Minutes of the University Faculty, January 14, 1957

The University Faculty met in Lafferty Hall, Monday, January 14, 1957, at 4:00 p.m. President Dickey presided. Members absent were W. M. Carter, L. M. Chamberlain, F. J. Cheek, Jr., F. G. Coolsen, Richard M. Doughty, C. Howard Eckel, W. P. Garrigus, Lyman V. Ginger, D. V. Hegeman, A. D. Kirwan, C. T. Lesshafft, Robert L. Mills*, Helen M. Reed, Roy E. Sigafus, Jonah Skiles, Earl P. Slone, D. G. Steele, D. V. Terrell, Kenneth Vanlandingham, and William R. Willard.

The minutes of the meeting of December 10, 1956 were read and approved.

Dean Wall presented for the College of Agriculture and Home Economics certain new courses, a dropped course and a curriculum change which were approved by the University Faculty.

New Courses

Animal Industry 8, LIGHT HORSE PRODUCTION. (3)
Breed history, development and pedigrees; a general study of the anatomy and physiology of the horse; diagnosis, prevention and cure of common ailments; breaking, schooling and training. Lecture, 2 hours; lab, 2 hours. Prereq: A I 5

Animal Industry 101, APPLIED LIVESTOCK NUTRITION. (3)
A discussion of the specific nutritional requirements of beef cattle, sheep and swine, with emphasis on recent nutritional concepts, feed formulation, and economic considerations. Prereq: A I 81 and approval of instructors.

New Curriculum in Food and Equipment Demonstration
Leading to the Degree of Bachelor of Science in Home Economics
(Effective, Sept. 1957.)

This curriculum prepares the student for commercial demonstration position or for experimental work in foods and equipment.

Core courses (see general curriculum)		89
Home Economics electives (starred courses are required for majors in Food and Equipment Demonstration)		13
*H E 168	Household Equipment	3
*H E 105a	Experimental Cookery	3
H E 115a	Foods for Special Occasions	3
*H E 170	Demonstration Techniques	3
H E 114	Food Preservation	3
H E 103	Community Nutrition	3
H E 41	Institution Marketing	3
H E 73	Farm Home Problems	4
H E 42	Institution Foods	4
General Electives		29
	Total	136

*Absence excused

Course to be Dropped
Animal Industry 103, WORK STOCK PRODUCTION

Change in Curriculum in General Agriculture
Remove Library Science 25 as a requirement

Professor Crouse referred the Faculty to a mimeographed list of new courses and an outline of the four-year program in Chemical Engineering which had been circularized by the College of Engineering Faculty under date of December 18, 1956. He stated that Metallurgical Engineering 250 had been included in the list through clerical error. The Faculty approved the circularized recommendations with the deletion of Metallurgical Engineering 250.

NEW COURSES TO BE ADDED

Applied Mechanics 1 -- ELEMENTS OF DYNAMICS (0) II
A basic course in dynamics including rectilinear motion, force and acceleration, curvilinear motion and rotation, work, energy and power. 17 weeks at 2 hours per week. Prereq: High school graduate and satisfactory grade in special test in mathematics and general ability.

Mechanical Engineering 16a -- SHOP TRAINING (0) I. 20 weeks at 20 hrs per week.
Mechanical Engineering 16b -- SHOP TRAINING (0) II. 18 weeks at 20 hrs per week.
Mechanical Engineering 16c -- SHOP TRAINING (0) S. 12 weeks at 20 hrs per week.
Training in machine tool practice covering basic machines with an introduction to toolmaking. Prereq: High school graduate and satisfactory grade on special test in mathematics and general ability.

Mechanical Engineering 17 -- ELEMENTS OF TOOL DESIGN (0) I
Study and design of jigs, fixtures, gauges and dies as related to production machines. 17 weeks at 2 hours per week. Prereq: High school graduate and satisfactory grade on special test in mathematics and general ability.

Metallurgical Engineering 20 -- ELEMENTS OF METALLURGY (0) S
Basic metallurgy including various methods of heat treatment and other pertinent data. 8 weeks at 2 hours per week. Prereq: High school graduate and satisfactory grade on special test in mathematics and general ability

Chemical Engineering 21 -- CHEMICAL ENGINEERING CALCULATIONS (4) II Hite
Calculations with emphasis on material and energy balances as applied to industrial processes. Prereq: Chem 22, Physics 3a and Math 20a

Chemical Engineering 101a -- UNIT OPERATIONS (3) I Hite
Principles of the unit physical operations of fluid flow, heat transfer, evaporation, and filtration with quantitative problems in the operation of chemical process equipment. Prereq: Ch E 21, Math 20b

Chemical Engineering 101b -- UNIT OPERATIONS (3) II Staff
Continuation of Ch E 101a. Principles of mass transfer - distillation, gas absorption, liquid extraction, drying, etc. Prereq: Ch E 101a

Chemical Engineering 104a -- UNIT OPERATIONS LABORATORY (2) II Staff
Quantitative study of fluid flow, heat transfer, evaporation, etc., comparing the operation of actual equipment with theory. Special consideration of problems in design and report writing; laboratory, six hours. Prereq: Ch E 101a

Chemical Engineering 104b -- UNIT OPERATIONS LABORATORY (2) I Staff
Continuation of Ch E 104a, covering diffusional operations such as distillation, absorption, and drying; laboratory, six hours. Prereq: Ch E 101b, 104a

Chemical Engineering 107a -- CHEMICAL ENGINEERING PROCESSES (3) I Staff
Survey of the technology and economics of the chemical industry. Detailed analysis of several selected chemical processes and an introduction to process design calculations. Prereq: Chem 130b, Chem 140b

Chemical Engineering 107b -- CHEMICAL ENGINEERING PROCESSES (3) II Staff
Continuation of Ch E 107a, including a comprehensive design problem. Prereq: Ch E 101b, Ch E 107a

Chemical Engineering 110 -- CHEMICAL ENGINEERING THERMODYNAMICS (3) I Staff
Fundamentals of thermodynamics, first and second laws, properties of fluids, phase and chemical equilibrium, and applications to chemical engineering. Prereq: Ch E 21, Math 20b, Physics 3b.

Chemical Engineering 175a,b -- SEMINAR (1 each) I, II Staff
General discussion of chemical engineering subjects; preparation and delivery of papers and reports; extemporaneous speaking, and the abstracting of current literature. Two hours. Prereq: Six semesters in chemical engineering.

Curriculum Leading to the Degree of Bachelor of Science in Chemical Engineering

FREHSMAN YEAR

First Semester		Crs	Second Semester		Crs
Ch E 1a	The Engineering Profession	0	Ch E 1b	The Engineering Profession	0
Eng 1a	English Composition	3	Eng 1b	English Composition	3
Chem 1a	General Chemistry	5	Chem 1b	General Chemistry	5
Math 17	College Algebra	3	Math 19	Plane Analytic Geometry	3
Math 18	Plane Trigonometry	3	Met E 27	General Elementary Met	3
ED 1a	Elementary Engineering Drawing	2	ED 1b	Descriptive Geometry	2
Military or Air Science		2	Military or Air Science		2
Physical Education		1	Physical Education		1
		19			19

SOPHOMORE YEAR

First Semester		Crs	Second Semester		Crs
Ch E 2a	The Engineering Profession	0	Ch E 2b	The Engineering Profession	0
Math 20a	Differential Calculus	4	Math 20b	Integral Calculus	4
Phys 3a	General College Physics	3	Phys 3b	General College Physics	3
Phys 4a	Physics Laboratory	2	Phys 4b	Physics Laboratory	2
Chem 22	Analytical Chemistry	5	Ch E 21	Chemical Engineering Calculations	4
Military or Air Science		2	Military or Air Science		2
Econ 51	Principles of Economics	3	AM3	Statics	3
		19			18

JUNIOR YEAR

First Semester		Crs	Second Semester		Crs
Ch E 3a	The Engineering Profession	0	Ch E 3b	The Engineering Profession	0
Chem 130a	Organic Chemistry	5	Chem 130b	Organic Chemistry	5
Chem 140a	Physical Chemistry	3	Chem 140b	Physical Chemistry	3
Chem 144a	Physical Chemistry Lab	2	Chem 144b	Physical Chemistry Lab	2
Ch E 101a	Unit Operations	3	Ch E 101b	Unit Operations	3
AM 100	Strength of Materials	4	Ch E 104a	Unit Operations Laboratory	2
*Non-technical Elective		3	*Non-technical Elective		3
		20			18

SENIOR YEAR

First Semester		Crs	Second Semester		Crs
Ch E 4a	The Engineering Profession	0	Ch E 4b	The Engineering Profession	0
Ch E 107a	Chemical Engineering Processes	3	Ch E 107b	Chemical Engineering Processes	3
Ch E 104b	Unit Operations Laboratory	2	Phys 155a	Fundamental Atomic and Nuclear Physics	3
Ch E 110	Chemical Engineering Thermodynamics	3	*Non-technical Elective		3
EE 105a	Electrical Engineering Circuits and Machinery	3	EE 105b	Electrical Engineering Circuits and Machinery	3
*Non-technical Elective		3	*Non-technical Elective		3
*Technical Elective		3	*Technical Elective		3
Ch E 175a	Seminar	1	Ch E 175b	Seminar	1
		18			19

*All electives selected must have the approval of the Head of the Department.

The Faculty adjourned.

Maple Moores

Maple Moores
Acting Secretary