

MINUTES OF THE MEETING OF THE FACULTY SENATE OF THE UNIVERSITY OF ARIZONA
Monday, April 5, 1954 Room 101, Law Building

The meeting of the Faculty Senate convened in regular session at 3:40 P.M. on Monday, March 1, 1954, in Room 101 of the Law Building. Thirty members were present with Dr. Nugent presiding in the absence of President Harvill.

The minutes of the meeting of March 1, 1954, as previously distributed to members of the Senate, were approved.

Catalog changes, Report re: Dr. Nugent called attention to the report of catalog changes and additions as approved by the Advisory Council and asked if there were any questions regarding this report. (List of changes attached hereto).

Dr. Roberts asked about the University policy in connection with the practice of submitting requests for catalog changes during the biennium. Dr. Nugent explained that there has been no stated change in the procedure of publishing the catalog every two years, and Mr. Leshner reported that it was the understanding that no requests would be submitted during the biennium in which catalog is effective unless they were to meet an emergency.

Admission requirements, Proposed change in College of Agriculture: Dr. Roberts called attention to the request of the faculty of the College of Agriculture for the deletion of plane geometry as a requirement for admission to regular Freshman standing. He requested an explanation of the reasons for this change which resulted in a listing of only six required credits with nine elective credits.

Dean Eckert explained that the faculty of the College of Agriculture had found that plane geometry is not necessary as a prerequisite for the prescribed curricula in the College of Agriculture, with a few exceptions. He explained also that a doctoral thesis recently published by Cornell University concludes that geometry is not an essential to most agricultural curricula. It was felt that retention of geometry tends to discourage high school students who might otherwise prepare for admission to the University and for this reason it was felt desirable to follow the pattern established by the majority of land grant colleges.

As a preliminary to considering this question formally and at some length, Dr. Roberts moved that the request of the College of Agriculture for the deletion of plane geometry in the admission requirements be denied. This motion was seconded by Dr. Carpenter.

Dr. Pistor explained that a number of students while going through high school are not certain as to just what specialty to follow in college and that when some of these enroll at the University they find it necessary under the present requirement to establish credit in plane geometry. The listing of this requirement serves to work a hardship on these students. The value of plane geometry in itself was appreciated by the faculty, but the necessity of retaining it as an admission requirement was questioned.

Dean Eckert expressed surprise that the request of the College of Agriculture faculty as approved by the Advisory Council would be challenged, especially in consideration of the practice in the majority of land grant colleges. He asked for further clarification of the reasons for the motion and its second.

Dr. Roberts' first statement in this connection is quoted, as follows:

"In the first place, this argument for utility does not register very strongly with me, and I think it is an argument that should not register very strongly with university faculties. Courses are not to be judged by their practical value, and if they

"were we should close down every liberal arts college in the country. Plane geometry is in my opinion, and I have some support for this, one of the most important, essential subjects in the whole high school curriculum. I am not alone in that - one of the most thorough, scholarly reports or studies ever made of high school curricula was made by the Harvard Committee and embodied in a report on General Education in the Free Society. They say, in general, exactly what I have said; namely that if you were going to leave out all the other courses in high school we should keep plane geometry because it is one course in which the student is introduced to a logical process of reasoning. I'd argue that the course is justified on some other basis than on the basis of utility. That emphasis on utility is one of the things that brings about the crisis in the whole subject of liberal education today. On the other hand, I cannot understand how we can reason that this course is not needed in the College of Agriculture because I call attention to the fact that the student is required to take Mathematics 70. It is described as College Algebra and Trigonometry. How are you going to teach trigonometry to a student who has not had plane geometry? He is also required to take Physics 5 and the prerequisite for Physics 5 is Mathematics 70, embodying trigonometry. I am told by both Dr. Graesser and Dr. Warner that nothing has been said to either one of them about this change or whether geometry is necessary in the course given in Mathematics and in Physics for students in Agriculture. It seems perfectly obvious to me if you are going to keep Mathematics 70 in the curriculum you must require plane geometry. I do not think you can teach Trigonometry without knowledge of plane geometry. Referring to the study made at Cornell, I have made a study myself. I went through the catalogs from Alabama to Wyoming to see what the practice was - I am talking about only the Colleges of Agriculture - and in twenty-one of these I find that they require plane geometry for entrance and in sixteen they do not. The quantity, perhaps, is not so important as the quality. Dean Eckert mentioned that in Penn State it is not required; Penn State requires it in 9 out of 11 curricula. It is required at California, Connecticut, Georgia, Idaho, Idaho State College, Illinois, Kansas State, Maine, Massachusetts, Michigan State, Purdue, Rhode Island, Rutgers, Texas A & M, West Texas State, West Virginia State College, Wisconsin, Cornell, New Mexico College of A & M at Las Cruces, and Nebraska. It is not required at Arkansas, Clemson, Florida, Iowa State (four curricula require it at Iowa State, others do not), Louisiana, Mississippi State, Missouri, North Dakota, Ohio, Oregon State, South Dakota, Virginia State, Washington State, Wyoming, Oklahoma, and Montana. At Iowa State they have the requirement that the student cannot enter on high school certification unless he has an average of three or better. We have nothing like that. I'd say the preponderance is in favor of the schools that do require it.

"There is another point. I am told students of the College of Agriculture have their chief difficulties in courses in Mathematics, English, and Chemistry. Are you going to make it any easier for the student to get through his college mathematics when you leave out a whole year of high school mathematics? If he has trouble now, what is going to be the situation when you leave out a whole year of preparatory work? I speak very feelingly about chemistry. They have trouble in chemistry aside from unwillingness to work. I think the student is going to be in more trouble when he comes more poorly prepared. I also call attention to the fact that the College of Agriculture has courses in the field of engineering. How are you going to take any course that merits the name of Engineering if you do not know the ratio between the circumference and diameter of a circle? How are you going to teach them Engineering?"

Dr. Roberts acknowledged the problem of competition for students between institutions. He questioned, however, the wisdom of lowering standards in order to meet such competition since obviously we cannot continue long to have recourse to such an expedient. He felt that the University should be made to appeal to students because of the high quality of its work and the exceptional opportunity it affords, and not by reason of its offering requirements that are easy to meet. He suggested that the question had been submitted without adequate consideration as to what it involves. Apparently the matter had not been reviewed with the head of the department of physics or the head of the department of mathematics regarding the effect on basic elements of work in those departments. Neither has anything been said about exceptions such as in the case of Agricultural Engineering. He felt that as

long as the work of the College of Agriculture is retained as of high standard and that it was regarded as a professional rather than a vocational school, the present admission requirements should be retained.

Dean Eckert explained that it was not the intention of the faculty of the College of Agriculture to withdraw geometry as a requirement in connection with all the curricula in the College of Agriculture. Engineering, he stated, would require it. He emphasized the retention of the phrase "strongly recommended" in the change from the present requirement and pointed out that the College of Agriculture faculty had recommended the change only after much discussion. He pointed to the type of training in Home Economics as an example of the nature of curricula which would not necessitate completing plane geometry as a part of the preparation for college work. He referred also to the lack of plane geometry in connection with admission to the College of Liberal Arts and the College of Business and Public Administration. He indicated on the other hand that certain curricula in the College of Agriculture, such as work leading to degrees in Engineering and Agricultural Chemistry, would require geometry. He reported also that some time ago Vice-Dean Hawkins of the College of Agriculture had had correspondence with Dr. Graesser, head of the department of mathematics, regarding the prospective change, and that he himself had often discussed the possibility with Dr. Webb of the department of mathematics. The faculty of the College of Agriculture, he said, have no interest in lowering standards in connection with work given in the college and it is not their intention to leave the way open for the lowering of any standards in the type of courses given at present. There is no chance, he said, that the College of Agriculture will interest itself in a vocational type of training for the student.

Dr. Carpenter pointed out that the move to delete geometry is not one toward uniformity with the other colleges of the University. It is true that some of the other colleges do not specifically require geometry for admission but it is also true, he said, that they have other specific requirements of subjects of importance and worth academically and they do not allow an excessive number of free electives toward admission. It was his judgment that the change lowers the standards of admission by allowing an additional free elective. He also called attention to the fact that Clemson College, which was mentioned as one of those institutions which does not require geometry for admission, was reported in a survey conducted by Dean Roy last year as having an excessive number of failures in various fundamental Freshman courses including Mathematics, English, Languages, Chemistry, et cetera. The report indicated that those failures were as much as 50% higher than at Arizona in some of the basic courses. He protested the deletion of geometry on the ground that it was not required in a number of other institutions and the general practice of following policies established by other institutions without due regard for the interests of our own university. In reply to a question by Dean Eckert, Dr. Carpenter said he could not state that the failures at Clemson College were directly related to the admission requirements of that institution. Dean Eckert pointed out that the University would not be out of order in following the example of other leading land grant institutions, and it was these to which he referred specifically in pointing out the absence of plane geometry as an admission requirement.

Dr. Rhodes stated that the lack of proper training in mathematics, including geometry, was directly related to failures in college chemistry. It was distressing, he said, to find so many students who cannot grasp, or who have never grasped, the concept of geometry. Training in geometry would prove an experience in the type of reasoning, the type of mental exercise, involved in satisfactory accomplishment in elementary chemistry.

Dean Eckert asked at this point if Dr. Rhodes had found a clear distinction in his classes among students from Liberal Arts, Fine Arts, Business and Public Administration and the College of Agriculture. This question had not been studied, according to Dr. Rhodes, but his impression was that there are somewhat more low grades among the students from the College of Agriculture. However, he had not made a careful comparison of this situation. It was his conviction that if there is any large number of students in

the future who have no training in the type of preparation which plane geometry affords, the number of students finding difficulty in freshman chemistry will be greatly increased.

Dr. Muir called attention to the statement of the recommendation as submitted which indicates that the requirement of plane geometry would be entirely deleted. In view of Dean Eckert's comments that the requirement would apply in certain major fields of study, he asked if this would be clarified in the statement published in the catalog. Dean Eckert reported that the clarification of this point was not indicated in the statement submitted to the Council but that the Senate might wish to refer the original request to the College of Agriculture for further consideration on this point. It was Dr. Roberts' opinion that if exception is to be made in certain major fields, it should be clearly provided for in the proposal of the College of Agriculture faculty, but that in the light of the statement as submitted to the Senate, the request should be denied.

Dr. Barnes called attention to the listing of certain required courses in the Agriculture curricula as stated in the catalog. He referred specifically to courses in mathematics which have as their prerequisite plane geometry. Dean Eckert explained that in some cases students were allowed to take equivalent courses as a means of meeting the requirement.

Mr. Leshar asked if in connection with the deletion of plane geometry the College of Agriculture faculty had considered the possibility of adoption of subject matter Plan B, as effective for admission to Liberal Arts, Fine Arts, and Business and Public Administration. Dean Eckert explained that Plan B had been considered. It was the feeling that to "strongly recommend" geometry would be a sufficient standard for admission. It encourages the student to take the subject in high school as preparation for college work but at the same time leaves the way open for him to be admitted to regular freshman standing as is done under Plan B which does not require credit in plane geometry. He stated that the College of Agriculture requirements in connection with its more technical work, such as in engineering and in Agricultural Chemistry and Soils, would be made familiar to the student through the Agricultural organization, including County Agents and Home Demonstration Agents, and that there was little likelihood that students who plan to prepare for these fields would come without credit in geometry.

The desirability of having the catalog quite clear in connection with the requirement for engineering and chemistry was again emphasized by Dr. Roberts. This clarification was also urged by Dr. Muir who felt that the proposal should be restated before it could be favorably considered by the Senate. Dean Roy also agreed that it would be well to deny the request as submitted and refer it to the College of Agriculture for further consideration.

Dean Eckert offered a substitute motion that the recommendation be returned to the College of Agriculture for further study in the light of the comments made, with particular regard to the statement being clarified as to what extent plane geometry might or might not be required for admission to the College of Agriculture. This motion was seconded by Mr. Leshar.

Dr. Roberts pointed out that the substitute motion was not in order but that he would withdraw his original motion to deny the request so the way could be left open for consideration of the new motion. Dr. Carpenter also withdrew his second of the original motion.

Dr. Nugent ruled that the original motion was withdrawn and called for any further discussion on the motion made by Dean Eckert to return the request to the College of Agriculture. There was no further discussion, and when the question was called for, the motion passed unanimously.

Committee to Study Registration Policies and Procedures, report of: The Registrar, as Chairman of the special committee appointed to study the plan of registration, read the report of the Committee which outlined its recommendations in connection with proposed adjustments in the present plan. He explained that the committee had had a number of meetings with members

of the student committee on registration and that the recommendations represented points on which the two committees were in agreement. The report of the committee, copy of which is attached hereto, was briefly explained by Mr. Leshner, who stated that the present general plan of registration is retained. However, in the fall provision is made for registration, during Freshman Week, of upper-division and graduate students, between the hours 9 to 12 daily. The enrollment of students is spread more evenly over the two-day period by establishing hourly quotas for registration based upon a lottery system conducted by the student body. It was felt that this quota plan would avoid over-crowding, especially in the early hours of registration, and allow for a more effective advisory program. It was acknowledged that registration may now be completed without difficulty in the two-day period, but it was the hope of the committee that the early registration of upper-division and graduate students might be tried as an experiment, especially in connection with prospective increases in enrollment which would otherwise tend to crowd registration on the two days regularly assigned.

Provision is made also for the assignment of medical examinations for new students throughout Freshman Week and for the distribution of appointments to all students in connection with student photographs for identification purposes.

At mid-year, the general plan effective in the fall would be continued but provision would be made to issue registration materials, including the schedule of hours, immediately after reopening of classes following Christmas vacation, and to allow students to report to their advisors during the period up to the opening of final examinations. The advisors would check and approve the general program of the student, who would then hold his registration materials until the regular days of registration, when he would complete his enrollment under the hourly quota system. It was provided, however, in this connection, that the advisory program would be administered only during the regular office hours of the faculty.

The Registrar also reported that the student committee had expressed the hope that a standing committee on registration would be appointed and that a student member would be designated to attend such meetings of the committee as were devoted to discussion of criticisms or adjustments in the plan of registration. The faculty committee made no recommendation on this point.

The Registrar submitted the report as a motion of the committee for adoption of its recommendations. This constituted a seconded motion.

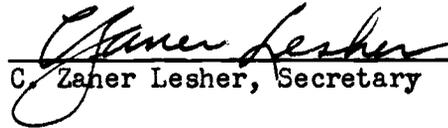
Dr. Muir felt that the Senate should have the opportunity to read the recommendations of the committee in detail before action was taken, and, therefore, moved to postpone consideration of the report until the next meeting. The Registrar reported that it had not been possible to distribute copies of the recommendations prior to the Senate meeting inasmuch as the committee had had its final meeting this same day. He felt it desirable, however, to have the Senate act in order that such action might be published to the students as soon as possible.

Dr. Muir's motion was seconded by Dean Brown and passed. Mr. Leshner stated that he would send copies of the committee recommendations to the members of the Senate with a copy of the minutes of this meeting. Dr. Nugent suggested that the matter be presented again at the next meeting of the Senate and thanked the members of the committee for their report.

Committee to Study Question of Absences, Report of: Dr. Roberts explained that his committee is still working on the problem of how to administer absences and that the report is not yet ready for presentation to the Senate.

Faculty Salaries, Newspaper Report re: Dr. Solve explained that the Tucson Daily Citizen had erred in printing a report regarding faculty salaries but upon its attention being called to the true situation, it agreed to publish the correct status of University salaries as related to those of other institutions in the western area and to editorialize on the subject of adequate salaries for members of the Faculty.

The meeting adjourned at 5:10 P.M.


C. Zaner Leshner, Secretary