

CHEN 4470 - PROCESS DESIGN PRACTICE

Catalog Data: CHEN 4470: PROCESS DESIGN PRACTICE (3).

Lec. 2, Lab 4. Pr. completion of CHEN 4460. Flowsheet synthesis, simulation and techno-economic analysis applied to complex, open-ended chemical engineering processes. Screening of alternatives and economic optimization.

Instructor: Dr. Mario Richard Eden, Joe T. and Billie Carole McMillan Associate Professor
222 Ross Hall
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Office Hours: Wednesday: 8:00 AM – 10:00 AM + Any time I am at the office

TA: No formal TA has been assigned to this class, but any of my graduate students will be happy to help if the need arises. You can find them in Ross 132 (right next to the McMillan Auditorium).

Consultants: Bob Kline
Senior Process Engineer
Eastman Chemical Company
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Class Schedule: Lectures: Tuesday and Thursday 9:30 - 10:20 AM (Ross Hall Auditorium)
Labs: Section I: Tuesday & Thursday 5:00 - 6:15 PM. (Ross 306), Section II: Tuesday & Thursday 6:30 - 7:45 PM. (Ross 306). Designated times are for group meetings and computer access, no TA will be available during the lab times.

Status Meetings: Each team will meet weekly with the instructor to discuss progress and/or problems.

Textbooks:

- Seider, Seader, Lewin and Widagdo, Product and Process Design Principles: Synthesis, Analysis, and Evaluation, 3e, 2008, 9780470048955, Wiley

References:

- Biegler, L.T., I.E. Grossmann, and A. W. Westerberg, "Systematic Methods of Chemical Process Design." Prentice Hall, New Jersey, 1997.
- Douglas, J.M., "Conceptual Design of Chemical Processes," McGraw Hill, New York, 1988.
- Peters, M.S. and K.D. Timmerhaus, "Plant Design and Economics for Chemical Engineers," fourth Edition, McGraw Hill, New York, 1991.
- Smith, R., "Chemical Process Design." McGraw Hill, New York, 1995.

Grading: Progress reports (60%), final report and presentation (40%).

Attendance: Students are expected to attend all their scheduled classes. College work requires regular class attendance as well as careful preparation.

Special Needs: Students who need accommodations are asked to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by E-mail. Bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have an Accommodation Memo but need accommodations, make an appointment with The Program for Students with Disabilities, 1244 Haley Center, 844-2096 (V/TT).