

ChE 100 – Basics of Chemical Engineering

1:30-2:20 M, JH 283



Catalog Description:

ChE 100. Basics of Chemical Engineering Credit 1.
Development of chemical engineering and introduction to chemical engineering education and practice.

Prerequisites:

none

Textbook:

None

Instructors:

Martha Mitchell: Jett Hall 259, 646-2093, martmitc@nmsu.edu

Course Objectives:

At the end of this course the student will be able to (including the mapping of these objectives to ABET outcomes a-k):

- Explain what a chemical engineer does to a high school student,
- Describe industries where chemical engineers work, and companies that employ chemical engineers,
- Explain what cooperative/internship experiences are, and why they are important,
- Describe current research areas in chemical engineering, particularly areas of research pursued by NMSU ChE faculty,
- Discuss contemporary issues related to chemical engineering, focusing on energy-related issues (ABET outcome (i) a knowledge of contemporary issues),
- Work on a team to develop a design prototype (ABET outcomes (d) an ability to function on multi-disciplinary teams, (g) an ability to communicate effectively, (j) a knowledge of contemporary issues, (k) an ability to use the techniques, skills and modern engineering tools necessary for engineering practice),
- Discuss case studies relevant to chemical engineering practice (ABET objective (f) an understanding of professional and ethical responsibility).

Final Exam: 1:00—3:00 p.m. Monday, December 8, 2008.

Relationship of course to departmental objectives:

This is the introductory chemical engineering course taken by NMSU chemical engineering majors. It addresses the Department's mission and objectives by developing the student's skills in participating on teams, the opportunity and training to develop the written and oral communication skills of a practicing engineering, and the development and comprehension of professional and ethical behavior.

Grading:

Grades will be assigned based on the following weighting:

Attendance:	20%
Homework:	50%
Group project:	30%.

The final grade distribution for this course will be as follows:

900—1000 Points	(90—100%)	A
800—899.99 Points	(80—89%)	B
700—799.99 Points	(70—79%)	C
600—699.99 Points	(60—69%)	D
<600.00 Points	(< 60%)	F

Extra Credit:

There will be several opportunities over the course of the semester to earn extra credit points (by attending the ice cream social, AIChE meetings, etc.). These opportunities will be announced in class. The extra credit will be considered when assigning final grades.

Attendance Policies:

Attendance at all classes is strongly encouraged. Attendance will make up 20% of the final grade.

Withdrawals:

Students **will not** receive an automatic drop for persistent absences or persistent failure to complete assignments. The responsibility for withdrawals is completely up to the student.

Incomplete Grades:

A grade of Incomplete (I) is given **only if the student is passing** and can not complete the required work for reasons beyond the student's control. The student is referred to the current *NMSU Undergraduate Catalog* for the regulations that apply to removing or changing an I grade.

ADA:

If you have (or believe you have) a disability and would benefit from classroom accommodation(s), please contact the Services for Students with Disabilities (SSD) Office located at Corbett Center, Room 244 [Phone: 646-6840; TTY: 646-1918]

Student Responsibilities:

1. Register with SSD and obtain accommodation documents early in the semester;
2. Deliver the completed accommodation and testing form(s) to the instructor(s) within the first two weeks of beginning of classes (or within one week of the date services are to commence);
3. Retrieve the signed form(s) from faculty and return to SSD within (5) days of the receipt from faculty and at least one week before any scheduled exam; and,
4. Contact the SSD Office if the services/accommodations requested are not being provided, not meeting your needs, or if additional accommodations are needed. Do not wait until you receive a failing grade. Retroactive accommodations cannot be considered.

Faculty Responsibilities

1. Sign the *ACCOMMODATION REQUEST FORM* and *TESTING ACCOMMODATION FORM* (when presented), retain a copy, and return the original to the student within five (5) working days of receipt;
2. Contact SSD immediately if there are any questions or disputes regarding accommodation(s), disruptive behavior, etc.; and,
3. Refer the student to SSD for any additional accommodations.

Feel free to call Jerry Nevarez, Director of Institutional Equity, at 505-646-3635 with any questions you may have about NMSU's Non-Discrimination Policy and complaints of discrimination, including sexual harassment.

If you have a condition which may affect your ability to exit from the premises in an emergency or which may cause an emergency during class, you are encouraged to discuss this in confidence with the instructor and/or the director of Disabled Student Programs.

Feel free to call Michael Armendariz, Coordinator of Services for Students with Disabilities, at 505-646-6840 with any questions you may have on student issues related to the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act of 1973. All medical information will be treated confidentially.

Coordinator:

Dr. Martha C. Mitchell, Professor of Chemical Engineering

Office: 259 Jett Hall 646-2093 martmitc@nmsu.edu

Office Hours: MWF 10:30 a.m.—11:20 a.m., TTh 2:30 p.m.—3:00 p.m, *or by appointment.*

Date prepared: August 21, 2008