

NTHU NES 541000, Fall 2013
Nuclear Reactor Engineering (Graduate Level)
反應器工程

Instructor: 陳紹文教授 (辦公室: 工科館 208 室, 分機: 34169, E-mail: chensw@mx.nthu.edu.tw)

Lecture time: M3,M4,R4 (R3 預備用); **Classroom:** ESS 402

Grade:

Homework: 20%,
1st Midterm Exam: 25%, 2nd Midterm Exam: 25%, Final Exam: 30%

Note:

1. 作業繳交時間: 公告作業後一周內繳交給助教 (例如: 本周四公告, 則下周四交)
2. 作業可討論, 但請勿抄襲!

TA:

辜郁庭

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研究室: ESS519E

分機: 34299

Textbook: James H. Rust, 1979, "Nuclear Power Plant Engineering", Haralson Publishing Company, Buchanan, Georgia. ISBN: 0-934534-00-4.

Tentative outline:

1. Chapter 1 Descriptions of Nuclear Reactors (2 hours)
2. Chapter 2 Thermodynamics of Nuclear Power Plants (6 hours)
3. Chapter 3 Fluid Flow Concepts (6 hours)

1st Midterm Exam, 10/24, 6:00pm, ESS402 (暫定)

4. Chapter 4 Fluid System Analysis (7 hours)
5. Chapter 5 Heat Generation in Nuclear Reactors (7 hours)

2nd Midterm Exam, 12/5, 6:00pm, ESS402 (暫定)

6. Chapter 6 Heat Transfer in Nuclear Power Systems (5 hours)
7. Chapter 7 Reactor Thermal-Hydraulics Analysis (5 hours)
8. Chapter 8 Stress Analysis in Nuclear Reactor Systems (2 hours)
9. Chapter 9 Fluid Transients (2 hours)

Final Exam, 1/16, 6:00pm, ESS402 (暫定)