

# CALCULUS III (MATH 312) - SYLLABUS

Spring 2007

MTR 3:30 – 4:55 p.m., Ed 128

Call # 22344

|                 |                                                                                                                           |                                    |                         |
|-----------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------|
| Instructor:     | Dr. Hideaki Kaneko, Professor of Mathematics<br>Office: ECS 2214, phone # 683-4969 or 683-3882<br>E-mail: hkaneko@odu.edu |                                    |                         |
| Office Hours:   | TR 11:00 a.m.-12:00pm or by appointment<br>(Schedule is subject to modification.)                                         |                                    |                         |
| Text:           | <b>CALCULUS</b> Early Transcendentals by Stewart, 5th Edition                                                             |                                    |                         |
| Grading Policy: | Lab Assignments 20%                                                                                                       | (additional items may be included) |                         |
|                 | Class Tests                                                                                                               | 45%                                | (dates to be announced) |
|                 | Final Examination                                                                                                         | 35%                                |                         |

This is a four credit-hour course. One additional contact hour will be associated with computer laboratory assignments. You will typically begin working on a laboratory assignment during Wednesday's class. If more time is needed to complete the assignment, the lab will be open at other times (the lab hours will be posted at the URL <http://www.math.odu.edu/lab>). Assignments will be due to be completed by the time the lab closes the same week unless a different deadline is announced by the instructor. They will be submitted in electronic form and returned, after grading, in the same way.

You will typically work on the lab assignments with a partner. Only members of the team who actively participate in completing the *entire* lab assignment should type their names at the end of the solution document. For example, it is not acceptable for a team to split a lab assignment into two parts and for each student to work on one part only. Any violation of this rule will be considered a breach of the ODU Honor Code.

**Since each student signs an Honor Pledge when applying to the University, it follows that each piece of work submitted by a student must be his or her own work - this applies to all the work you will be asked to submit during this course, unless the instructor specifically states otherwise.**

When you work on the labs with a partner, you should assist one another in both understanding and completing the lab assignments. If neither of you can come up with a solution to a problem, either math or computer related, then get help. The instructor and/or lab assistants will be available whenever the lab is open.

All students enrolled in this class are **required to have the following ODU computer accounts:**

- { **a NetWare account** needed to access computer labs on campus, and
- { **announcements will be posted on the course website.**
- {

If you do not have such account, you must request it immediately at the URL: <http://season.odu.edu>. In case of any problems (lost passwords, etc.) contact OCCS directly (help desk: 683-3192).

The tests and the final exam will be "closed book, no computers, **no calculators**". However, some of the questions may be related to topics developed in lab assignments.

Department of Mathematics and Statistics makes help sessions available to all Calculus III students in Ed 126. The schedule will be posted under the URL <http://www.math.odu.edu/lab>

### ***Make-up policy***

There will be no make-up tests or labs.

Under exceptional circumstances, beyond the student's control,

a. the final exam grade may be recorded for ONE (and only ONE) missed **test**, and

b. a **lab assignment** that the student missed, may be dropped.

The student must provide written documentation of the reason for missing the test or lab, no later than one week after the test or lab date. If this explanation is approved by the instructor, the test or lab grade will be adjusted according to a. or b. above, respectively. Otherwise, a score of zero will be entered for the missed test or lab.

Students are responsible for getting class notes and assignments from other students in the class, and for keeping up with the class and assignments.

### ***Homework***

The following is a list of suggested homework problems. Homework will not be collected. However, you will be expected to be able to solve all suggested problems. The assigned problems are representative of those given on class tests and the final exam so that your performance in this course will generally reflect the skill attained at solving problems. Students who initially have difficulty working these problems correctly, should then work additional problems.

Keep a notebook for homework problems that you will show me if you come to my office for help.

| <b>Section</b> | <b>Problems (in some sections, additional problems will be provided by the instructor)</b> |
|----------------|--------------------------------------------------------------------------------------------|
| 12.1           | 1, 3, 5, 11, 13, 15, 21, 35, 37, 41                                                        |
| 12.5           | 1-7, 11-14, 19-23, 25-35(o), 36-41, 45-53(o), 61, 63, 65, 67, 71, 72                       |
| 12.6           | 1-9(o), 11, 13, 17                                                                         |
| 12.7           | 3-57(o)                                                                                    |
| 13.1           | 1-11(o), 14, 25, 33-36                                                                     |
| 13.2           | 3-25(o), 29-39(o), 51                                                                      |
| 13.3           | 1-5, 13, 15, 39, 41                                                                        |
| 13.4           | 3-9(o), 13, 15, 19, 31, 33                                                                 |
| 14.1           | 7, 11, 15, 17, 21, 23, 37, 41                                                              |
| 14.2           | 27-31                                                                                      |
| 14.3           | 1, 13-73(o)                                                                                |
| 14.4           | 1, 3, 5, 11-17(o), 23-31(o)                                                                |
| 14.5           | 1-35(o), 43-53(o), 56                                                                      |
| 14.6           | 5-25(o), 39, 41, 43, 53, 59                                                                |
| 14.7           | 1, 5-17(o), 27-31(o), 37, 39, 41                                                           |
| 14.8           | 1-19(o), 23, 39                                                                            |
| 15.1           | 11-14, 17                                                                                  |
| 15.2           | 3-21(o), 25, 27, 29, 33                                                                    |
| 15.3           | 1-21(o), 37-47(o), 55, 57                                                                  |
| 15.4           | 1-6, 7-17(o), 21-31(o)                                                                     |
| 15.5           | 3, 5, 7, 9                                                                                 |
| 15.7           | 7-19(o), 37, 47                                                                            |
| 15.8           | 1, 3, 7-23(o), 33, 35                                                                      |
| 15.9           | 1, 5, 7, 9, 17-23(o)                                                                       |
| 16.1           | 1-9(o), 21, 23, 25                                                                         |
| 16.2           | 1-15(o), 19, 21, 31, 37, 39, 41                                                            |
| 16.3           | 3-9(o), 13-21(o), 29-33                                                                    |
| 16.4           | 1-15(o), 19                                                                                |
| 16.5           | 1-11(o), 12, 13-21(o)                                                                      |
| 16.6           | 1-4, 17, 21, 23, 31-45(o)                                                                  |
| 16.7           | 5-27(o)                                                                                    |
| 16.8           | 3, 5, 7, 9, 11a, 13, 15, 17                                                                |
| 16.9           | 3-15(o)                                                                                    |

Important Dates:

|             |                              |
|-------------|------------------------------|
| Jan. 15     | MLK Day (No Class)           |
| Mar. 5 – 10 | Spring Break                 |
| Apr. 24     | Classes end                  |
| May 3       | Final Exam (3:45pm – 6:45pm) |

Lab Schedule:

|          |                                                                |
|----------|----------------------------------------------------------------|
| Lab0A/0B | Complete before Lab01 (only for those unfamiliar with MathCad) |
| Lab01    | after Chapter 13                                               |
| Lab02    | after Chapter 14                                               |
| Lab03    | after Section 15.4                                             |
| Lab04    | after Chapter 15                                               |
| Lab05    | after Chapter 16                                               |

Test Schedule:

|        |           |
|--------|-----------|
| Test 1 | 12.1-14.4 |
| Test 2 | 14.5-15.9 |
| Test 3 | 16.1-16.9 |