

강좌번호 Course No.	010.140	012		Title	공학수학1 Engineering Mathematics	credit	3
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	Office Hours : Any time but prior appointment recommended	

강의목표 Objective	<p>Most practical problems involved in engineering can be formulated and solved mathematically. Engineering Mathematics I introduce undergraduate students to those areas of mathematics which are most important in connection with such engineering problems. This course, Engineering Mathematics 1, covers the areas of ordinary differential equations and linear algebra as mathematical tools for solving the system equations.</p> <p>This course is followed by Engineering Mathematics II in the 2nd semester.</p>
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교재 Textbook and references	- Erwin Kreyszig, 2006, Advanced Engineering Mathematics, 9th Ed., Wiley
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평가방법 Evaluation	Participation	Home Assignment	Quiz	1st Exam	2nd Exam	Final Exam	Sum
	5 %	20 %	10 %	20 %	20 %	25 %	100%
	비고						

수강생 참고사항 Note to the students	<p>- Teaching Assistant: Bona Park (36-409), tel. 880-7230, tautou37@snu.ac.kr</p> <p style="text-align: right;">Syllabus last updated: 21 March 2011</p>
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부정행위자에 대한 처리 Note about Plagiarism	<p>- Plagiarism is strictly prohibited.</p> <p>- Home assignments must include 'statement of originality'.</p>
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강의 계획 Schedule	주(기간)	강의내용
	week 1 3/2	Introduction First-Order ODEs
	week 2 3/7, 9	First-Order ODEs
	week 3 3/14, 16	Second-Order Linear ODEs Quiz #1
	week 4 3/21, 23	Second-Order Linear ODEs Higher-Order Linear ODEs
	week 5 3/28, 30	Higher-Order Linear ODEs 1st Exam
	week 6 4/4, 6	Systems of ODEs. Phase Plane. Qualitative Methods
	week 7 4/11, 13	Series Solutions of ODEs. Special Functions
	week 8 4/18, 20	Quiz #2 Series Solutions of ODEs. Special Functions
	week 9 4/25, 27	Series Solutions of ODEs. Special Functions
	week 10 5/2, 4	Laplace Transforms Quiz #3
	week 11 5/9, 11	Laplace Transforms
	week 12 5/16, 18	2nd Exam Linear Algebra: Matrices, Vectors, Determinants. Linear Systems
	week 13 5/23, 25	Linear Algebra: Matrices, Vectors, Determinants. Linear Systems
	week 14 5/30, 6/1	Quiz #4 Linear Algebra: Matrix Eigenvalue Problems
week 15, 6/8	Final Exam	