

강좌번호 Course No.	409.202	001		Title	핵공학개론2 Introduction to Nuclear Engineering 2	credit	3
--------------------	---------	-----	--	-------	--	--------	---

담당교수 Instructor	Name: <b>Kyoung-Jae Chung</b> (Professor ) Department of Nuclear Engineering		Homepage : snupilab.com				
	E-mail : jkjlsh1@snu.ac.kr		Tel : 880-8338				
	Office Hours : Any time but prior appointment recommended						

강의목표 Objective	Students will get broad knowledge on nuclear engineering related to fusion, plasma and radiation fields.
-------------------	--

교재 Textbook and references	<p>Radiation engineering</p> <p>J. Turner, Atoms, Radiation, and Radiation Protection, Wiley (2007)</p> <p>A. Waltar, Radiation and Modern Life: Fulfilling Marie Curie's Dream, Prometheus Books (2004)</p> <p>C. Grupen and M. Rodgers, Radioactivity and Radiation, Springer (2016)</p> <p>J. Shultis and R. Faw, Fundamentals of Nuclear Science and Engineering, CRC Press (2016)</p> <p>N. Tsoufanidid and S. Landsberger, Measurement and Detection of radiation, CRC Press (2015)</p> <p>Plasma and fusion engineering</p> <p>G. McCracken and P. Stott, Fusion: The Energy of the Universe, Elsevier (2005)</p> <p>F. Chen, An Indispensable Truth, Springer (2011)</p> <p>F. Chen, Introduction to Plasma Physics and Controlled Fusion, Springer (2016)</p>
-------------------------------	--

평가방법 Evaluation	Participation	Home Assignment	Mid-term Exam	Final Exam	Sum
	10%	10%	40%	40%	100%
	비고				

수강생 참고사항 Note to the students	<ul style="list-style-type: none"> <li>- Teaching Assistant: 손성현 (31-108), tel. 880-8337</li> <li>- Lectures will be given in <u>Korean</u> at 32-106 (off-line)</li> </ul>
-------------------------------------	---

부정행위자에 대한 처리 Note about Plagiarism	<ul style="list-style-type: none"> <li>- Plagiarism is strictly prohibited.</li> <li>- Home assignments must include 'statement of originality'.</li> </ul>
---	---

강의 계획 Schedule	주(기간)	강의내용
	week 1 9/1	Introduction Atomic structure and atomic radiation
	week 2 9/6, 8	Nucleus and nuclear radiation Radioactive decay
	week 3 9/13, 15	Radiation interaction with matter 9/15 학과 행사
	week 4 9/20, 22	Radiation source technology
	week 5 9/27, 29	Detection and measurement of radiation
	week 6 10/4, 6	Radiation dose and hazard assessment
	week 7 10/11, 13	Radiation applications Mid-term exam (10/13)
	week 8 10/18, 20	Basic concepts of plasma 9/19~9/21 원자력학회/물리학회
	week 9 10/25, 27	Fundamentals of plasma physics
	week 10 11/1, 3	Plasma source technology
	week 11 11/8, 10	Plasma applications
	week 12 11/15, 17	Fusion energy
	week 13 11/22, 24	Various fusion concepts
	week 14 11/29, 12/1	Tokamak
week 15 12/6, 8	Final Exam (12/8)	