

MINUTES OF THE UNIVERSITY SENATE
January 9, 1939

The University Senate met in the Assembly Room of the Law College Monday, January 9, 1939. President McVey presided.

The minutes of December 12 were read and approved.

In accordance with the action of the Senate at its previous meeting, Dean Wiest, as Chairman of the Committee on Insurance, reported to the Senate on the question of group hospitalization and medical services. His committee had previously sent to each member of the Senate an outline of three possible plans of organization for this type of service, with approximate costs. Following the statement of Dean Wiest, the Senate discussed briefly the possible forms of organization, the extent of coverage that might be available, and the possibility of including the members of a family. The Senate was asked for a show of hands to indicate interest in plans of this character. Seventy-seven of an approximate attendance of 135 voted that they would be willing to join a plan covering hospitalization only; 58 of the members present voted their willingness to join a plan covering surgeons' fees and service fees in addition to hospital costs. No further action was taken on the matter.

The Curriculum Committee reported to the Senate as follows:

Part I. The Curriculum Committee recommends the approval of the requests for new courses, changes in courses and dropping of courses as follows:

New Courses

Art 157. - Art in Secondary Schools for Summer Schools Only - 3 credits

Art 68a,b. Graphic Design. 3 credits each, with the condition that the description and content of Art 64a,b, be changed so as to exclude Graphic Design.

Art . - Art in America. 3 credits for Summer School only, with the condition that it not be open to students who have credit in Art 22, Art 41 or 42, and that to the descriptions of these courses be added the statements that they are not open to students who have credit in Art .

English 163a,b. Playwriting. 3 credits each.

Physics 137. Experimental Physics: Heat. 2 credits

Physics 131. Experimental Physics: Electricity. 2 credits

Physics 138. Experimental Physics: Light. 2 credits

Minutes of the University Senate - January 9, 1939

- Education 244. Problems in Teaching of Physics. 3 credits for Summer School only.
- Education 175h. Problems in Educational Radio Broadcasting. For Summer School only. 3 credits.
- Education 184. Teaching Office Appliances. 1 credit.
- Education 239. The Administration of Public Schools in Relation to Other Agencies. 3 credits. For Summer School only.
- Education 249. Teaching Consumer Courses in the High School. 2 credits. For Summer School of 1939 only.
- Education 282. Special Problems in Vocational Education. 3 credits.
- Education 245. Organization of Audio-Visual Aids. 3 credits. Prerequisite: Education 186 or equivalent.
- Education 246. Motion Pictures in Education. 3 credits.
- Farm Economics 114a,b,c. Current Land Problems. 1 credit each.

Changes in Courses

- Art 112a,b. Composition. Title changed from Advanced Composition.
- Art 116a,b. Etching. Changed from Advanced Etching.
- Art a,b. Painting. Number changed from Art a,b.
- Art 165a,b. Intermediate Painting. Number changed from 159a,b.
- Education 152. Problems in Educational Psychology. Raised to the graduate level and given number 254.
- Animal Industry 35. Artificial Incubation and Brooding, changed to A. I. 35, Hatchery Management.

Dropped Courses

- Physics 101 - Theory of Heat, 5 credits.
- Physics 102a - Electricity and Magnetism, 5 credits.
- Physics 103 - Theory of Light. 5 credits.
- Education 137 - The Teaching of Physical Sciences, 2 credits.
- Education 184 - Community Studies and Their Application, 3 credits.

All the above new courses and changes as recommended by the Committee were approved by the Senate. The Committee's report continues as follows:

Minutes of the University Senate - January 9, 1939

Part II. The Committee has had before it the proposal for the new courses and changes in courses in the memorandum from the College of Engineering.

These proposed curricula represent a type of expansion. The candidates for the Metallurgical degree are to be required to take two courses of seven weeks each in two successive summers in addition to a full four-year load. The candidates for the Mining degree are to take a four weeks' course in one summer and a seven weeks course in the next summer also in addition to a full four-year load. The students who take these courses are not to enroll in the regular University Summer School. At the beginning of the second semester of the regular school year they will enroll for a normal semester's work plus the work to be taken in the following summer, without the payment of additional fees for the summer work. Thus the University would have, in effect, two separate summer schools.

Although this appears to constitute a type of expansion of the University organization, it arises from the requirements for the degrees rather than from the new courses or changes in courses. Therefore, in considering the courses the committee has disregarded this situation. We have found no duplication of courses or unwise expansion of the University curriculum. We, therefore, recommend the approval of the new courses, changes in courses and dropped courses as recommended by the College of Engineering.

The Senate voted its approval of the new courses, changed in courses and dropped courses in the Engineering College as recommended by the Curriculum Committee.

Professor Trimble, Chairman of the Curriculum Committee, pointed out that under the recent action of the University Senate, the authority of his committee did not cover the recommendation of the proposed new Engineering curricula, and that the recommendation for the approval of these curricula should come from the College. Professor Freeman moved the approval of the proposed curricula and the motion was seconded. This motion raised the question as to the procedure to be followed in offering the summer work in Metallurgy 60a, Metallurgy 120, 121, 167, the proposed procedure being to make these summer courses an extension of the second semester's work. After an extended discussion of the implications of this proposed procedure, Professor Manning moved that the original motion be amended as follows: that the recommendations of the College of Engineering be approved, except that all students taking work scheduled for the summer shall enroll for such work in the summer school, or through the Extension Division, except for the work being done in accordance with the commonly accepted term of "incomplete". This motion was seconded and further discussion followed. On a motion by Dean Evans, which was duly seconded, the Senate voted to refer the matter to a special Senate committee for further consideration and a report to the Senate.

The report of the Curriculum Committee continues as follows:

Minutes of the University Senate - January 9, 1939

"On the advice of the special committee under the chairmanship of Dean Cooper, the Curriculum Committee recommends the transfer from the Department of Sociology to the new Department of Social Work, of the following Graduate courses which Dr. Palmer wishes to offer next semester, to wit: Social Work 213, 217, 220a,b. Also the Committee recommends the new course, Social Work 227, asked for by Dr. Palmer. This is one of the courses referred back to the Committee at the last meeting of the Senate. Since that time the matter of duplication between this course and that of Professor Oyler has been settled agreeably to Professor Oyler.

"It was the sense of the majority of the special committee that the work of this new department should be developed gradually. The Curriculum Committee approved of this policy. We are, therefore, not recommending approval of the transfer of Social Work 226, nor approval of the new courses, approval of the transfer of Social Work 226, nor approval of the new courses, Social Work 123, or 218. We recommend further that credit be authorized for those students who have been taking the course Social Work 123 during the current semester."

This recommendation from the Curriculum Committee was approved by the Senate.

Dean Boyd moved that the Senate approve the recommendation of the College of Arts and Sciences that courses Social Work 123, 218, and 226 be approved. Following extended discussion of the Social Work courses and the Social Work program, the Senate voted not to approve the motion.

Descriptions of the new courses approved by the Senate are as follows:

College of Arts and Sciences

Art 157. Art in Secondary Schools. Three credits. The study of art for teachers in secondary schools: problems of definition and interpretation; evaluation of visual training; the correlation of art with other subjects. Sources for art; original works, facsimile reproductions, art literature, etc. Lectures, conferences, report.

Note: This course is designed to assist teachers of art; it will emphasize art content rather than teaching methods; art sources rather than text-book sources; and deal largely with junior high school problems rather than art in the elementary grades.

Art 68a,b - Graphic Design. 3 credits each. Design in relation to advertising, publications and general commercial needs; also its application to campus problems. A course for Art, Journalism, and Commerce majors interested in creating finished layout. 9 studio hours per week. Prerequisites: Art 29 and Art 61a,b, or Art 61a and Art 30a.

Note: This will provide a specific course for a specialized type of work

Minutes of the University Senate - January 9, 1939

heretofore given as one phase of Art 64a,b, Intermediate Design. It deals with concrete problems, most of them on the University campus, and has already proved its helpfulness. It would seem advisable therefore to set up a separate course for it so that students may know from the catalogue that this work is actually being offered.

Art - Art in America. 3 credits. A critical and historical examination of the arts in America; architecture, sculpture, painting, illustration, and handicrafts from colonial times to the present. Illustrated lectures, reports. Not open to students who have credit in Art 22, 41 or 42.

English 163a,b. - Playwriting. 3 credits each. This course is designed as a practical course in the writing of plays for production. A study of the principles of dramatic composition. Members of the class will write one act plays first semester and present them as laboratory exercises on the Guignol stage; the second semester full length plays will be written and produced. Principles of dramatic composition will be continued second semester. Open to juniors and seniors. Prerequisites: English 1a, 1b, 34a, 34b.

Physics 137. Experimental Physics: Heat. 2 credits. An advanced laboratory course in modern methods of measuring thermal quantities. Opportunity is provided for using the gas thermometer, resistance thermometer, thermopiles, and various types of radiation pyrometers. Construction and calibration of thermocouples. Determination of coefficients of expansion, vapor pressure and densities, viscosity, surface tension, freezing and boiling points, specific and latent heats, ratio of specific heats, heats of combustion, thermal conductivities, radiation constants, etc. Prerequisites: Physics 117, or equivalent.

Physics 131. Experimental Physics: Electricity. 2 credits. The course provides advanced laboratory practice in electrical measurements. It includes calibration and use of the quadrant electrometer, the d'Arsonval galvanometer and the Type K potentiometer; studies of dielectrics and the magnetization of iron; measurements of capacitance, resistance and inductance; charge and mass of electron; and absolute determinations of electrical quantities. Prerequisites: Physics 111, or equivalent.

Physics 138. Experimental Physics: Light. 2 credits. This course is an advanced laboratory study of lenses, mirrors, prisms, gratings, light sources, filters, apertures, and combinations of these elements in optical systems. The experiments include measurements with such instruments as the photometer, the spectrometer, the Interferometer, and the polarimeter, etc. Prerequisites: Physics 108, or equivalent.

Social Work 227. Problems of Rural Social Work. 3 credits. Rural needs and social welfare programs to meet them will be studied in selected rural areas and the findings will be related to larger social welfare problems and programs. The relationship of social work programs to other community programs in these areas will also be considered.

Minutes of the University Senate - January 9, 1939

College of Agriculture

Farm Economics 110a,b, and c. Current Land Problems. 1 credit each.
A study of the requirements for and the supply of agricultural land in the United States. A consideration of the contribution of land classification and land use planning toward the development of socially desirable policies and programs for using our natural resources. This course is to be offered in the summer session only.

College of Engineering

Metallurgy 143 - Physics of Metals. (3) II Subjects discussed are atomic structures of metals and alloys, atomic forces, superlattices, ferromagnetism, perfect and imperfect crystals, corrosion, superconductivity, the physical properties of metals as a function of periodic and electrochemical position, diffusion, free energy, Hume-Rothery and other rules and the use of X-rays and electron diffraction. Lectures and recitations, 3 hours a week. Prerequisites: Met. 140, Physics 123, Physics 119.

Engineering Administration 101 - Law for Engineers (3) I To be taught by a member of the Law College Faculty. The nature of law and the organization of courts. Contracts, offer and acceptance, comparative bids. Parties, consideration, discharge of contracts. Engineering specifications and estimates. The engineer before the courts and his relation to the public. Typical engineering contracts and specifications. Text - Legal and Ethical Phases of Engineering by Harding and Canfield. Lectures and recitations, 3 hours a week.

Metallurgy 213 - X-ray Metallography. (4) I, II. The atomic structure of metals and alloys will be determined. Laue, Debye, focusing, rotating crystal, Phragmen and Sacks type diffraction cameras will be studied; also stereographic and gnomonic projection, pole figures, fibre patterns, crystal structure and Cohen's analytical method of calculating lattice parameters. Radiographs will be made and interpreted. Lectures and recitations, 2 hours, laboratory, 4 hours a week. Prerequisite: Physics 119.

Metallurgy 230a,b,c,d - Research in X-ray Metallography. (6) I, II, S. Research problems in X-ray metallography either diffraction or radiographic. Prerequisite or concurrent. Met. 143, Met. 213.

Metallurgy 166a - Extractive Metallurgy. (3) I. Study of the principles and mechanisms applied to the practices of gravity concentration, flotation, and related processes, in the preparation of mine products for market, including discussion of the principles of plant design, with reference reading planned to keep the student informed of current technological development. Recitations and lectures, 3 hours a week for one semester, with assigned reference reading and problems. Prerequisites: Chem. 2b, Phys. 2a, Math. 20a, Met. 27.

Minutes of the University Senate - January 9, 1939

Metallurgy 166b - Extractive Metallurgy. (3) II Continuation of Met. 166a. 3 hours a week for one semester. Prerequisite: Met. 166a.

Metallurgy 167 - Extractive Metallurgy Plant Practice. (3) S
3 weeks summer course in the operation of plants studied in Met. 166a,b. Between junior and senior years. 44 hours a week. The numbers and titles of Met. 166a,b and 167 are new. The course content is practically the same as Met. 160, 161, 163, (now dropped), with some expansion due to availability of new equipment.

Metallurgy 132. Metallurgical Calculations. (5) II The course content is the same as Met. 130, now dropped. Only the number is new.

Mining 160 - Mine Surveying and Field Practice in Mining Engineering.
(3) S 44 hours a week for 4 weeks. The general nature of the course is the same as Mining 60a,b,c, now dropped, except the time and the credits are reduced.

Mining 127a - Mining Underground. (3) I Includes a study of methods of excavation and support, and underground working and development faces in all types of underground mining operations. Recitations and Lectures, 3 hours a week with assigned reference reading. Prerequisite: Min. 126a.

Mining 127b - Mining Underground. (2) II Continuation of Min. 127a. Recitations and Lectures, 2 hours a week with assigned reference reading. Prerequisite: Min. 126a.

Mining 128 - Mining at the Surface. (3) II Study of the methods of working placer deposits, open-pit mines, and similar surfacial mining operations. Lectures and recitations, 3 hours a week with assigned reference reading. Prerequisite: Min. 126a.

Mining 127a,b, 128, are new numbers, titles and descriptions. The general content of these new courses is similar to that of the old ones, (Min. 110, 122a,b, 150 - now dropped) with some contraction.

Mining 129a - Mine Ventilation and Drainage. (3) I. Includes study of the principles applied in the conditioning of underground mine atmospheres, the drainage of underground mine workings, and the problems encountered in the handling of emergencies, such as fires and floods in underground workings. Recitations and lectures, 3 hours a week. Prerequisite: Min. 126a, preferably Concurrent Min. 127a.

Mining 129b - Mine Ventilation and Drainage. (2) II Continuation of Mining 129a. Recitations and assigned reference reading, 2 hours a week. Prerequisite: Min. 129a.

Mining 129a,b are new numbers, titles and descriptions. The general content of the courses is similar to that of the old one (Min. 111 -

Minutes of the University Senate - January 9, 1939

dropped) with some expansion.

Mining 126a - Development of Mines. (4) II. Includes study of the origin of mineral deposits in general, as they concern the engineering procedures involved in the location and exploration of mineral deposits and of the engineering processes involved in the development of prospects into mines. Recitations, 4 hours a week; reference reading and assigned reports. Prerequisites: Chem. 2b, Phys. 2a, Geogl. 12 and Geol. 7.

Mining 126b - Development of Mines. (2) I. Continuation of Min. 126a. Recitations, 2 hours a week, with assigned reference reading and reports. Prerequisite: Min. 126a.

Mining 126a,b are new numbers, titles and descriptions. The general content of the courses is similar to that of the old ones, (Min. 123a,b - dropped), with some expansion.

Mining 130a - Mine Administration. (2) I. A study of the engineering aspects of mine administration and management, of the technology and mechanization studies of mining and market preparation processes, and practice in the fundamentals of mine plant design. Recitations and lectures with assigned reference reading, 2 hours a week. Prerequisites: Min. 126a, Min. 126b.

Mining 130b - Mine Administration. (2) II. Continuation of Min. 130a. Lectures, assigned reference reading and problems in mine plant design. 2 hours a week for one semester. Prerequisite: Min. 130a.

Min. 130a,b are new numbers, titles and descriptions. The general content of the courses is similar to that of the old ones, (Min. 125 - dropped), with some expansion.

College of Education

Education 244 - Problems in the Teaching of Physics. 3 credits. The purpose of this course is to take the prospective teacher over the whole field of high school physics. A series of demonstration lectures will be given supplying inspirational material. Selected experiments will be used as models for laboratory exercises. In conferences the following will be considered; equipment and operation of the laboratory, source materials and tests, problems actually encountered by teachers in their work, etc. An outline for a workable course in high school physics will be required. (To be offered during the summer session only.)

To replace Education 137, The Teaching of Physical Sciences, (permanently discontinued)

Minutes of the University Senate - January 9, 1939

Education 175h - Problems in Educational Radio Broadcasting. 3 credits. This course is designed to acquaint teachers and school administrators with the problems and techniques of broadcasting educational programs. Actual practice with the principles and methods of preparing, producing, and broadcasting educational material will be given. A part of the time of the course will be given to the use of the radio in schools. (To be offered during the summer session only.)

Education 184. Teaching Office Appliances. 1 credit. Methods and materials to be used in teaching the various office appliances to high school pupils. Dictating machines, mimeographs, multigraphs, graphotypes, mimeoscope, addressing machines, filing, calculating machines, and other appliances will be used.

Education 239. The Administration of Public Schools in Relation to Other Agencies. 3 credits. This course deals with the relationship of the public schools to other agencies and services, such as the public health service, the agriculture extension service, employment bureaus, public libraries, culture extension service, employment bureaus, public libraries, parent-teacher associations, and professional organizations or teachers. A study is made of the functions and organization of such agencies. The general aim of the course is to give the school administrator an understanding of the social agencies which should be included in the total education program of a community.

Education 249. Teaching Consumer Courses in the High School. 2 credits. This course is designed to provide techniques and devices for teaching pupils in high schools the various aspects of consumer education. The emphasis is placed on procedure rather than on content and the student is presumed to have a background of training in economics before taking the course.

Education 282. Special Problems in Vocational Education. 3 credits. An independent work course for students interested in vocational education. Provision is made for the student to make individual investigations and reports on special problems.

Education 245. Organization of Audio-Visual Aids. 3 credits. The topics to be covered in this course are: Initiating the audio-visual program, qualifications and duties of the audio-visual aids director, courses of and criteria for judging equipment and supplies, the audio-visual aids budget, projection mechanics, in-service teacher training. Prerequisite: Education 186 or equivalent.

Education 246. Motion Pictures in Education. 3 credits. The topics covered are: the history of the educational motion picture, technique in the use of films, educational scenario writing, grading and scoring films, motion picture appreciation.

