

## Calculus II

<b>Registration Code</b>	0055221	<b>Credits</b>	2.0
<b>Course Category</b>	Sciences Basic		
<b>Term (Semester) / Day / Period</b>	G-II (1st year, Spring Semester) / Fri. / 2 (10:30~12:00)		
<b>Instructor</b>	RICHARD Serge Charles		
<b>Contact</b>	Office: Room 237, Science Building A E-mail: richard@math.nagoya-u.ac.jp Web site : <a href="http://www.math.nagoya-u.ac.jp/~richard/spring2019.html">http://www.math.nagoya-u.ac.jp/~richard/spring2019.html</a>		
<b>Target Schools (Programs)</b>	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>● <b>Objective of the Course:</b> 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. The aim of the second half of this one-year course is to provide a solid understanding of functions of several real variables.</p> <p>● <b>Course Prerequisites:</b> Some notions on functions of one variable, as seen in Calculus I. A basic knowledge of linear algebra will be an asset.</p> <p>● <b>Course Content:</b> 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.</p> <p>● <b>Evaluation Methods:</b> The final grade will be determined by quizzes (30%), the midterm (30%) and a final exam (40%). The grading scale will be <b>S</b>: 90-100, <b>A</b>: 80-89, <b>B</b>: 70-79, <b>C</b>: 60-69, <b>F</b>: 0-59. It is necessary to submit a Course Withdrawal Request Form when the student has no intention of finishing the course during the semester.</p> <p>● <b>Notice for Students:</b> It is strongly encouraged to attend the Mathematics Tutorial IIa which is linked to this course.</p>			
<b>Textbook</b>	None.		
<b>Reference Book</b>	Free reference books or lecture notes are available on the website of the course.		