

Course Name	Calculus II		
Semester, Year	Second Semester, 2018	Number of Credits	2 credits
Course level	1000	Course Number	27085
Instructor(s) (Institution)	Simona Settepanella (大学院理学研究院)		
Course Objectives	This course covers integration of functions of one and several variables.		
Course Goals	Master basics of - integration of functions in one variable - integration of functions in several variables - application to (elementary) scientific problems		
Course Schedule	Week 1 Integral (one variable) : Definite integral over a closed interval, Properties of Definite Integrals Week 2 Integral (one variable) : Indefinite integral, elementary differential equations, Fundamental theorem of calculus Week 3 Integral (one variable) : Integrals of Elementary Functions Week 4 Integral (one variable) : Improper integrals Week 5 Integral (one variable) : Gamma function, Beta function Week 6 Integral (one variable) : applications Week 7 Integral (two variables) : Definite integral over a closed domain in the plane Week 8 Integral (two variables) : Iterated Integrals, volume integrals and Fubini theorem Week 9 Integral (two variables) : Integral over an open domain in the plane Week 10 Integral (two variables) : Gaussian integral Week 11 Integral (two variables) : applications Week 12 Integral (parametric) : Line integrals on a path Week 13 Integral (parametric) : Green's theorem and independence of line integral from the path Week 14 Integral (parametric) : Surface Integrals Week 15 Computation		
Homework	Study at home at least two hours per week -- Check basic notions you learn in the course, and try to solve exercises assigned by the teacher.		
Grading System	Students are graded accordingly to whether or not 1. he/she masters basic knowledge (definitions, theorems etc); 2. he/she can correctly answer questions; 3. he/she is able to apply the knowledge achieved during the course to given problems.		
Textbooks / Reading List	The course material will be provided by the teacher.		
Websites	http://www.math.sci.hokudai.ac.jp/~s.settepanella/		
Website of Laboratory	http://www.math.sci.hokudai.ac.jp/~s.settepanella/		
Additional Information	For further details check on the on the Instructor's home page: http://www.math.sci.hokudai.ac.jp/~s.settepanella/		