MINUTES OF THE UNIVERSITY SENATE May 13, 1940

The University Senate met in the Assembly Room of Lafferty Hall Monday, May 13, 1940. President McVey presided.

The minutes of April 15 were read and approved.

Professor R. H. Weaver, Chairman of the Curriculum Committee, read the following report to the Senate from this Committee:

"On Dec. 6, 1939, the College of Arts and Sciences recommended the approval of <u>History 127a-b</u>. American Political Biography (2 crs. each). Dr. Tuthill has informed the Committee that the request for the course has been withdrawn by action of the History Department staff.

At the March meeting of the Senate the Committee was given authority to take final affirmative action upon certain courses which were then before the Committee. In accordance with this action, the Committee has approved Commerce 153. The Economics of Consumption.

(2) The place of consumption in economic theory with special emphasis upon its relation to the phases of the business cycle including the institutional background of our consumer habits: sources of information on consumption; and government regulation of consumer standards.

On April 2, 1940, the College of Engineering recommended some changes in Engineering courses. Several meetings have been held between representatives of the Physics Department and representatives of the Engineering College, with a representative of the Curriculum Committee present at one of the meetings. As a result of these meetings, some changes have been made in these recommendations. The College of Engineering and the Department of Physics are now in agreement upon these recommendations. The Committee believes the changes in courses as modified by the agreement to be desirable and therefore recommends as follows:

Drop Applied Mechanics 1 - Analytical Mechanics (4) (Effective September 1, 1940)*

Approve Applied Mechanics 3 - Statics (3) A study of forces, vectors, couples, moments of areas and masses, center of gravity, and their application to engineering structures in two and three dimensions. Prerequisite: Physics 2a. Prerequisite of concurrent: Mathematics 20a.

Approve Applied Mechanics 4 - Dynamics (2) Motion of a particle, dynamics of moving bodies, impulse and momentum, work and energy. Prerequisites: Physics 2a, Applied Mechanics 3. Prerequisite or Concurrent: Mathematics 20b.

Approve the following new description of Applied Mechanics
100 - Strength of Materials (4). (For Civil, Electrical, Metal-

^{*}This change made subsequent to meeting of Senate at request of Dean Freeman and with approval of R. H. Weaver. Chairman of Curriculum Committee, August 5, 1940. L.M.C.

lurgical and Mining Engineers). A general course in the application of the principles of mechanics to the solution of problems in stress and strain due to direct forces, shear, bending, torsion, eccentric loads, and combined stresses; in beams, columns, thin cylinders, springs, etc. Prerequisites: Applied Mechanics 3. Prerequisite or Concurrent: Mathematics 20b.

Approve Applied Mechanics 104 - Strength of Materials (4) (For Mechanical Engineers). Theory of stress and strain in engineering materials, due to direct forces, bending, torsion, eccentric loads and combined stresses. Deflection of beams.

Prerequisites: Applied Mechanics 3. Prerequisite or Concurrent: Mathematics 20b.

Credit shall not be allowed for both Applied Mechanics 100 and Applied Mechanics 104.

Drop Applied Mechanics 101, 102 and 103.

Approve Applied Mechanics 105 - Applied Elasticity (3)
Bending and deflection of thin plates, stress analysis of thick
walled cylinders and rotating discs, stress concentrations and
fatigue. Prerequisites: Applied Mechanics 4, Applied Mechanics
104, Mathematics 20b.

Approve Applied Mechanics 106 - Advanced Strength of Materials (3) Theory of elastic energy, least work, influence lines, redundant structures, balancing of moments, curved beams, arches, pipes, and other engineering structures. Prerequisites: Mathematics 20b and either Applied Mechanics 100 or 104.

Approve Applied Mechanics 107 - Mechanical Vibrations (3) Vibration of systems of one and several degrees of freedom, balancing of rotating machines, critical speeds, torsional and lateral vibrations of shafts. Prerequisites: Mathematics 20b, Applied Mechanics 4 and either Applied Mechanics 100 or 104.

Approve Mettalurgy 35 - Engineering Metallurgy (2) (For Mechanical Engineers). This is a course designed to cover the fundamental principles of extractive and mechanical metallurgy from the standpoint of the needs of Mechanical Engineers. It places emphasis on the application of the above principles in the extraction and fabrication of the more important engineering metals. In addition, it includes the iron carbon diagram and a consideration of alloy steels and cast irons. Credit shall not be allowed for both Metallurgy 26 and 35.

Approve Metallurgy 143 - Physics of Metals (5) A study of the laws governing the formation of alloys. Subjects discussed are atomic structures of metals and allows, atomic forces, super-lattices, ferro-magnetism, perfect and imperfect crystals, corrosion, super-conductivity, the physical properties of metals as a function of the periodic and electro-chemical position, diffusion, free energy, Hume-Rothery and other rules. In addition the course entails the application in the X-ray laboratory

of the work taken in the class room together with the development of an operating technique in radiography as applied to metals and alloys. Lectures and recitations 4 hours a week, laboratory 2 hours a week.

Prerequisites: Physics 119: Physics 123: Metallurgy 140.

Reduce credit in <u>Metallurgy</u> 175a and b - Seminar, from 4 hours a week, 2 credits each, to 2 hours a week, 1 credit each.

Approve Metallurgy 214 - The Metallic State (2) Fibre patterns, stereographic projection and goniometry, crystal chemistry and metallic crystals, quantum mechanical concepts for isolated atoms are applied to interacting atoms, leading to the methods of calculating energies and forces binding atoms together in crystals. Lectures and recitations 2 hours a week. Prerequisite: Metallurgy 143.

Reduce credit in Mining 175a-b - Seminar from 4 hours a week, 2 credits, each to 2 hours a week, 1 credit each.

The prerequisites for Applied Mechanics 3 and Metallurgy 143 constitute an essential part of the agreement between the Physics Department and the College of Engineering. The Committee recommends, therefore, that the approval of these courses be only for as long as these prerequisites are retained.

On April 16, 1940, the College of Engineering submitted further recommendations to the Senate. The Committee recommends that these recommendations be approved. They are as follows:

1. Drop the following courses July 1, 1940:

Petroleum Engineering 101a-b - Petroleum Laboratory

Petroleum Engineering 102a-b - Oil Property Development

Petroleum Engineering 103 - Production of Gas and Oil by Drilled Wells

Petroleum Engineering 104 - Field Storage, Preliminary
Refining and Transportation of
Petroleum

Petroleum Engineering 105 - Deep Bore Hole Surveys and Problems

Petroleum Engineering 106 - Oil Field Hydrology

Petroleum Engineering 120 - Seminar

Civil Engineering 111 - Contrasts and Specifications

Engineering Drawing 16a-b - Freehand Lettering

- 2. Make Electrical Engineering 123 Electrical Equipment
 Problems. 2 credits instead of 1.3 as it now appears on Registrar's records.
- 3. Change number and description of Metallurgy 60a,b,c (2 ea), Metallurgical Laboratory and Shop Practice, to Metallurgy 60 (6), same title. Omit from description "one summer course is required and more may be taken."

In many cases one of the important factors considered by the Curriculum Committee and by the Senate before the approval of a course is the list of prerequisites for the course. Frequently - one department or college will agree to a course only on the basis of certain prerequisites. At present, however, the prerequisites are not considered a part of the official course description, and may be changed in the catalog without consultation with the Senate. The Curriculum Committee is of the opinion that some rule should be passed to control this situation and therefore recommends that the Rules Committee be requested to study the problem and to report their recommendations to the Senate.

Within the last few days the Law College has requested approval of Law 181a-b (1.5 each) Law Journal Note Editing with this statement: "This authorization is requested to be made applicable to the present semester. The work has been given during the present semester under the course entitled 'Problems of Research'. In the past student have been permitted to enroll in 'Problems of Research' for two semesters, it being regarded as having been authorized as an a and b course." Also, the College of Commerce requests a change in title and description for Commerce 125. Both of these requests came too late to allow consideration by the Committee and by the Senate. The Committee suggests that it be given the authority to give final approval to these requests. Law 181a-b and Commerce 125 were subsequently approved by the Committee."

All recommendations in the report of the Committee were approved by the Senate.

Dean Boyd, Chairman of the Rules Committee, reported that action had been postponed on the petition from the Student Legislature, relative to optional class attendance, on recommendation of the new Student Legislature. Dean Boyd indicated that the request would be given consideration in the fall.

The following recommendations from the College of Engineering were approved:

"The faculty of the College of Engineering recommends the following changes in the curricula:

1. In Mechanical Engineering

Drop Applied Mechanics 1, 100, 101, 102, and 103. Add Applied Mechanics 3, 4, 104, 105, 106 and 107.

2. In Civil and Electrical Engineering

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Drop Applied Mechanics 1.
Add Applied Mechanics 3 and 4.

3. In Metallurgical and Mining Engineering

Drop Applied Mechanics 1. Add Applied Mechanics 3.

4. In Mechanical Engineering

Drop Metallurgy 26 and Add Metallurgy 35.

5. In Mining Engineering

Add Civil Engineering 123 - Hydraulics Laboratory."

President McVey reminded the faculty of the Seventy-third annual commencement, to be held on Friday, June 7. He requested a large attendance of the faculty at the Commencement Exercises and at the Baccalaureate Service, to be held at four o'clock on Thursday, June 6.

Leon hawberlain

MINUTES OF THE UNIVERSITY SENATE June 5, 1940

The University Senate met in the Assembly Room of Lafferty Hall Wednesday, June 5, 1940. President McVey presided.

The minutes of May 13 were read and approved.

The following named persons, who have completed all requirements, were recommended to the Board of Trustees for the degrees indicated:

COLLEGE OF ARTS AND SCIENCES

Candidates for the Degree of Bachelor of Arts

Jeanne Russell Barker
Ruth Conrad Bennett
Margaret Chenault Blanton
George William Booher
Walter Coleman Botts
Charles Patrick Cahill
Dorothy Ann Calhoun
Nathan Heath Centers
Floris Janet Chambers
Janet Reece Chanslor

Anna Frances Odor
Jane Truman Ogg
Patricia Withers Parker
Mary Thomas Parks
Orville Miller Patton
Ruth McDanell Peak
Hazel Richardson PerkinsLydia Ellen Perrine
Phillip Kirk Phillis
Mary Stuart Pile