

Minutes of the University Faculty, January 11, 1954

The University Faculty met in regular session at 4:00 p.m., Monday, January 11, 1954 in the Assembly Room of Lafferty Hall. President Donovan presided. Members absent were W. R. Brown, H. H. Downing, Merton England, W. P. Garrigus, Fred Harris, John T. Masten, L. E. Meece, J. W. Miles, Edward Newbury, E. P. Slone*, W. G. Survant, Lee H. Townsend, Charles A. Walton, D. L. Weismann and Frank J. Welch.

The minutes of December 14, 1953 were read and approved.

President Donovan commented on the large number of absentees at the December 1953 meeting and reminded the elected members of the Faculty that the regulations of the Board of Trustees provides that any member who fails to attend several consecutive meetings can be removed from membership on the Faculty. He asked that the Acting Secretary make a study of the attendance record of the Faculty.

Acting Associate Dean Steele presented for the College of Agriculture and Home Economics a recommendation for a new course which was approved as follows:

Farm Engineering 107, Advanced Farm Structures (3) S
Planning buildings for the adequate housing of farm animals, crops, machinery and supplies. Design problems considering the efficient use of labor, space requirements, construction methods, use of various building materials and costs.

Dean Spivey presented for the Graduate Council a recommendation for approval of graduate credit for courses previously approved for undergraduate credit by the Faculty, graduate courses, and changes in title and catalog description of graduate courses. The recommendations were approved by the University Faculty as follows:

I. The Graduate Council recommends approval of graduate credit for the following courses, previously approved by the University Faculty for undergraduate credit:

Agronomy 120.	<u>Soil Physics.</u>	3 credits	Survant
Agronomy 141.	<u>Plant Pathology.</u>	3 credits	Diachum
Agronomy 142.	<u>Diseases of Plants.</u>	3 credits	Staff
Agri. Econ. 118.	<u>Farm Labor Utilization</u>	3 credits	Byers
Sociology 131.	<u>Sociological Analysis of American Society.</u>	3 credits	Brown
Mathematics 126.	<u>Introduction to Higher Algebra.</u>	3 credits	Ward
Mathematics 128a,b.	<u>The Operational Calculus.</u>	6 credits	Leser
Mathematics 146.	<u>Algebraic Methods in Engineering.</u>	3 credits	Ward
Ancient Languages 152a,b.	<u>Studies in Roman Philology.</u>	6 credits	Staff
Ancient Languages 153a,b	<u>Studies in Greek Philology</u>	6 credits	Staff
Ancient Languages 154a,b	<u>Studies in Semitic Philology.</u>	6 credits	Staff
Zoology 126.	<u>Speciation.</u>	3 credits	Carpenter

*Absence explained

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II. The Graduate Council recommends approval of the following strictly graduate courses:

- Agronomy 241. Virus Diseases of Plants. (4 credits) Diachum
 Characteristics and properties of viruses that cause plant diseases; host-virus relationships; identification and control of some important virus diseases; consideration of research methods. (Prereqs.: Agronomy 141 or equivalent and consent of instructor.)
- Agronomy 245a-d. Research in Plant Pathology. (3 crs. ea.) Staff
 Prereqs.: Agron. 141 or equivalent and consent of instructor)
- Agri. Econ 240. Advanced Agricultural Policy. (3 crs.) Rudd
 This course will examine the nature of agricultural policy and its formulation, the tools of analysis of agricultural policy and, in the light of the goals of agricultural policy, examine the current problem areas in agricultural policy and analytically appraise the alternative means proposed for their solution. The specific problem areas in agricultural policy to be examined will be modified from year to year in line with the changes in the issues facing agriculture. (Prereqs.: Ag. Econ. 140 and consent of instructor.)
- Botany 235. Plant Cytotaxonomy. (3 Crs.) Riley
 Cytogenetic, geographical, ecological, and other factors that have influenced the origin and development of species of plants. (Prereqs.: Botany 15 and 134 or equivalent)
- Mathematics 207 a, b. Functions of a Complex Variable (3 crs. ea.)
 Goodman or Cowling
 Differentiation and integration, contour integration, poles and residues, Taylor and Laurent series, conformal mapping, Riemann mapping theorem, Dirichlet problem, multiple-valued functions, Riemann surfaces, and applications. (Prereq.: Mathematics 106b)
- Mathematics 232 a, b. Linear Spaces. (6 crs.) Cowling
 Topological spaces, metric spaces, vector spaces, Banach space, with applications to summability theory, infinite systems of linear equations, spectral theory. (Prereq.: Consent of instructor)
- Mathematics 236. Theory of Matrices. (3 crs.) Ward
 Equivalence, inverses, symmetric and Hermitian matrices, similarity, canonical forms. Applications to systems of linear equations, differential equations, quadratic forms. (Prereq.: Math. 126 or consent of instructor)
- Physics 206. Methods of Mathematical Physics. (3 crs.) Lamarsh
 Solution of physical problems systematized according to the equations they satisfy. Variational methods, boundary conditions, eigenfunctions, Green's function, integral representations, approximation procedures, with applications from electromagnetic theory, quantum mechanics, acoustics. (Prereq.: Consent of instructor)

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- Mining Engineering 222. Ceramic Engineering. (3 crs.) Swift
Materials and equipment used in the ceramics industry. Physical and chemical principles relating to the manufacture of ceramic products such as pottery, tile, brick, white-ware, refractories, glass, and enamels on metals. Calculations involving formulas, batches of materials, and the drying and firing of ceramic ware. Lecture and recitation, three hours. (Prereq.: B.S. degree in Engineering)
- Mining Engineering 223. Fuels and Their Combustion. (3 crs.) Crouse
Available fuels in the solid, liquid, and gaseous states. Emphasis will be on the utilization of fuels in the mineral industries. Technology of fuels. Physics and Chemistry of combustion. Combustion calculations. Lecture and recitation, three hours. (Prereq.: B.S. degree in Engineering)
- Mining Engineering 224. Preparation and Uses of Industrial Minerals. (3 crs.) Swift
Sources, processing, marketing, utilization, and economics of nonmetallic minerals, and product specifications. Clay, limestone, asbestos, refractories, will be studied. Lecture and recitation, three hours. (Prereq.: B.S. degree in Engineering)
- Civil Engineering 230a-e (in place of 232a-d, which drop. (3 crs. ea)
230a. Advanced Highway Engineering. (Gregg)
A study of highway administration, economics and finance including sources and types of revenue, road costs, toll financing, classification of roads, benefits from improvement and program planning. Lecture, three hours. (Prerequisites: C. E. 130b or consent of instructor)
- 230b. Advanced Highway Engineering. (Pendley)
A study of traffic, planning and geometric design including traffic surveys, traffic control, parking and design consideration. Lecture, two hours; laboratory, two hours. (Prereq.: C. E. 130a or consent of instructor)
- 230c. Advanced Highway Engineering. (Gregg)
Highway design, construction and maintenance including physical aspects of design, drainage, road types, pavement design, construction methods and supervision, and maintenance methods. Lecture, three hours. (Prereq.: C. E. 232a)
- 230d. Advanced Highway Engineering. (Gregg)
Origin, production, classification, and significant properties of bituminous materials, bituminous paving mixes, paints, metal products and miscellaneous materials used in the highway industry. Tests and application of test data. Lecture, two hours, laboratory, two hours. (Prereq.: C. E. 130b)
- 230e. Advanced Highway Engineering. (Gregg)
Production, classification and significant properties of Portland and natural cements, mineral aggregates, and concrete paving mixtures. Tests and application of test data. Lecture, two hours; laboratory, two hours. (Prereqs.: C. E. 130b)

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Zoology 216a-d. Problems in Speciation. (3 crs. ea.) Carpenter. Determination of animal distribution (particularly Drosophila), measurements of reproductive potential, genetic and ecological analysis of Drosophila populations, species determination, intra and interspecific competition, nutritional preferences of Drosophila species. (Prereq.: Zool. 126)

III. The Graduate Council recommends approval of changes in title and (in some instances) changes in catalog description of the following graduate courses, none of them new:

Change Markets and Rural Finance 204 to Agri. Econ. 206.
 Change Farm Economics 202a,b to Agri. Econ. 220a,b.
 Change Markets and Rural Finance 230 to Agri. Econ. 230.
 Change Markets and Rural Finance 231 to Agri. Econ. 231.
 Change Markets and Rural Finance 210 to Agri. Econ. 250.
 Change Markets and Rural Finance 202a-c to Agri. Econ. 260a-c.
 Change Farm Economics 204 to Agri. Econ. 216.
 Change Markets and Rural Finance 200a-c to Agri. Econ. 200a-d.
 Change the title of Civ. Engineering 202a-d from Construction to Advanced Concrete Structures and approve the following new catalog description for each part of the course:

202a. Theory and application of condensed forms of stress analysis and design as applied to continuous unsymmetrical building frames. Lecture, three hours. (Prereqs.: C. E. 171b and C. E. 110b.)

202b. Theory and application of the column analogy method of stress analysis and design as applied to members and continuous structures with emphasis on arches. Lecture, three hours. (Prereqs.: C. E. 171b and C. E. 110b.)

202c. Theory and application of stress analysis and design methods as applied to continuous unsymmetrical frames carrying horizontal loads; frames with haunched members and continuous arches on slender piers. Lecture, three hours. (Prereq.: C. E. 202b.)

202d. Problems in the design and detailing of special structures, selected jointly by the student and instructor. Lecture, one hour; laboratory, four hours. (Prereq.: C. E. 202c)

Change the title of Civ. Engineering 272a-d from Structural Engineering to Advanced Steel Structures and approve the following new catalog description for each part of the course:

272a. Theory and application of the Williot and Mohr diagrams, Maxwell's law of reciprocal relations, virtual work and influence lines for determining deflections, movements and camber in design of continuous steel trusses and plate girders. Lecture, three hours. (Prereqs.: C. E. 171b and C. E. 173b)

272b. Preparation of design drawings of structures analyzed and proportioned in C. E. 202a and C. E. 272a. Laboratory, four hours. (Prereqs.: C. E. 202a and C. E. 272a)

272c. Theory and application of stress analysis and design methods as applied to single and multi-span gabled frames and thin shells. Lecture, three hours. (Prereqs.: C. E. 272a and C. E. 202b)

272d. Theory and application of stress analysis and design as applied to suspension bridges. Lecture, two hours; laboratory, two hours. (Prereqs.: C. E. 272a)

Dr. William S. Ward, Chairman of the Planning and Policy Committee, presented a motion that the Chairman of the University Faculty appoint a Committee which will seek to make suggestions designed to raise the level of scholastic attainment at the University, which was approved. The Chairman of the University Faculty requested that the present Planning and Policy Committee consisting of W. S. Ward, Chairman, Merl Baker, W. P. Garrigus, H. W. Hargreaves, Sarah B. Holmes, Vernon A. Musselman, Paul Oberst and H. A. Romanowitz undertake this study. The report of the Committee is as follows:

To Members of the University Faculty:

Your 1953-1954 Planning and Policy Committee has adopted the following general policy: namely, that it will concern itself with two sorts of matters: (1) short "information" reports before the Faculty by members of the teaching and administrative staff; (2) study reports which relate to educational policy and practice in the University.

University Faculty members are urged to call to the attention of some member of the committee any matter that they would like to see brought before the Faculty in either of these two ways.

At the January 11 meeting of the Faculty the Committee proposes to make the following motion: That the Chairman of this Faculty appoint a committee which will seek to make suggestions designed to raise the level of scholastic attainment in the University.

Among the matters which such a committee might wish to consider are the following:

1. The Advisory System: how it can be improved.
2. Study Orientation: the advisability of a required orientation course to deal with such matters as "How to Study," "How to Use the Library," and so on.
3. Reading: the wisdom of expanding the University's remedial reading program. The Orientation program might conceivably concern itself with this matter, especially for the weaker student.
4. Writing: the need (1) to persuade the faculty to report students for "Poor Work in English" (p. 28 of the General Catalogue) and (2) to require remedial work in English of those transfer students whose placement scores indicate a serious deficiency in English, even though they have transferred course credit in composition.

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5. Arithmetic: the wisdom of requiring remedial work of all students whose placement scores indicate a serious deficiency in their understanding of basic arithmetical and algebraic principles.

6. Study Conditions: the improvement of study conditions in all University housing units.

7. General Reading: making newspapers and good periodicals more generally available to students in University housing units.

Perhaps the problem of raising the level of scholastic attainment with reference to the above basic learning skills and tools and the problems of programming and advising are greater than one committee can deal with adequately. It is possible, however, that such a committee could concern itself at least in some measure with the question of creating an atmosphere which places a high value on scholastic achievement, fosters an inquisitive and critical attitude, and in general substitutes interest for apathy.

The Committee is aware of the fact that in one or two instances the University as a whole, or some individual college, has concerned itself with the problems raised here and that remedies, later to be discontinued, have been attempted. The Committee believes, however, that the problems raised (as well as others that might be named) are basic problems and are worthy of the deliberations of a committee appointed specifically for this purpose.

Respectfully submitted,

Merl Baker
W. P. Garrigus
H. W. Hargreaves
Sarah B. Holmes
Vernon A. Musselman
Paul Oberst
H. A. Romanowitz
William S. Ward, Chairman

President Donovan stated that he had received a letter from Mr. Ivan Jett, Director of the Kentucky Chain Stores Council, announcing that the Council was planning a dinner similar to the one held last year in honor of the University Faculty. He stated that because of limited facilities, the invitations last year had been sent only to the faculties of Agriculture and Home Economics, Engineering and Commerce and that this year they would invite the faculties of Arts and Sciences, Law, Education and Pharmacy as well as some of the others who did not receive invitations last year. The dinner is to be given Thursday, February 25, at 6:30 p.m. at the Lafayette Hotel. President Donovan urged that this invitation be accepted by as many faculty members as possible since it was a gesture of good will on the part of the Chain Stores Council.

The Faculty adjourned.

Maple Moores
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Acting Secretary