

# ManuTech III



## □ **Process Control - Introduction**

## □ **Syllabus**

- **Crystal Structures**

- **Flowsheeting, Flow Diagrams**

- **Material and Energy Balances**

- **Unit operations**

  - **Heat exchangers**

  - **Distillation columns**

# Class Schedule



- Two lectures with Adrienne
- Two lectures with me:
  - Thursdays 11:00 – room TN-302
  - Thursdays 12:00 – room 052

# TextBooks

Analysis, Synthesis, and Design of Chemical Processes, Second Edition, by Richard Turton

Chemical Engineering Computing by Finlayson

Product and Process Design Principles, Second Edition, by Seider, Seader, & Lewin

Process Dynamics and Control, Second Edition, by Seborg, Edgar, & Mellichamp

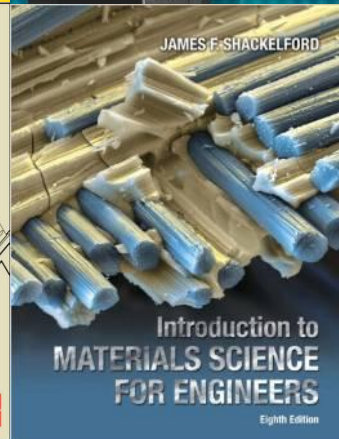
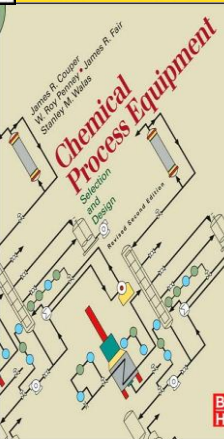
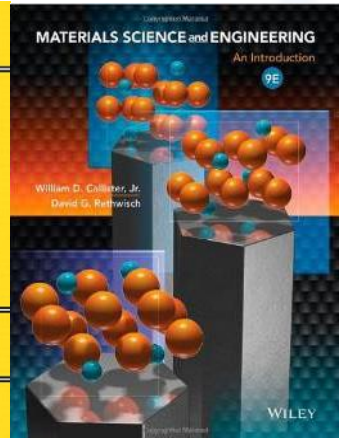
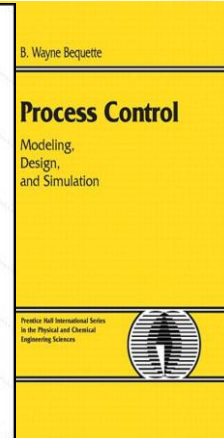
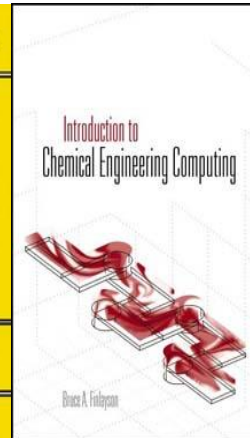
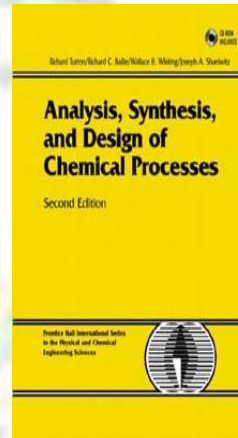
Process Control, by Bequette

Chemical Process Equipment, Couper, Penney, Fair & Walas

Materials Science and Engineering, Callister

Materials Science for Engineers, Shackelford

Books expensive, but look on books.google



# Assessment



- **May Exam – 70%**
  - **Common paper for Adrienne and me**
- **Midterm – 30%**
  - **Across Adrienne's part of course**
  - **And for Process Technology**
    - **Series of online quizzes**
    - **One every week**
    - **Open on Fridays, last for seven days**
    - **Best of three attempts**
    - **Based on weeks work**

# Brightspace



- Brightspace site contains:
  - Course announcements
  - Lecture notes
  - Past papers
  - Tutorial Sheets
  - CA Quizzes
- Same brightspace site for both Adrienne and Eugene