

# 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 Thursdays, last for eight 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