete the MML homework problems from that section(s). Those problems and concepts that you still do not understand or that you need further clarification on should be asked about on the class meeting after the section is discussed in class or during an SI session (if available). Because there is very little class time, you will probably need to seek further assistance from the instructor, from the SI Leader (if the class has an SI Leader), from the Math Lab, or from other resources such Smarthinking or the Online Learning Academy, if not all your questions on problems are handled during class time or if you are still having difficulties. Complete, review, and analyze all of the MML homework, activity sheets, worksheets, and other problems that were graded to help you learn and get a better understanding of the material. You may need to do more than the MML homework problems to become comfortable with the concepts and skills – there are textbook problems and study plan problems available for extra practice.

   **LATE GRADED WORK WILL NOT RECEIVE ANY POINTS.** You may turn in your graded work before the due date and/or time without losing points. You will have three (3) one day late graces and two (2) same day late graces available to use. Please notify me if you want to use a late grace. A few opportunities for extra credit may be available for the course activities portion of your grade.

   Course activities may also include other activities such as journals (writing assignments), oral presentations, etc. Any item collected for grading purposes for the course activities portion of your grade are due at the **BEGINNING OF CLASS** unless otherwise specified by the instructor and **WILL NOT RECEIVE ANY POINTS IF TURNED IN LATE.**

   Although there are generally no points associated with MML study plan problems or additional problems that are done from the text or on handouts that have answers provided as a way to practice the strategies learned, it is expected that students do these problems to assist them in their learning and for additional practice.

   Be sure to review and analyze any graded course activities after it is returned to you. This will help you to get a better understanding of the material and concepts.
7. **CELL PHONES:**

Please put your cell phone on silent mode or turn it off prior to the start of the class so that it does not disturb the class session.

8. **HELP:**

Your instructor and SI Leader (if one is available for this class) are your primary human resources for help when you are lost or having trouble. Seek help immediately if you are encountering problems even after reading and re-reading the text section(s) and listening to/thinking about the discussion in class on that section(s). See the instructor during office hours, see the SI leader during SI sessions (if available for this class), make an appointment, email or call. Don’t wait too long to get help!!

If a crisis comes up that interferes with the class, communicate with your instructor in a timely manner. Too many students wait until it is too late to inform their instructor about their crisis and that reduces the options that students may have to complete the course with a grade of C or better.

9. **GRADING ON HOMEWORK, QUIZZES, OR EXAMS:**

To receive full credit for problems done on exams, on quizzes, or for graded homework, you must show sufficient work in a clear, logical, mathematically precise and organized manner. This is to assess student learning outcome #6 and Foundations Hallmark #4. It also helps me determine where your error is (hence, you might be able to obtain partial credit) and if you are logically applying the mathematical tools learned to solve the given problem. Your work must be neat and organized. "Messy" and/or disorganized work will not be accepted.

10. **DON'T PROCRASTINATE**

Mathematics is not a subject that you can consistently be successful in by "cramming" a day or two before the test. By "cramming" you don't develop proficiency in doing the problems, knowledge of what to do on a particular problem and long-term understanding of the process. Also, if you procrastinate, you may fall so hopelessly behind that it becomes impossible to catch up. It requires constant work to keep on top of the material.
# TENTATIVE SCHEDULE - MATH 205

**FALL 2012 - OKUMURA**

**MWF 8:30 – 9:45 am**

<table>
<thead>
<tr>
<th>Date</th>
<th>MONDAY</th>
<th>Date</th>
<th>WEDNESDAY</th>
<th>Date</th>
<th>FRIDAY</th>
</tr>
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<tbody>
<tr>
<td>AUG 20</td>
<td>Orientation</td>
<td>AUG 22</td>
<td>Proofs,</td>
<td>AUG 24</td>
<td><strong>2.1, 2.2</strong></td>
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<td></td>
<td></td>
<td></td>
<td>Math Induction (MI)</td>
<td></td>
<td><em>Last Day for 100% Refund</em></td>
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<tr>
<td>AUG 27</td>
<td><strong>2.3</strong></td>
<td>AUG 29</td>
<td><strong>2.4</strong></td>
<td>AUG 31</td>
<td><strong>2.5</strong></td>
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<tr>
<td>SEPT 3</td>
<td>HOLIDAY: Labor Day</td>
<td>SEPT 5</td>
<td><strong>2.6</strong></td>
<td>SEPT 7</td>
<td><strong>2.7</strong></td>
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<td>SEPT 10</td>
<td><strong>3.1</strong></td>
<td>SEPT 12</td>
<td><strong>3.2</strong></td>
<td>SEPT 14</td>
<td><strong>3.3, 3.4</strong></td>
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<td>SEPT 17</td>
<td><strong>3.4</strong></td>
<td>SEPT 19</td>
<td><strong>3.6</strong></td>
<td>SEPT 21</td>
<td><strong>3.5</strong></td>
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<tr>
<td>SEPT 24</td>
<td>Review for Exam 1</td>
<td>SEPT 26</td>
<td><strong>EXAM 1 - MI, Ch 2,</strong></td>
<td>SEPT 28</td>
<td><strong>3.7</strong></td>
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<tr>
<td>SEPT 24</td>
<td>Review for Exam 1</td>
<td>SEPT 26</td>
<td><strong>EXAM 1 - MI, Ch 2,</strong></td>
<td>SEPT 28</td>
<td><strong>3.7</strong></td>
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<tr>
<td>OCT 1</td>
<td><strong>3.8</strong></td>
<td>OCT 3</td>
<td><strong>3.8</strong></td>
<td>OCT 5</td>
<td><strong>4.5</strong></td>
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<td>OCT 8</td>
<td><strong>4.5, 4.1</strong></td>
<td>OCT 10</td>
<td><strong>4.1, 4.2, 4.3</strong></td>
<td>OCT 12</td>
<td><strong>4.2, 4.3</strong></td>
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<td>OCT 15</td>
<td><strong>4.2, 4.3</strong></td>
<td>OCT 17</td>
<td><strong>4.6</strong></td>
<td>OCT 19</td>
<td><strong>4.7</strong></td>
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<tr>
<td>OCT 22</td>
<td>Review for Exam 2</td>
<td>OCT 24</td>
<td><strong>EXAM 2 - Sec 3.5, 3.7,</strong></td>
<td>OCT 26</td>
<td><strong>4.4</strong></td>
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<td>OCT 29</td>
<td><strong>4.4, 5.1</strong></td>
<td>OCT 31</td>
<td><strong>5.1, 5.2</strong></td>
<td>NOV 2</td>
<td><strong>5.2, 4.8</strong></td>
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<tr>
<td>NOV 5</td>
<td><strong>4.8, 5.3</strong></td>
<td>NOV 7</td>
<td><strong>5.3</strong></td>
<td>NOV 9</td>
<td><strong>5.4</strong></td>
</tr>
<tr>
<td>NOV 12</td>
<td>HOLIDAY: Veteran’s Day</td>
<td>NOV 14</td>
<td><strong>5.5</strong></td>
<td>NOV 16</td>
<td><strong>6.1</strong></td>
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<tr>
<td>NOV 19</td>
<td>Review for Exam 3</td>
<td>NOV 21</td>
<td><strong>EXAM 3</strong></td>
<td>NOV 23</td>
<td><strong>NO CLASSES:</strong></td>
</tr>
<tr>
<td>NOV 19</td>
<td>Review for Exam 3</td>
<td>NOV 21</td>
<td><strong>Sec 4.4, 4.7, 4.8, Ch 5, 6.1</strong></td>
<td>NOV 23</td>
<td><strong>Thanksgiving Recess</strong></td>
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<td>NOV 26</td>
<td><strong>6.2</strong></td>
<td>NOV 28</td>
<td><strong>6.3</strong></td>
<td>NOV 30</td>
<td><strong>6.3</strong></td>
</tr>
<tr>
<td>DEC 3</td>
<td><strong>6.6</strong></td>
<td>DEC  5</td>
<td>Final Exam Review</td>
<td>DEC 7</td>
<td>SI Session</td>
</tr>
<tr>
<td>DEC 10</td>
<td>No Class</td>
<td>DEC  12</td>
<td><strong>FINAL EXAM !!!</strong></td>
<td>DEC 7</td>
<td><strong>Final Exam Review</strong></td>
</tr>
<tr>
<td></td>
<td>Study for Final Exam</td>
<td></td>
<td><strong>8:30 – 10:30</strong></td>
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</tbody>
</table>
Grades for this course are based on the following course tasks:

- **3 exams @150 pts**: 450 pts (60% of possible pts)
- **Course Activities**: 100 pts (13⅓% of possible pts)
- **SI participation/activities**: 25 pts (3¼% of possible pts)
- **Final Exam**: 175 pts (23⅓% of possible pts)
- **Total points**: 750 pts

Course activities may include but are not limited to:
- MML Homework
- Mini-projects
- Journal entries (writing assignments)
- Presentations
- Other Assignments (Activity Sheets, etc.)

**COURSE ACTIVITIES THAT ARE TURNED IN LATE WILL NOT RECEIVE ANY POINTS** (no matter what the reason). All assignments are due at the **BEGINNING** of class unless otherwise specified by the instructor. The "beginning of class" means that assignments must be given to the instructor by 5 minutes after the start of class. For example, since the class meets 8:30 – 9:45 then, the assignment must be turned in by 8:35. The clock of the classroom is used to determine the time. Any homework turned in after 8:35 is considered late.

There are no make-up opportunities for missed assignments, in-class activities or other activities that are graded for the course activities portion of your grade. However, you will have 2 same day late graces (SDLG) and 3 one day late graces (1DLG). There also will be a few opportunities to earn some extra credit points for the course activities portion of your grade. The total percent earned will be multiplied by a 100 (rounded to the nearest whole number) to obtain your score for the course activities portion of your grade. The maximum score for the course activities portion of your grade is 100 points.

In addition, an extra credit quiz will be given for each unit and will be used as a form of extra credit for unit exams. The points earned for each extra credit quiz for a unit will be called the Unit Extra Credit Quiz Score. A maximum of 20 points can be earned for the Unit Extra Credit Quiz Score. In calculating your unit exam score, I will follow the given formula:

\[
\frac{(\text{Raw Score on Unit Exam} + \text{Unit Extra Credit Quiz Score})}{150 + \text{Unit Extra Credit Quiz Score}} \times 150
\]

This number will be rounded to the nearest whole number to determine your score for the unit exam. Quizzes must be taken outside of class time in the TTC on specified days and times. **There are no make-up opportunities for missed quizzes.**

The aforementioned scoring procedure will not be used for the final exam.

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Instructor: Jean Okumura
Office Hrs: MW: 10:00 – 11:00 am
            TR: 10:00 – 10:30 am
            Other hours by appointment
Office: Mana’opono 112A
Office Phone: 236-9282
Email: jokumura@hawaii.edu
School Fax Number: 247-5362
Attention: Jean Okumura