

# Calculus II

**Term/Day/Period:** II (1<sup>st</sup> year, 2<sup>nd</sup> semester), Friday, 2 (10:30am – 12:00pm)

**Class room:** Room A34 in the Liberal Arts and Science Building A

**Instructor:** Anne-Katrin Herbig

**Office:** Rm. 331 in Sci. Bldg. A

**E-mail:** herbig@math.nagoya-u.ac.jp

**Office hour:** by appointment

**Text:** Vector Calculus, 3<sup>rd</sup> Edition, Susan J. Colley, Prentice Hall, 2006. (576 pp., ISBN:0-13-185874-2)

**Course:** Analysis is the field of mathematics that describes and analyses quantitative change and the central method is differential and integral calculus. These methods are indispensable research techniques in natural science, and recently, have found increasing application also in social science. The aim of the second half of this one-year course is to furnish students with a solid understanding of multivariable calculus. The geometrical understanding of multivariable functions through their graphs and the connection to linear algebra is emphasized.

**Homework:** There is no homework for this course. However, you are strongly encouraged to do all homework problems assigned to you for the calculus part of the Mathematics Tutorial II.

**Quizzes:** Quizzes will be given at the end of some of classes.

**Grading Policy:** Your final grade will be determined by quizzes (30%), the midterm (30%) and the final (40%).

The grading scale will be **S:** 90-100, **A:** 80-89, **B:** 70-79, **C:** 60-69, **F:** 0-59

**Class and Exam Dates:** Apr 10, 17, 24

May 1, 8, 15, 22, **29** (Midterm Exam)

Jun 12, 19, 26

Jul 3, 10, 17, **24** (Final Exam)

**Advice:** • It is expected that you attend all lectures.

- Prepare for class by (1) reviewing previously learned concepts from previous sections, (2) reading at least a section ahead, and (3) completing the homework problems assigned in Mathematics Tutorial II.
- The instructor is here to help you. Please do not hesitate to contact me, earlier rather than later. I hope that you will find the course interesting and that you will have a good experience with it.
- The course website for Calculus II, Linear Algebra II, and Mathematics Tutorial II may be found at

<http://www.math.nagoya-u.ac.jp/~richard/spring2015.html>