Calculus II

Undergraduate / Graduate	Undergraduate	**Registration Code**	0055221
Course Category	Sciences Basic	**Credits**	2.0
Term (Semester) / Day / Period	G-II (1st year, Spring Semester) / Fri / 2 (10:30～12:00)		
Instructor	RICHARD Serge		
Contact e-mail of the Instructor			
Target Schools (Programs)	Hu(J)・La(S)・Ec(S)・Sc(P・C・B)・En(C・Au)・Ag(B)		

●Goals of the Course

Analysis is the field of mathematics that describes and analyzes quantitative changes, and the central methods are differential and integral calculus. These methods are essential techniques in natural science, and have recently found increasing applications also in social sciences.

●Objectives of the Course

The aim of the second half of this one-year course is to provide a solid understanding of functions of several real variables. The students will become familiar with the various tools necessary for the analysis of such functions.

●Course Content or Plan

The basic notions related to the study of functions of several variables, as for example: partial derivatives, maximum and minimum, implicit functions theorem, multiple integrals, change of variables, Jacobian matrix, surface and line integrals. Some elements of vector calculus will also be introduced.

●Course Prerequisites and Related Courses

Some notions on functions of one variable, as seen in Calculus I. A basic knowledge of linear algebra will be an asset. It is strongly encouraged to attend the Mathematics Tutorial 2a which is linked to this course.

●Course Evaluation Method and Criteria

The final grade will be determined by quizzes (30%), the midterm (30%) and a final exam (40%). The grading scale will The grading scale will be A+, A, B, C, C-, F. It is necessary to submit a Course Withdrawal Request Form when the student has no intention of finishing the course during the semester.

●Study Load(Self-directed Learning Outside Course Hours)

Students are expected to read their notes, and to be familiar with the content of the lectures of Calculus II before each tutorial sessions.

●How to Respond to Questions

By email. Look also at the related website

http://www.math.nagoya-u.ac.jp/~richard/spring2021.html

Textbook	Free reference books and lecture notes will be available on the website of the course
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