

ManuTech III



□ **Process Control - Introduction**

□ **Syllabus**

- **Flowsheeting, Flow Diagrams**

- **Material and Energy Balances**

- **Unit operations**

 - **Heat exchangers**

 - **Distillation columns**

- **Crystal Structures**

Class Schedule



- Two lectures with Adrienne
- Two hours a week with me:
 - Monday 12:00 room room 144
 - Tuesday 14:00 room 142
 - Have tutorial ~ once every two weeks
- Labs Tuesday 10:00 room 116

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

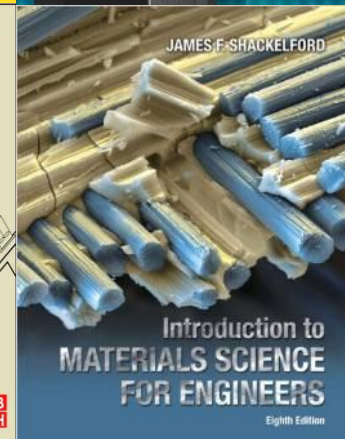
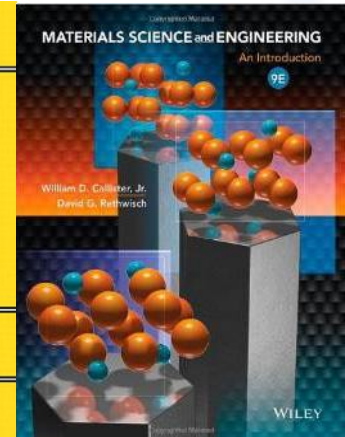
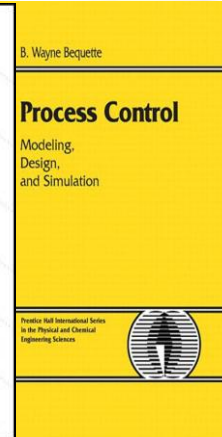
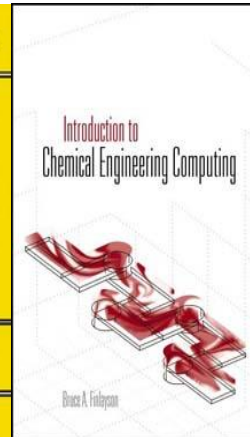
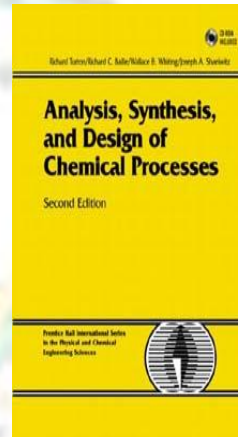
Process Control, by Bequette

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

- **January Exam – 50%**
 - **Common paper for Adrienne and me**
- **Midterm – 15%**
 - **10% for Adrienne's 1/2 of course**
 - **5% for Process Technology 1/2**
 - **Series of multi-choice online quizzes**
- **Labs – 35%**

Brightspace



- You're enrolled already



Brightspace



- brightspace site contains:
 - Course announcements
 - Lecture notes
 - Past papers
 - Tutorial Sheets
 - CA Quizzes
 - Upload points for lab write-ups
- Same brightspace site for both Adrienne and Eugene