강 의 계 획 서(Syllabus)

[1] 기본 정보(Basic Information)

■ 강의 정보(Course Information)

개설년도/학기 (Year/Semester)	2015-1학기	개설 캠퍼스 (Campus)	서울
교과목명 (Course Title)	복소해석학(1)	과목구분 (Lecture Type)	단독강의

■ 교수자 정보(Instructor Information)

교수명 (Name)	이지훈	소속 (Department)	수학과

[2] 학습 목표/성과(Learning Objectives/Outcomes)

■ 과목 설명(Course Description)

Complex analysis, traditionally known as the theory of functions of a complex variable, is the branch of mathematical analysis that investigates functions of complex numbers. It is useful in many branches of mathematics, including algebraic geometry, number theory, applied mathematics; as well as in physics, including hydrodynamics and thermodynamics and also in engineering fields such as; nuclear, aerospace, mechanical and electrical engineering.

■ 선수과목 및 공통필수과목(Prerequisites and Co-requisites)

■ 학습 목표(Learning Objectives)

1. What is the definition of analytic function?
2. How can you get Power series expansion?
3. How to evaluate line integral using Cauchy integral formula?
4. What is Maximum modulus theorem?
5. How to apply residue theorem?

■ 학습 성과(Learning Outcomes)

1. Obtaining mathematical logic
2. Obtaining skills which is useful in line integrals
3. Computational skills

[3] 강의 진행 정보(Course Methods)

■ 수업 자료(Textbooks, Reading, and other Materials)

수업 자료	제목	저자	출판일/게재일	출판사/학회지
주교재(Main Textbook)	Complex variables with applications	Ponnusamy S., Silverman H	2006	Birkhauser