# Syllabus: Applied Calculus 1, Math 215 (CRNs 84832, 84111, 85327)

## Tentative- subject to change with announcement Instructor Info

Instructor: Christopher Winfield, PhD

Office: 402 PSB

Office hours: 2-3 pm MTW or by appt.

**Ph:** 956 4661

Email: cjwinfield@math.hawaii.edu

### **Meeting times**

Lecture: MWF, 12:30-1:20 pm, MSB 114

Recitation 1: TR, 9:30-10:20 am, Kell 402 (Lorentz)

Recitation 2: TR, 12:00-12:50 am, Kell 402 (Curiel)

Recitation 3: WF 10:30 -11:20 am, Kell 402 (Curiel)

TA office hours and locations will be announced in recitations.

Online: Material and study aids will be made available on Laulima (https://laulima.hawaii.edu)

#### **Course Info**

Textbook: Calculus for the Life Sciences by Greenwell, Ritchey, Lial, 2<sup>nd</sup> edition

**Course Objectives**: Upon successful completion of Math 215, the student will be able to solve routine problems of differential and integral calculus and their applications to the life sciences. They will be able to apply ideas of calculus and differential equations to the understanding of some biological processes.

**Homework**: Your overall homework score will be worth 25% of your total grade. All homework assignments will be on MyMathLab. Homework will be usually be assigned after lecture and due before the next lecture period.

- MyMathLab: Go to http://www.pearsonmylabandmastering.com/northamerica/mymathlab/, or Google search MyMathLab.
- If you already have an account sign in.
- If you do not have an account click "register now" as a student and follow the instructions.
- The course ID is TBA

**Exams**: There will be two in class exams and a in class final exam.

- Each in-class exam will be worth 15% of your total grade.
- The final exam will be cumulative and is worth 25% of your total grade. You must take it to pass the course.
- No calculators, notes, or books are allowed during Exams.
- There will be <u>no</u> make-ups for any tests except in the case of a properly documented medical or family
  emergency. If you will miss a test for a school related excused absence (e.g. a travel team). It is your
  responsibility to arrange a time to take the test *before* the absence. With this policy, no other exam make-up
  except for special circumstances, such as early exams, by arrangement or situations accommodated by
  university policy.

**Recitations**: You must attend recitations. Recitations will be worth 15% of your grade. The TA's will do example problems and give group work and/or quizzes during recitation.

**Rules of conduct**: Your instructor and TAs intend to answer your questions and have the duty to present the course content. At appropriate moments during lecture, your instructor will call out for questions, but may have only a few minutes to answer them. If your questions were not addressed, please see any of us at appropriate times and venues to answer them. Disruptions of the class will not be tolerated. Moreover, we have a zero-tolerance policy on cheating. If you are caught cheating on an assignment, you will receive a zero for that work whereupon further action may well be taken in accord with university policy; indeed, if you are caught twice your course grade will be an F.

Finally, <u>class participation</u> will be encouraged/expected as your instructor will ask for student input as example problems are worked out in class.

Some Important Dates: (Also see the academic calendar online)

Last day to drop - Sept. 4	Exam 1 – Mon., Sept. 23	Exam 2 – Mon., Oct. 21
Exam 3 – Mon., Nov. 25	Final Exam – Monday, Dec. 16, 12:00 –	2:00 pm

Grades:

Course component	Recitation:	Midterms	Homework:	Final
	Classwork, quizzes	exams (3)	MyMathLab or TBA	Exam
Percent of course grade	15%	15% each (45% total)	15%	25%

Letter grade	А	В	С	D	F
Percentage	90-100	80-89.9	70-79.9	60-69.9	Below 60
score					

### **Additional Resources**

**Online:** This class moves fast, it is important that you seek out help as soon as you experience difficulty. Extra help can be found at:

- The Learning Emporium, http://www.hawaii.edu/natsci/math.php
- And from The Learning Assistance center, <u>http://manoa.hawaii.edu/undergrad/learning/</u>

Accessibility: Any student who feels s/he may need an accommodation based on the impact of a disability is invited to contact me privately. I would be happy to work with you, and the KOKUA Program (Office for Students with Disabilities) to ensure reasonable accommodations in my course. KOKUA can be reached at (808) 956-7511 or (808) 956-7612 (voice/text) in room 013 of the Queen Lili'uokalani Center for Student Services.

Week	Μ	W	F
1	Intro. Review of algebra: R1-R7, 1.1	1.3 Functions	1.4 Quadratics
2	Labor Day, no class	1.5 Poly's & Rational	2.1, 2.2 Exp. And Logs
3	2.4 Trig	3.1 Limits	3.2 Continuity
4	3.3, 3.4 Rates of change & derivative	3.4, 3.5 Derivatives and graphing	Review
5	Exam 1	4.1 Techniques	4.2 Derivatives: products & quotients
6	4.3 Chain Rule	4.4 Deriv. of exponentials	4.5 Deriv. of logs
7	4.6 Deriv. of trig	5.1 Inc./dec. functions	5.2 Relative extrema
8	5.3 Higher derv.	5.4 Curve sketching	Review
9	Exam 2	6.1 Absolute extrema	6.2 Applications
10	6.3 Implicit diff.	6.4 Related rates	6.5 Differentials & linear approx
11	Veteran's Day, no class	7.1 Antideriv.	7.2 Substitution
12	7.2 Subst. cont'd.	7.3 Area and def. int	7.4 FTOC
13	7.5 Area between curves	8.2 Int. by parts.	Review
14	Exam 3	8.3	Thanksgiving, no class
15	8.4	11.1	11.2
16	TBA/Instructor's choice	Catch-up/review	