

# 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 13:00 room TN-301
  - 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

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- **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