LEEWARD COMMUNITY COLLEGE
Course Syllabus - Spring 2016
Math 206 - Calculus II

CRN: 55022
Instructor: Dr. Paul Nguyen, Ph.D
Office Location: GT-215
Office Hours: MW 11p-1p in GT-215, TR 1:30p-2:30p and W 9a-10a in BS-204
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Course Homepage: http://www.paul-nguyen.com/teaching/calculus-ii-spring-2016/

Course Description: Second course in the calculus sequence. The course extends differentiation and integration to single-variable inverse trigonometric, logarithmic, and exponential functions. Topics include techniques of integration, convergence of improper integrals, sequences and series, Power and Taylor series representations of functions, and an introduction to differential equations.

Prerequisites: C or better in MATH 205 (numbered MATH 241 at UH Mānoa and UH West Oʻahu), or articulated equivalent, within the past two years.

Student Assessment Notification: With the goal of continuing to improve the quality of educational services offered to student, Leeward CC conducts assessments of student achievement of course, program, and institutional learning outcomes. Student work is used anonymously as the basis of these assessments, and the work you do in this course may be used in these assessment efforts.

Students with Disabilities Statement: Leeward Community College abides by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, which stipulate that no student shall be denied the benefits of an education "solely by reason of a handicap." Students with documented disabilities who believe that they may need accommodations in this class are encouraged to contact the Coordinator of the KAKO'O'IKE (KI) program as soon as possible to ensure that such accommodations are implemented in a timely fashion. The KI office is located in L-208, across from the elevator in the library building or call for information at 455-0421.

Student Learning Outcomes: Upon successful completion of MATH 206, a student should be able to:
- ➔ Compute derivatives and integrals of exponential, logarithmic, and inverse trigonometric functions.
- ➔ Apply limit theorems to solve indeterminate forms when possible.
- ➔ Apply integration techniques such as integration by parts, trigonometric substitution, and partial fractions.
- ➔ Compute improper integrals.
- ➔ Choose and apply appropriate algorithms to test for convergence of sequences and series..
- ➔ Compute coefficients of power series and related functions.
- ➔ Model and solve various application problems.
- ➔ Select and correctly utilize precise mathematical language and symbols to effectively communicate procedures and results.

Required Course Materials:

- ➔ Textbook: Calculus for Scientists and Engineers by Briggs, Cochran, and Gillett (Not the "early transcendental" version). **Note:** online access to this textbook is *included* with the MyMathLab access code. A printed copy of this textbook is NOT needed to be successful in this course.
- ➔ MyMathLab access code - Course ID: nguyen08922. Homework and exams will be administered through MyMathLab, an online educational software system. An access code is included in the textbook package sold by the Leeward Community College bookstore.
- ➔ **TI-30XIIS** Scientific Calculator. This model calculator will be the only one allowed for exams.

Grading Policy:

There is a departmental exit exam for this course. This is an at-home, repeatable exit assessment administered in MyMathLab. You must pass the departmental exam with a score of at least 85% by the deadline in order to qualify for a grade of C or higher on your best attempt. If you pass the departmental exit exam your course grade will be determined by the following weighted categories.

Online Assignments (30%) All graded homework will be done in MyMathLab. Generally, each problem allows for multiple attempts to earn full credit. Some problems with multiple parts are eligible for partial credit. Individual problems submitted after the due date will incur a scoring penalty of 10%, but no late penalty will be applied to correct answers that were submitted by the due date.

Chapter Exams (50%) There will be four midterm exams and a cumulative final exam. These will closed notes, and closed book. A scientific calculator may be used during exams. Unless arrangements to take an exam at another test site are proposed and approved in advance, each exam attempt must be done in an approved location on campus: the Halau, the Math Lab testing room, or the campus Testing Center, each during their regular hours. **Each exam can be attempted up to three times.** The best score on each exam will be used for grading purposes.

The midterm exams cover the following material

1. Module 1
2. Modules 2 and 3
3. Modules 4 and 5
4. Module 6

and the final exam is cumulative, covering Module 7.

Projects and show-your-work problems(10%) Projects and show-your-work problems are available from each module's opening page. Modules 1 through 5 have projects related to their respective modules. Each module has a "show-your-work" assignment. Grading of project and show-your-work problems will be based both on the correctness and on the presentation of your work. "Answers" only with no supporting work will not earn any points. Instructions for submitting work is found on the course homepage. Each project and show-your-work problem set must be submitted by the module end date or a late penalty of 10% will be applied.

Departmental Exit Exam(10%) A student's best score on an at-home, repeatable exit assessment will be worth 10% of the weighted course average. As specified above, a student must score at least 85% on the best attempt at this exit assessment to be eligible for a C or better letter grade for the course.

Subject to the exit exam constraints, standard letter grades will be assigned according to the weighted course average, 90%+ A, 80%+ B, 70%+ C, etc.

Studying and homework: Students should carefully read the relevant portion(s) of the printed or online textbook and/or view the instructional videos in the web course and MyMathLab BEFORE attempting any assigned problems. Most of the MyMathLab problems involve computations but the projects may require reflection or experimentation. Such problems should be attempted on their own merits rather than by trying to find an example to copy.

Resources:
I am always available to help my students. My office and office hours are listed at the beginning of this syllabus, and if you can't make them just email me to make an appointment. Also, if you have any questions, just email me and I'll do my best to help you over email. We can also meet via skype during office hours or by appointment.

In addition, the Math Lab in MS-204 is available to you. They have student tutors on hand for walk-in tutoring free of charge. This is an amazing resource that you should all take advantage of. They also have calculators you can borrow and computers for use.

Information:
The course homepage for this site is located at
http://www.paul-nguyen.com/teaching/calculus-ii-spring-2016/
and is the place to start this course. Watch the videos there, read the book, and do the MyMathLab assignments done. After you finish the modules associated with a midterm, go take that midterm before moving on.

Most of the course grades and information will be available on MyMathLab (www.mymathlab.com) and Laulima (www.laulima.hawaii.edu). This is also the place to view your grades or any course announcements. It is the student's responsibility to check Laulima and their hawaii.edu emails often in order to be aware of new assignments and requirements.