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.

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. Professor, Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale ‘Akoakoa 213 for more information.

Activities Required Other Than Class Times

Attending SI sessions (TBD); Doing homework; Having conference with instructor; Taking quizzes at TTC (The testing Center), or other activity that the student must complete outside of regularly scheduled class time. Please plan at least three hours per credit to do work other than class times.

Learning Resources and Materials

REQUIRED TEXT: Calculus for Scientists and Engineers, By Briggs, Cochran, Addison Wesley & MyMath Lab on-line resources
My MathLab: ID: landers07198 (Go to pearsonmylabandmastering.com)
LECTURE NOTES: By Weiling Landers
REQUIRED CALCULATOR: TI-83 or TI-83 Plus or TI-84
**Foundations Hallmarks:**

1. Students will be exposed to the beauty, power, clarity and precision of formal systems.

2. Instructor will help students understand the concept of proof as a chain of inferences.

3. Instructor 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. Instructor will build a bridge from theory to practice and show students how to traverse this bridge.

**STUDENT LEARNING OUTCOMES**

The student learning outcomes for the course are:

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 anti-derivatives and integrals.

7. Utilize integration in applied problems.

**Note:** All SLO assessments are embedded in class activities, homework, quizzes, or Exams.
Assessment Tasks and Grading

The student will demonstrate competency in the objectives via assignments, in-class activities, quizzes, unit exams and a final exam over concepts and skills covered in the entire course.

1. Homework: You should finish each On-line assignment before each due date. Please follow the handout and use the access code coming with the textbook to set up your account at pearsonmylabandmastering.com as soon as you can. Homework is waiting for you.

2. In-class activities: Class activities are done in class only. Class activities will be graded on a 0 – 3 point scale. There is no make-up for a missed class activity. Students must be present in class to participate.

3. Quizzes: Online Quizzes are done at Pearson MyLab and Mastering. You should finish each quiz and review for each unit exam before deadline.

4. SI sessions or study group sessions: Since I have not found a SI leader for this course, I may facilitate study group sessions to assist you.

Tentatively the course grade will be evaluated as following, however, the instructor reserves the right to make a change if needed.

<table>
<thead>
<tr>
<th>Task</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>in-class activities</td>
<td>10%</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>3 Unit Exams (@100 points)</td>
<td>45%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
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</tbody>
</table>

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

Note: CR/NC or W grade require written instructor consent. Students must apply for the CR/NC grading option at the Admissions office by the official withdrawal deadline March 31, 2015. This grading option is not available to majors in required courses. If a student does not apply for the CR/NC grading option 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.
Additional Information

1. **ABSENCE for lectures:**

   It is your responsibility to attend class. 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. **ABSENCE ON TESTS:**

   If you unexpectedly must be absent on an exam day, notify the instructor at least one hour prior to that exam time. You can leave a voice message to me at 236-9283 or email at weiling@hawaii.edu. 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 justifiable, then you will receive a zero for that exam and no make-up will be allowed. If notification is received and the reason is justifiable, then a make-up exam will be scheduled. You must take the make-up exam as soon as you make an arrangement with the instructor. The instructor has the right to request documentation of the student’s absence and determine if the reason for the absence is justifiable. ONLY ONE MAKE-UP EXAM may be granted to each student.

3. There is NO RETEST for this course.

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

5. **Assignments on-line:**
   a. There is no time limit or frequency restriction for each on-line **homework**. You must finish each assignment before due.
   b. Make sure that you write down step by step work of each problem in your notebook. If you believe that you have the correct answer, but the computer system marked you wrong. You can bring your paper/pencil work to see me. I will verify your work and may give you some credits back if your work proves that you are right. You must initiate this kind of appeal within three business days after the due date of that assignment. Four days or more that would be too late. So, please pay special attention to the due date of each assignment.
   c. There is a time limit and two attempts for each problem of online quiz. It will show you the time remaining as you proceed, so make sure that you finish the quiz before due. There is an extended time for each review quiz of each unit test because more problems are selected in the review quiz. Still, you need to manage your time to finish it before due.

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

   To receive full credit for problems done on paper-pencil exams or quizzes, you must show **sufficient work in a clear and organized manner**. It 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.

7. A TI-83, TI-83+, TI-84, or TI-84+ calculator is required for this class. Calculators are not allowed for some parts of tests but required for other parts.

8. Please **turn off your cell phone anytime while you are in the class.**

9. Email: Check your email frequently for some important messages.

10. **Academic Honesty**
    a. 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.
    b. You are not allowed to tell a friend the type of questions on the quiz or exam, the answers, or help a classmate in anyway. 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.
    c. Any photo copy (including cell phone) of any exam is not allowed. Any evidence of cheating will result in a score of 0 for the exam.
    d. You must complete all assignments by yourself. You are not allowed to let someone else do your assignments for you. This would fall under the guidelines of cheating.
    e. An “F” will be assigned to students involved in cheating and will be reported to the Dean.

11. **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 complete the course by the end of the semester. It requires constant work to keep on top of the course material.

    **Help:** Your instructor and SI leader are your primary resource for help when you are lost. **Seek help immediately if you have problems. Don't wait too long!**

    Please read the syllabus carefully. If you have any suggestion, we can discuss it during the first week. We will follow this syllabus as a guideline from the second week on.
<table>
<thead>
<tr>
<th>MONDAY</th>
<th>WEDNESDAY</th>
<th>FRIDAY</th>
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<tbody>
<tr>
<td>Jan 12</td>
<td>Syllabus, 2.1 The Idea of Limits</td>
<td>Jan 14</td>
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<tr>
<td>Jan 19</td>
<td>Martin Luther King Day</td>
<td>Jan 21</td>
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<td>Jan 26</td>
<td>2.6 Continuity</td>
<td>Jan 28</td>
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<tr>
<td>Feb 2</td>
<td>3.2 Rules of Differentials</td>
<td>Feb 4</td>
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<tr>
<td>Feb 9</td>
<td>3.4 Derivatives of Trig. Functions</td>
<td>Feb 11</td>
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<tr>
<td>Feb 16</td>
<td>Presidents Day</td>
<td>Feb 18</td>
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<td>Feb 23</td>
<td>3.7 Implicit Differentiation</td>
<td>Feb 25</td>
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<tr>
<td>March 2</td>
<td>4.2 What Derivatives Tell Us</td>
<td>March 4</td>
</tr>
<tr>
<td>March 9</td>
<td>4.4 Optimization Problems</td>
<td>March 11</td>
</tr>
<tr>
<td>March 16</td>
<td>4.7 L’Hopital’s Rule</td>
<td>March 17</td>
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<tr>
<td>March 23</td>
<td>Spring Break</td>
<td>March 25</td>
</tr>
<tr>
<td>March 30</td>
<td>5.1 Approximating Areas under curves</td>
<td>April 1</td>
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<tr>
<td>April 6</td>
<td>5.2, 4.9 Anti-Derivatives</td>
<td>April 8</td>
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<tr>
<td>April 13</td>
<td>5.4 Working with Integrals</td>
<td>April 15</td>
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<tr>
<td>April 20</td>
<td>6.2 Regions Between Curves</td>
<td>April 22</td>
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<td>April 27</td>
<td>6.3 Volume by Slicing</td>
<td>April 29</td>
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<tr>
<td>May 4</td>
<td>Final Review</td>
<td>May 6</td>
</tr>
<tr>
<td>May 11</td>
<td>Final Exam 10:00 – 12:00</td>
<td>May 13</td>
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- Last day for 50% refund of tuition – February 2, 2015
- Last day to change to CR/NC or Withdraw option – March 31, 2015
- Last Day of Instruction – May 6, 2015
MyLab & Mastering
Student Registration Instructions

To register for Math 205 CRN 63036 MWF 10:00 - 11:15 Spring 2015:
2. Under Register, click Student.
3. Enter your instructor’s course ID: landers07198, and click Continue.
4. Sign in with an existing Pearson account or create an account:
   - If you have used a Pearson website (for example, MyITLab, Mastering, MyMathLab, or MyPsychLab), enter your Pearson username and password. Click Sign in.
   - If you do not have a Pearson account, click Create. Write down your new Pearson username and password to help you remember them.
5. Select an option to access your instructor’s online course:
   - Use the access code that came with your textbook or that you purchased separately from The bookstore.
   - Buy access using a credit card or PayPal.
   - If available, get 14 days of temporary access. (Look for a link near the bottom of the page.)
6. Click Go To Your Course on the Confirmation page. Under MyLab & Mastering New Design on the left, click Math 205 CRN 63036 MWF 10:00 - 11:15 Spring 2015 to start your work.

Retaking or continuing a course?
If you are retaking this course or enrolling in another course with the same book, be sure to use your existing Pearson username and password. You will not need to pay again.

To sign in later:
2. Click Sign in.
3. Enter your Pearson account username and password. Click Sign in.
4. Under MyLab & Mastering New Design on the left, click Math 205 CRN 63036 MWF 10:00 - 11:15 Spring 2015 to start your work.

Additional Information
See Students > Get Started on the website for detailed instructions on registering with an access code, credit card, PayPal, or temporary access.