



Korea University International Winter Campus (KU IWC) 2021-2022

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December 27, 2021 ~ January 14, 2022

IWC102 – [In-person] Calculus II

I . Instructor

Professor	:	Sangjib Kim
E-mail	:	sk23@korea.ac.kr
Home Institution	:	Korea University (Department of Mathematics)
Class Time	:	
Office	:	Asan Science Hall 620
Office Hours	:	TBA

II . Textbook

Required Textbook	:	Calculus: Early Transcendentals, Metric Edition (9 th edition) by Saleem Watson, Daniel K. Clegg, and James Stewart ISBN-10: 0357113519, ISBN-13: 978-0357113516
Recommended Additional Readings	:	University Calculus (Alternate Edition) by J. Hass, M. Weir, and G. Thomas; Addison Wesley, ISBN-13: 978-0321471963

III . Course Description and Objectives

This course will cover the basic concepts of multi-variable calculus, including vector functions, partial derivatives, multiple integration and vector calculus. The course material is fundamental for majors in mathematics, sciences, and engineering departments. Students enrolling in the course are assumed to have good knowledge of single variable calculus. Upon successful completion of Calculus II, the student will have an understanding in topics listed in the class outline below and be able to handle basic multivariable functions.

IV . Grading

There will be two exams and daily quizzes.

- Midterm exam 1 (35%), Final exam (45%): Each of these one-hour examinations consists of less than 10 problems in a form similar to textbook exercises.
 - Daily quizzes (20 %): Almost every day, you will be asked to solve one or two problems and submit your answers. This will check your class attendance as well as give a chance to review what is covered in class.
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- If you do not take any of two exams or do not submit more than 30% of daily quizzes then your final grade will F.
- Grading scale: Your final grade will be based on your score of Total 100 (= 35 + 45 + 20), 100-95 (A+), 94-90 (A), 89-85 (B+), 84-80 (B), 79-75 (C+), 74-70 (C), 69-65 (D+), 64-60 (D), 59-0 (F).
- To domestic Korea University students, grading policies comparable to those for MATH161/162 will be applied. For this purpose, additional tasks can be assigned to them.

V. Class Outline

Date	Topic	Chapter	Remarks
Dec 27 (Mon)	Vectors, Geometry of Space	12	
Dec 28 (Tue)	Vectors, Geometry of Space	12	
Dec 29 (Wed)	Vectors, Geometry of Space	12	
Dec 30 (Thu)	Vector functions	13	
Dec 31 (Fri)	Vector functions	13	
Jan 3 (Mon)	Vector functions	13	
Jan 4 (Tue)	Partial derivatives	14	
Jan 5 (Wed)	Partial derivatives	14	Midterm exam
Jan 6 (Thu)	Multiple integrals	15	
Jan 7 (Fri)	Multiple integrals	15	
Jan 10 (Mon)	Multiple integrals	15	
Jan 11 (Tue)	Vector calculus	16	
Jan 12 (Wed)	Vector calculus	16	
Jan 13 (Thu)	Vector calculus	16	
Jan 14 (Fri)	Vector calculus / Graduation Day	16	Final exam

Note:

- Committing plagiarism is a serious violation of our school's code of academic conduct. Any student who commits plagiarism will immediately fail this course.
- This syllabus is subject to change at the discretion of the instructor. Students are responsible for keeping up with all the announcements (e.g., daily quizzes, exams) and any changes that are announced in class.
- If you have a physical, psychological, medical or learning disability that may impact your course work, please contact me. I will determine with you what accommodations are necessary and appropriate. All the information and documentation you provide will be confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with me. For procedures and information, please email me.