



2상유동 열전달 공학

Two-phase flow and heat transfer Engineering

2022년 1학기

서울대학교 원자핵공학과
조형규

Course Syllabus

❖ Objectives of Course

- ✓ To introduce basic theories and physical models on the multi-phase flow for the understanding and analysis of multi-phase flow system.

❖ Grading

- ✓ Homework(40% + a)
- ✓ Mid-term examination (30%)
- ✓ Final exam (30%)

❖ Textbooks

- ✓ A. Mostafa Ghiaasiaan, Two-phase Flow, Boiling, and Condensation, Cambridge University Press (2017).

Contents of Lecture

- ❖ Introduction of Two-phase Flow and Its Basic Parameters
- ❖ Two-phase Flow Regimes
- ❖ Two-phase Flow Model
- ❖ Two-phase Flow Pressure Drop
- ❖ Bubble Dynamics
- ❖ Pool Boiling
- ❖ Flow Boiling
- ❖ Condensation
- ❖ Measurement Methods for Two-phase Flow Parameters