

## ChE 455 – Plant Design

### Course (catalog) description:

Topics in design and economics. Requires individual solution of the AIChE student contest problem, according to the national competition rules. Written report of work required.

### Prerequisites:

ChE 452

### Course Objectives:

- (1) Provide course credit for students to work the AIChE National Student Design Competition problem. Performance on this problem is the sole basis of the course grade. Problem is done by students in accord with national competition rules as an individual project.
- (2) Respond to generic student requests for supplementary instruction in design and other courses.
- (3) Review of old contest problems; suggestions for improving design.

### Topics Covered:

- (1) Topics requested by students.
- (2) Because of contest rules, instructor is not allowed to select contest specific topics for instruction.
- (3) Review of old contest problems solutions illustrating their key points and showing the difference between average and excellent solutions.

### Class/laboratory schedule:

MWF, 2:30 – 3:20pm.

### Contribution of course to meeting professional component:

This course contributes to the professional component requirements of Criterion 4 by providing an independently prepared design problem for students to work in accord with the chemical engineering program criterion.

### NMSU Program Outcomes (details below)

#### Ch E 455 Course Objectives

a. b. c. d. e. f. g. h. i. j. k.

		a.	b.	c.	d.	e.	f.	g.	h.	i.	j.	k.
1	Provide course credit to work the design competition problem	3	3	3	0	3	3	2	3	2	3	2
2	Respond to student requests for supplementary instruction	3	3	3	0	3	3	3	3	3	3	2
3	Review old contest problems for their noteworthy and unique features and to illustrate the differences between good and excellent solutions	3	3	3	0	3	3	3	3	3	3	2

