

Course Syllabus

SYLLABUS

CHME597 Advanced Chemical Process Industry Analysis

Spring 2022

Instructor:

Martha Mitchell, Jett Hall 260, martmitc@nmsu.edu (mailto:martmitc@nmsu.edu), (575)646-2093

In-depth analysis and defense of a timely commercially-relevant chemical process design.

Prerequisite(s): CHME 596.

Requirements:

- prepare a final report that is comprehensive
- data collected, an analysis related to yield, or anything else that would be appropriate as a final discussion/conclusions/recommendations about the process.
- add figures/graphs/tables as well as sketches and drawings for the plant P&IDs, plot plans, elevation diagrams, energy balances, final PFDs with stream tables/mass balances.

Grading:

1. Written background on the process (25%).
2. Research description (with results—figures, tables, data....) (25%).
3. Demonstration of use of design and engineering (calculations, estimations). (25%)
4. Demonstration of fundamentals (energy balance, mass balance..) (25%)

The final letter grades are determined by the following percentage cutoffs:

| | | |
|----------------|----------------|---------------------|
| 94%: A+ | 76%: B+ | 50%: C |
| 88%: A | 70%: B | below 50%: F |
| 82%: A- | 64%: B- | |

Incomplete grades (I grade) will only be assigned if the student is unable to complete the course due to circumstances beyond the student's control. Complete information regarding the use of an The final letter grades are determined by the following percentage cutoffs:

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82%: A-**64%: B-**

Incomplete grades (I grade) will only be assigned if the student is unable to complete the course due to circumstances beyond the student's control.

Discrimination and Disability Accommodation

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act Amendments Act (ADA) covers issues relating to disability and accommodations. If a student has questions or needs an accommodation in the classroom (all medical information is treated confidentially), contact:

Main Campus

Disability Access Services

Corbett Center Student Union Room 208

Aaron Salas, Director

575-646-6840

das@nmsu.edu

New Mexico State University, in compliance with applicable laws and in furtherance of its commitment to fostering an environment that welcomes and embraces diversity, does not discriminate on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex (including pregnancy), sexual orientation, spousal affiliation, or protected veteran status in its programs and activities, including employment, admissions, and educational programs and activities. Inquiries may be directed to the Laura Castille, Executive Director, Title IX and ADA/Section 504 Coordinator, Office of Institutional Equity, P.O. Box 30001, E. 1130 University Avenue, Las Cruces, NM 88003; 575.646.3635; 575-646-7802 (TTY); equity@nmsu.edu

Title IX prohibits sex harassment, sexual assault, intimate partner violence, stalking and retaliation. For more information on discrimination or Title IX, or to file a complaint contact:

Laura Castille, Executive Director and Title IX Coordinator

Office of Institutional Equity (OIE) - O'Loughlin House, 1130 University Avenue

Phone: (575) 646-3635






E-mail: equity@nmsu.edu

E-mail communication: For any e-mail communication with students, I will only use Canvas email (preferred) or NMSU e-mail addresses. It should be noted that students can activate forwarding of their mail to any current-use e-mail address.

Other NMSU Resources:

| | | |
|--------------------------------|---|--|
| NMSU Police Department: | (575) 646-3311 | www.nmsupolice.com  |
| | (http://www.nmsupolice.com) | |
| NMSU Police Victim Services: | (575) 646-3424 | |
| NMSU Aggie Health and Wellness | (575) 646-1512 | https://wellness.nmsu.edu/ |
| NMSU Dean of Students: | (575) 646-1722 | |
| For Any On-campus Emergencies: | 911 | |

Course Summary:

| Date | Details | Due |
|------------------|---|----------------|
| Fri Feb 11, 2022 |  Outline (https://nmsu.instructure.com/courses/1434252/assignments/12049635) | due by 11:59pm |
| Fri Mar 11, 2022 |  Outline (https://nmsu.instructure.com/courses/1434252/assignments/12049635) (1 student) | due by 11:59pm |
| Mon Mar 14, 2022 |  Rough draft (https://nmsu.instructure.com/courses/1434252/assignments/12049637) | due by 11:59pm |
| Fri Mar 18, 2022 |  Rough draft (https://nmsu.instructure.com/courses/1434252/assignments/12049637) (1 student) | due by 11:59pm |
| Fri Apr 1, 2022 |  Second draft (https://nmsu.instructure.com/courses/1434252/assignments/12049638) | due by 11:59pm |

| Date | Details | Due |
|------------------|--|----------------|
| Fri Apr 8, 2022 |  Second draft (https://nmsu.instructure.com/courses/1434252/assignments/12049634) (1 student) | due by 11:59pm |
| Mon Apr 25, 2022 |  Oral Final defense (https://nmsu.instructure.com/courses/1434252/assignments/12049634) (1 student) | due by 11:59pm |
| Wed Apr 27, 2022 |  Final Report (https://nmsu.instructure.com/courses/1434252/assignments/12049634) | due by 11:59pm |
| Thu Apr 28, 2022 |  Oral Final defense (https://nmsu.instructure.com/courses/1434252/assignments/12049634) (1 student) | due by 11:59pm |