**Math 128 – Calculus 2 (AP)**

**Lecture:** MW 3:00-3:55 am, Fowler 201  
**Instructor:** Viktor Grigoryan, (323) 259-2876, vgrigoryan@oxy.edu  
**URL:** [http://sites.oxy.edu/vgrigoryan/128](http://sites.oxy.edu/vgrigoryan/128)  
**Office Hours:** MW 10:30 am-12:00 pm (and by appointment) in Fowler 305

**Lab:** R 8:30-9:55 am / 10:05-11:30 am, Fowler 113  
**Instructor:** Harry Gray, (323) 259-2764, hgray@oxy.edu  
**Office Hours:** F 9:00-10:00 am (and by appointment) in Norris 312

**Resources**

- Moodle: [http://moodle.oxy.edu/](http://moodle.oxy.edu/)  
- College Catalog: [http://www.oxy.edu/academics/course-catalog](http://www.oxy.edu/academics/course-catalog)  
- Academic Calendar: [http://www.oxy.edu/registrars-office/academic-calendar](http://www.oxy.edu/registrars-office/academic-calendar)

**Syllabus**

**Textbook:** *Calculus, Early Transcendentals, 9th ed.* by H. Anton *et al.*

**Outline:** The goal of the class is to continue the study of functions of a single variable. We will quickly review antiderivatives and definite integrals of functions of a single variable and discuss geometric and physical applications of integrals. This will be followed by discussion of infinite series and their convergence, power series and expansion of functions of single variable into such series. Differential equations will be considered next. Time permitting, we will also discuss some simple partial differential equations and Fourier series.

The learning objectives of the course are:

- Computing antiderivatives and definite integrals  
- Using integrals to compute areas, arclengths, volumes, work, etc.  
- Checking infinite series for convergence  
- Expanding functions of a single variable into their Taylor series  
- Solving simple first order (ordinary) differential equations  
- Solving linear second order equations  
- Solving basic PDE’s and boundary value problems via Fourier series

**Gateway:** The Derivatives Gateway exam will be administered during the first lab, which is meant to check your understanding of derivatives, which (Calculus I) is a prerequisite for this course. The Integrals Gateway will be administered in a subsequent lab.

**Homework:** There will be weekly assignments due on Fridays in class, beginning from the second week of classes. You are encouraged to discuss and work on the homework with your classmates; however, your write-up must represent your own understanding. No late homework will be accepted.

**Labs:** Lab sections are meant to provide support for the lectures. This time will be also used to go over questions from lectures and homeworks. Some computational projects enhancing the material learned in lectures will be carried out in groups of 2 or 3 students. Gateway exams will also be administered during lab sections.
Exams: There will be three midterm exams and a final exam. They will consist of problems related to your lectures and homework. No calculators will be allowed during the exams. No make-up exams will be offered. The midterms will be administered during class time on the dates indicated below, while the cumulative final will be a 3-hour exam.

- Exam I: Friday, September 28
- Exam II: Friday, October 26
- Exam III: Friday, November 16
- Final exam: Friday, December 14, 1:00-4:00 pm

Grading: Grading will be based on homework, labwork, 3 midterm exams and a final exam

- Labwork: 10%
- Homework: 10%
- Midterm exams: 50% (total)
- Final exam: 30%

Final grades will be assigned according to the following guideline:

- A 94-100%
- B+ 87-89%
- C+ 77-79%
- D+ 67-69%
- F 0-60%
- A- 90-93%
- B 83-86%
- C 73-76%
- D 63-66%
- B- 80-82%
- C- 70-72%
- D- 60-62%

Tips for success: Attending lectures; regularly consulting the textbook and provided notes; attempting and working out each and all assigned problems; taking advantage of office hours; asking questions in class; not falling behind; being ready to work hard. Discussing with classmates may provide insight and further motivation!

Classroom Courtesy: Lectures and class discussions are crucial contributors to this course. Reading a newspaper, chatting with a neighbor or sleeping during the lecture drastically reduces the usefulness of the class both for you and your fellow classmates. Please respect the mutual investment (time, effort, resources) of the class participants in this educational experience. Cellphones must be inaudible.

Students with Disability: If you believe that you need special accommodations due to a disability, please contact Disability Services immediately. Such arrangements may take time, and contacting them early is crucial. I will work with you and the Disability Services to ensure that the best possible accommodations are made available.

http://www.oxy.edu/disability-services (323) 259-2969

Academic Ethics: “Shared commitment to ethical principles is essential to the educational purposes and fairness of the academic enterprise. Occidental College assumes that students and faculty will embrace a high ethical standard for academic work. Fundamental to academic ethics is a spirit of honor. A spirit of honor thrives when students challenge each other to attain the highest levels of scholarship, civility, and responsibility.”

http://www.oxy.edu/student-handbook/academic-ethics/academic-ethics