## Los Angeles Valley College Math 266

"But just as much as it is easy to find the differential (derivative) of a given quantity, so it is difficult to find the integral of a given differential.

Moreover, sometimes we cannot say with certainty whether the integral of a given quantity can be found or not."

#### -- Johann Bernoulli

#### 1. Class Information

Semester: Spring 2014 Instructor: Prof. Luz V. Shin

**Section** #: 1430 **Office**: MS 104E

**Class Time**: MTWTh 8:15-9:25 **Phone** #: 818-947-2393

Classroom: MS 114 Student Drop-in Hours: MW 9:25-11:00 am

#### 2. Course Information

Title: Calculus with Analytic Geometry II

**Description:** This is the second course of a three-semester unified treatment of analytic geometry and calculus. It covers derivatives and integrals of transcendental functions (trigonometric, inverse trigonometric, logarithmic, exponential, hyperbolic and inverse hyperbolic functions) methods of integration, indeterminate forms, improper integrals, conic sections, polar coordinates, sequences, infinite series and power series.

**Prerequisites:** A grade of C or better in Math 265.

**Objectives:** Upon completion of this course, the students will:

- Analyze, differentiate and integrate exponential, logarithmic and hyperbolic functions and the inverse trigonometric functions.
- > Solve exponential growth and decay problems.
- > Distinguish various functions and apply the proper techniques of integration.
- > Evaluate limits of indeterminate forms and improper integrals.
- Analyze infinite sequences and series and their convergence or divergence.
- Graph conic sections and parametrized curves.

#### **Course Student Learning Outcomes:** Upon completion of this course:

> Students will be able to think analytically about higher level mathematical concepts in order to model and solve calculus problems.

#### 3. Course Requirements

**School Supplies:** The student is expected to bring the following to each class session:

- > Textbook
- Notebook (3-ring binder or file folder) for notes and homework
- > Pens, pencils and erasers
- Testing booklets (greenbooks/bluebooks) on exam days

**Homework and Group Work:** Refer to the assignment sheet provided for the semester. Homework is assigned daily and questions discussed the next meeting. Group work will be given from time to time. Mathematics is not a spectator sport, so you have to do the work!

**Group Quizzes:** There will be five group quizzes on selected topics, and will be worth 25 points each. The lowest group quiz will be dropped.

**Long Exams:** There will be five Long Exams; each will be out of 100 points. Each exam is free response and covers one or two chapters. Students are not allowed to use notes during exams, but calculators are permitted. The tentative testing schedule is given in the timeline.

**Final Exam:** Finals is a two-hour comprehensive exam and is out of 100 points.

#### 4. Class Policy

**Attendance**: REGULAR ATTENDANCE is very much encouraged! School policy on attendance is enforced. The instructor may exclude students who have excessive absences. There will be sign-in sheets that will be passed around each meeting. It is the student's responsibility to make sure that he/she signs in for his/her attendance.

**Withdrawals**: If you stop attending the class (or wish to drop a class), **you must drop the class yourself – officially** – over the Internet or in person at the Office of Admissions and Records. Failure to do so may result in a grade of "F" in the class. Please take note of important dates noted in the timeline.

**SSD Students**: To make arrangements for special accommodations that have been recommended by SSD for students with disabilities, please contact the instructor.

**Cell Phones and Text Messaging**: Please turn off or silent (not vibrate) phones before coming to class. No text messaging, no MP3's, no ipods, and no hand-held video games while class is in session. Class time is for learning mathematics, not for personal communication or entertainment

**Cheating**: Any form of academic dishonesty will not be tolerated. If caught, you may be given a zero for that particular exam.

**Student Conduct**: Students are expected to adhere to all district policies as described in the LAVC Spring 2014 Schedule of Classes including attendance, withdrawal from classes and Standards of Student Conduct.

## 5. Grading System

**Evaluation**: The total points earned will be computed out of a grand total of 800 points. No make-up exam will be given at any circumstance! If you miss an exam, a grade will be assigned from your final exam performance on the missed exam's coverage.

|                  | Homework and Group Work | 100 points |
|------------------|-------------------------|------------|
| $\triangleright$ | Group Quizzes           | 100 points |
| $\triangleright$ | Long Exams              | 500 points |
|                  | Final Exam              | 100 points |

## **Grading Curve:**

| $\triangleright$ | A | 90 - 100 | 720 - 800  points |
|------------------|---|----------|-------------------|
| $\triangleright$ | В | 80 - 89  | 640 - 719 points  |
| $\triangleright$ | C | 70 - 79  | 560 - 639  points |
| $\triangleright$ | D | 55 - 69  | 440 – 559 points  |
| $\triangleright$ | F | below 55 | below 440 points  |

#### 6. Tips for Success in this class

- ➤ Choose to attend all class periods on time and don't leave early. If you are absent on a day that group work is given, you lose the points for that class work.
- ➤ Pay attention in class, participate in class discussions, and ask questions. The instructor regularly gives away tips for exams and quizzes, so make sure you take note of them.
- Do or attempt all homework not for the sake of just doing it, but trying to understand the concepts, learning them in the process. "Practice makes perfect" applies not only to music and sports, but also in mathematics. Be sure to schedule sufficient time to complete your assigned tasks before the next class period.
- > Know how to get help if you need it.
  - Attend scheduled review sessions.
  - Consult instructor during posted student drop-in hours.
  - Drop by the Transfer Math Lab (LARC 219) for tutoring services. Check posted schedule.
- ➤ Organize your class materials, including homework assignments, graded quizzes and tests, notes and worked out review problems. These items will make valuable references when studying for upcoming tests and the final exam.

"Who has not been amazed to learn that the function  $f(x) = e^x$ , like a phoenix rising from its own ashes, is its own derivative?"

-- François le Lionnais

Math 266 Section #1430 Spring2014 Calendar

| Math 266 Section #1430 Spring2014 Calendar |                   |                      |                          |                  |  |  |  |
|--|-------------------|----------------------|--------------------------|------------------|--|--|--|
|  | MONDAY            | TUESDAY              | WEDNESDAY                | THURSDAY         |  |  |  |
| Week 1                                     | Introductions     | 7.1                  | 7.2                      | 7.3              |  |  |  |
| Feb. 10, 11, 12, 13                        | 265 Review        | # 1-29 eoo           | # 1-49 eoo               | # 1-57 eoo       |  |  |  |
| Week 2                                     | No School         | 7.4                  | 7.5                      | 7.6              |  |  |  |
|  | President's Day   | # 1-53 eoo           | # 1-57 eoo               | # 1 – 25 ODD     |  |  |  |
| Feb. 17, 18, 19, 20                        | •                 |                      |                          |                  |  |  |  |
| Week 3                                     | GQ #1             | 8.1                  | 8.2                      | 8.3              |  |  |  |
| Feb. 24, 25, 26, 27                        | 7.1 – 7.6         | # 1 – 37, eoo,<br>38 | # 1 – 53, eoo            | # 1-69, eoo      |  |  |  |
| Week 4                                     | Exam 1 Review     | Exam 1               | 9.1                      | 9.2              |  |  |  |
| March 3, 4, 5, 6                           | 7.7<br># 1-89 eoo | Chapter 7            | # 1 – 53, eoo            | # 1-35 odd       |  |  |  |
| Week 5                                     | 9.3               | Continue 9.3         | 9.4                      | Continue 9.4     |  |  |  |
| March 10, 11, 12, 13                       | # 1-31 odd        | GW #3                | # 1-43, odd              | GW #4            |  |  |  |
| Week 6                                     | GQ #2             | 9.5                  | 9.6                      | 9.7              |  |  |  |
| March 17, 18, 19, 20                       |                   | # 1 – 19, odd        | # 1-33 odd               | # 1 – 29, odd    |  |  |  |
| Week 7                                     | 9.8               | Exam 2               | 10.1                     | 10.2             |  |  |  |
| March 24, 25, 26, 27                       | Exam Review       | Chapters 8 & 9       | # 1-63, eoo              | # 1- 49, eoo     |  |  |  |
| Waten 24, 23, 20, 27                       | # 1 – 97, eoo     | ·                    |                          | ·                |  |  |  |
| Week 8                                     | No School         | 10.3                 | 10.4                     | GQ #3            |  |  |  |
| March 31, April 1, 2, 3                    | Cesar Chavez Day  | # 1-49,eoo           | # 1-45, eoo              | 10.5             |  |  |  |
| , •  |                   |                      |                          | # 1 – 31, odd    |  |  |  |
| April 7, 8, 9, 10                          | Spring Break      | Spring Break         | Spring Break             | Spring Break     |  |  |  |
| Week 9                                     | 11.1              | 11.2                 | 11.3                     | 11.4             |  |  |  |
| April 14, 15, 16, 17                       | # 1-49, eoo       | # 1 – 61, eoo        | #1-61, eoo               | # 1-39, odd      |  |  |  |
| Week 10                                    | 11.5              | 11.11                | Exam 3                   | 11.6             |  |  |  |
| April 21, 22, 23, 24                       | # 1 – 45, odd     | Exam Review          | Chapter 10,              | # 1-45, odd      |  |  |  |
| 7 xp1 ii 21, 22, 23, 24                    | GQ #4 Take Home   | # 1 – 39, odd        | 11.1-11.5                |                  |  |  |  |
| Week 11                                    | 11.7              | Continue             | 11.8                     | Continue         |  |  |  |
| April 28, 29, 30, May 1                    | # 1-37, odd       | 11.7                 | # 1-49, odd              | 11.8             |  |  |  |
| April 20, 27, 30, Way 1                    |                   |                      |                          |                  |  |  |  |
| Week 12                                    | 11.9              | 11.10                | 11.11                    | Exam 4           |  |  |  |
| May 5, 6, 7, 8                             | # 1-45, eoo       | # 1 – 21, odd        | Exam Review<br># 41 - 65 | 11.5b-11.11      |  |  |  |
| W/I- 12                                    | 12.1              | 12.2                 | 12.3                     | 12.4             |  |  |  |
| Week 13                                    | # 1 – 41, odd     | # 1 – 45, eoo        | # 1-41, odd              | # 1-13, odd      |  |  |  |
| May 12, 13, 14, 15                         | # 1 – 41, 0dd     | # 1 – 45, e00        | # 1-41, Odd              | # 1-13, 0dd      |  |  |  |
| Week 14                                    | 12.5              | 13.1                 | 13.2                     | 13.4             |  |  |  |
| May 19, 20, 21, 22                         | # 1 – 39, odd     | # 1 – 37, odd        | # 1-37, odd              | # 1-31, odd      |  |  |  |
|  | GQ #5             |                      | 13.3                     | 13.5             |  |  |  |
|  | N 0 : :           | N 0 : :              | # 1-65, eoo              | # 1 – 35, odd    |  |  |  |
| Week 15                                    | No School         | No School            | 13.6                     | Exam 5           |  |  |  |
| May 26, 27, 28, 29                         | Memorial Day      | Non-instruction      | Exam Review              | Chapters 12 & 13 |  |  |  |
| TO: 1 XX/ 1                                | Mook Finals       | Day                  | # 1 – 45, eoo            | Finale Meets     |  |  |  |
| Finals Week                                | Mock Finals       | Finals Week          | Final Exam<br>8-10 am    | Finals Week      |  |  |  |
| June 2, 3, 4, 5                            |                   |                      | 0-10 alli                |                  |  |  |  |

# **Important Dates to Remember**

<u>Drop Dates</u>: 5/11 by internet - with W (Letter grade required from this date forward)
<u>Pass/No Pass</u>: 3/14 – Last day to petition