

UNIVERSITY OF MINNESOTA
Graduate School

Minutes of the Executive Committee
Tuesday, October 8, 1963
1:30 P.M. 306 Johnston Hall

Present: Dr. C. P. Barnum, Professors A. Orville Dahl, W. E. Ibele, R. L. Jones, W. A. Russell, D. R. Torbert; Prof. R. E. Comstock for W. P. Martin; Professor J. G. Darley; by special invitation, Deans Marcia Edwards, Frank Verbrugge, S. O. Berg; Mrs. Martha Hostettler - Graduate School Research Center; Deans F. M. Boddy, J. C. Haugland; Dean Bryce Crawford, presiding; Mrs. Shirley McDonald, secretary.

The Graduate School Executive Committee meeting was called primarily to screen and rank fourteen program applications under Title IV of the National Defense Education Act. However, several other items were discussed briefly prior to the Title IV activity.

1. November Executive Committee Meeting - It was agreed that the Committee should meet once each month during the coming academic year. The next meeting date was set for Tuesday, November 5 -- 12:00 noon at the Campus Club.
2. Proposed New Programs - Dean Crawford mentioned that there have been several proposals for new Master's and Ph.D. programs. Some have already gone to the appropriate group committees, others will be referred. He also reported that a special Subcommittee on Paramedical Programs has been appointed with Dr. John Darley as its chairman. This committee, he pointed out, will review and make recommendations on certain interdisciplinary programs which do not fall within the scope of one of the regular graduate group committees.
3. Proposed Changes in Minor Requirement for the Ph.D. - Dean Crawford reported to the Committee that a second letter outlining changes proposed in the Ph.D. minor requirement has gone to the Graduate Faculty. Copies of letters which the dean received in response to the earlier faculty letter along with copies of his replies were distributed to the Executive Committee. This compilation will also be sent to the group committees.

Dean Crawford asked that the subject be discussed further in group committee meetings with a view toward reaching a decision this fall quarter.

4. The Research Technique - Dean Boddy reported to the Committee that mathematics courses formerly numbered 53 and 54 have been used to satisfy the Research Technique by a good many graduate students, especially in the field of Agricultural Economics. This fall, the numbers were changed to 43 and 44 - Lower Division numbers. This would seem to violate the Graduate School rule which states that Upper Division or graduate level courses are required. It was brought out that the course description in the 1963-64 catalogue of the College of Liberal Arts reads, "courses 43 and 44 are available for Upper Division credit except to majors in mathematics . . ."

It could then be interpreted that these courses will satisfy the Research Technique requirement. Dean Boddy said that this has been checked with the appropriate faculty in mathematics. The Executive Committee concurred in the decision that these courses may continue to be used for the Research Technique requirement in the Ph.D.

5. NDEA - Title IV - Fourteen graduate fellowship program applications under Title IV of the National Defense Education Act were reviewed and ranked by the Committee.

Proposals for initial programs of study were considered first. They were ranked in the following order:

1. Counseling Psychology Research (Psychology)
2. Econometrics (Economics)
3. Integrated Electronic and Magnetic Circuitry Via Sputtering Techniques (Electrical Engineering)
4. Special Education (Special Education)
5. Preparation for Library School Teaching (Library School)
6. The Advanced Degree Program in Plant Physiology (Plant Pathology and Physiology)
7. Teachers Internship Program for Graduate Students in Engineering Utilizing Closed Circuit TV (Aeronautics and Engineering Mechanics)
8. Preparation of College or University Teachers in Public Administration (Political Science)
9. Preparation of Teachers in Professionally Oriented Communication (Speech and Theater Arts)

Next, the proposals for additional fellows in previously approved programs were discussed. They were ranked in the following order:

1. Training of Research Education Psychologists (Educational Psychology)
2. High Energy Physics (Physics)
3. Non-equilibrium Thermodynamics for Mechanical Engineering Students (Mechanical Engineering)
4. Soils: Microclimatology (Soils Science)
5. German Literature (German)

Finally, the two lists were compared and the Committee agreed on the over-all priority listing:

1. Counseling Psychology Research
2. Training of Research Educational Psychologists
3. Econometrics
4. High Energy Physics
5. Non-Equilibrium Thermodynamics for Mechanical Engineering Students
6. Soils: Microclimatology
7. Integrated Electronic and Magnetic Circuitry Via Sputtering Techniques
8. Special Education
9. Preparation for Library School Teaching
10. The Advanced Degree Program in Plant Physiology
11. Teachers Internship Program for Graduate Students in Engineering Utilizing Closed-Circuit TV

12. Preparation of College or University Teachers in Public Administration
13. German Literature
14. Preparation of Teachers in Professionally Oriented Communication

The application forms will be completed and sent with the proposals to the Office of Education in Washington with a covering letter showing a separation of the new and additional requests for fellowships as well as the combined rank.

Respectfully submitted,

Mrs. Shirley McDonald
Secretary

October 14, 1963

October 3, 1963

Dr. F. M. Boddy
Assistant Dean
Graduate School
216 Johnston Hall
Minneapolis Campus

Dear Dr. Boddy

We would appreciate receiving a ruling by yourself or the Executive Committee of the Graduate School regarding the possibility of using Math 43 and 44 as a research technique for our majors. In the past a large number of students have used Math 53 and 54 for this purpose; about one-half of our present candidates for the Ph.D. would like to continue to use courses in Calculus for this purpose.

The use of Math 53 and 54 has met the technical requirements of a research technique, as stated in the 1962-64 Catalog of the Graduate School:

1. "In no case may the special research technique subject or the collateral field of knowledge be one that has regularly or traditionally been included in the major or minor fields of study of similar candidates in the past." This has not been a regular requirement in Agricultural Economics. Calculus also have not been a prerequisite for the courses in Economics which usually have been taken to fulfill the requirements for a minor in Economics (the minor chosen by at least 70 percent of our students).
2. "The special research technique subject should represent the acquisition of any special skill that will effectively contribute to the research proficiency of the candidate." Since much of the research deals with numerical data, any increase in mathematical knowledge will be helpful. We would like to see an increased competency in this field, although it is a competency that is not needed by all of our students.
3. "A special research technique is defined as not less than nine credits in approved Upper Division or graduate courses, completed with a grade not lower than C." Math 53 and 54 were Upper Division courses, and the total credits was 10.

Our question arises due to the renumbering of these courses to Math 43 and 44 (normally Lower Division courses). Under the description of these courses in the 1963-64 catalog of the College of Liberal Arts (page 103) appears this statement: "Courses 43 and 44 are available for Upper Division credit except to majors in mathematics ... " We intrepret this to mean that they can be used to satisfy the requirements for a research technique; we would appreciate however, a ruling on this matter.

We have found that the opportunity to use these courses as a research technique has been very beneficial for our students. We expect that this will continue to be so for several years, although we hope that this situation may change. Some of the reasons are:

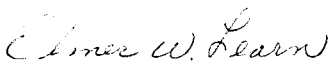
1. Most of our graduate students are graduates of agricultural colleges, where calculus is not required for graduation.
2. The courses included in the major and minor for most of our students do not carry a prerequisite of calculus.
3. A knowledge of calculus is beneficial for these students in many respects.
4. With a background in calculus they are able to enroll in courses where this is a prerequisite. This enables them to obtain a broader or deeper training. Many of the students would find that it would not be profitable for them to provide the prerequisites for these courses if it was necessary for them to prepare themselves for two languages or for one language and another research technique or collateral field.

Incidentally, we do not approve the use of calculus as a research technique if the student chooses a minor, such as statistics, where calculus is normally a prerequisite to the courses included in the minor.

Yours truly



Selmer A. Engene
Chairman of Graduate Committee
Department of Agricultural Economics



Elmer W. Learn
Head, Department of Agricultural Economics

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UNIVERSITY OF MINNESOTA
Graduate School

Minutes of the Executive Committee
Tuesday, November 5, 1963
1:30 P.M. 306 Johnston Hall

Present: Dr. C. P. Barnum, Professors A. Orville Dahl, W. E. Ibele, R. L. Jones, W. A. Russell, D. R. Torbert, R. E. Comstock for W. P. Martin, Dr. Victor Johnson; Deans T. W. Chamberlin, J. C. Haugland, F. M. Boddy; Dean Bryce Crawford, presiding; Mrs. Shirley McDonald, secretary.

1. Specialist in Education Certificate - Counseling.

Professor Russell was asked to describe briefly to the Executive Committee the new program in Counseling which was approved by the Education Group Committee and the Graduate School in June, 1963. The program in Counseling brings the present number of Specialist Certificate programs to six, Professor Russell reported. There are three in Educational Administration, one in School Psychological Services, and one in Special Education. Any question of possible overlap between the new Counseling program and the School Psychological Services program was dispelled--the Education Group Committee agreed that there are substantive differences between the two: School Psychological Services involves individual student problems such as testing, diagnosis, personality, and the like; the Counseling program emphasizes the administrative and personnel aspects of counseling programs in the schools.

There followed some discussion on the general usefulness of such Specialist programs to people seeking professional qualifications. Additional programs could be developed in areas where an academic degree is presently used for this purpose. In this connection, Professor Russell said that the Education Group Committee has discussed the research requirement ("stuffed papers") for the Plan B program. Some have suggested that this requirement be lightened or eliminated since this is the main obstacle for those students looking for professional qualifications. Dean Crawford mentioned that the State Department of Education, in working out plans for the fifth year certification requirement for teachers, has made no mention of an advanced degree. There would be a preliminary certification at the end of the fourth year so that the teacher could begin teaching, and final certification would come after a fifth year of work concentrated in subject matter courses.

2. Proposed New Majors.

Dean Crawford reported to the Executive Committee that several proposals for new majors have been submitted to the appropriate Graduate Group or special committees for their review and recommendation. These include the following proposals:

- (a) Ph.D. in Electrical Science; (b) Ph.D. in Control Sciences to the Physical Sciences Group Committee.

- (c) M.A. in American Legal Institutions; (d) changes in the M.S., M.B.A., & Ph.D. in Business Administration to the Social Sciences Group Committee.
- (e) M.S. in Hospital Pharmacy; (f) M.S. in Hospital Engineering;
- (g) The present Ph.D. program in Hospital Administration to the special Paramedical Committee.
- (h) Ph.D. in Mathematical Education - to a special committee.
- (i) Ph.D. in Industrial Relations - to a special committee.

The dean asked that any action or recommendation on these proposals be reported at the December Executive Committee meeting.

3. Report on Recent Association of Graduate Schools and Council of Graduate Schools Meetings.

Dean Crawford mentioned first, the AGS Committee on Testing which has worked with Cornell University and the U.S. Office of Education in the development of standardized proficiency tests in German, French, and Russian. Tests in the three languages were given, on an experimental basis to students in several colleges in the spring of 1963. The Educational Testing Service is the agency which will administer, distribute, and maintain the proficiency tests. The tests will be available within a year for those colleges wishing to use them. Dean Crawford will write to the Educational Testing Service to get sample tests.

The Council of Graduate Schools has a committee working on accreditation of graduate schools. Apparently a number of federal agencies and professional organizations believe that it would be desirable to have lists of graduate schools specified as "good" graduate schools in the various fields of graduate education. Dean Crawford said that he would pass along to the Committee any communications he receives in this regard.

Dean Boddy mentioned the development and administration of tests by the Educational Testing Service to determine the ability of applicants from non-English speaking countries to use the English language. ETS plans the first world wide administration of these tests early in 1964. In this same connection, Dean Crawford reported that the I.I.E. (Institute of International Education) is offering a service to Admissions personnel in graduate schools to provide information on foreign applicants in Africa, Asia, and the Latin American countries. This will be accomplished by I.I.E. representatives stationed in the applicants' home countries. The kinds of information the representatives hope to provide will include the applicant's general academic competence, English language competence, financial position, and physical health and personality. The Council of Graduate Schools has endorsed a survey of some twenty graduate schools to be sponsored by the I.I.E. and College Entrance Examination Board. The survey will attempt to "determine procedures presently employed and problems experienced in evaluating foreign students applying for admission and award." The Executive Committee will be informed of further developments.

4. Proposed Changes in the Minor Requirement for the Ph.D. Degree.

Dean Crawford reported to the Committee that most of the response he has received from the Graduate Faculty favored the proposed "flexible" or "coherent" program as an alternative to the present "classical" minor. There was, he said, some degree of exception in regard to the role of the "Graduate Counselor."

The dean asked for the Committee's reaction to moving forward on establishing an alternate minor. Professor Russell commented that he had not heard any objections toward the proposal. Professor Ibele asked whether this new minor would be a supplement to the present minor. He also said that, in his opinion, the Physical Sciences Group Committee endorsed the proposal in principle. Professor Torbert remarked that, in the Language and Literature Group Committee, there had been discussion in respect to when programs are submitted for action. So many, he said, are filed very late--usually after most or all of the course work has been completed. The result is that most group committee members feel that questioning the program at this late date would penalize the student unduly. Early advising and early filing of student programs would certainly "lighten" the load for the group committees.

Some of the Graduate Faculty, it was brought out, have indicated that if the "flexible" minor is adopted, the present system of program planning, advising, and group committee action should be retained. Both Dean Crawford and Dean Boddy pointed out that this would add to the already heavy burden of work falling to the group committees.

Dean Crawford asked the Executive Committee for suggestions which might be incorporated into a "bulletin-copy" type of description to be prepared by the Graduate School. This brief would then be circulated to the Executive and group committees for study and discussion.

The discussion began with some questions. Professor Torbert asked if the "Graduate Counselor" would take the place of the minor adviser; Dr. Johnson asked whether the "Graduate Counselor" would represent a field and act upon all programs in that field. **Would the program be acted upon by a designated Graduate Counselor?**

Professor Torbert suggested that the proposal be discussed more fully with the departments since it certainly will affect the material they submit for Graduate School Bulletin copy.

Dr. Barnum brought up the question, again, of earlier submission of programs. Would there be a way in which a time limit could be enforced? Dean Crawford explained that with the present records system in the Graduate School, there would be no way of policing any rigid regulation. He did say, however, that with new procedures which are now being developed, we may be able to keep better track of student progress.

Dean Crawford asked again about the preparation of a definitive document on the proposed "coherent" program. The program itself can be defined clearly enough--"The coherent program in related fields would require not less than one-sixth of the total time of the doctoral program involving some 18-22 quarter credits of study. "... A coherent program must be offered, a pattern of study perhaps embracing several separate disciplines, but clearly forming

a purposeful program with the same type of supporting relation to the major field as the present normal minor requirement."

The dean went on to say that the "Graduate Counselor" would serve in the room of the normal minor adviser, and hopefully would give his advice at an early stage. Professor Comstock commented that this one person would have an impact on many programs and would have to be very wise indeed if he were to avoid becoming "too formal" in his action on the programs. A student, he said, choosing the "flexible" minor would want to give a lot of careful thought to the plan and certainly the major adviser and the student are in the best position to really know the student's interests and goals. Professor Comstock asked why the group committees could not call on ad hoc advisers when they need help with this type of program.

Professor Dahl then quoted from a discussion held by the Biological Sciences Group Committee at their October meeting. "In an area such as the Biological Sciences, the current arrangements for the minor requirement for the present population of students have permitted, in a number of cases at least, desirable--and I hope adult--flexibility with reference to discovery of relevant educational experience. However, there are instances where greater latitude, but still with reference to an academically sound program, may well be needed. Thus a potpourri of the old and the new is desirable. However, the matter of new Counselors seems not so appealing. In some areas at least, Group Committee review as at present, or the possible selection of one or more of its membership to serve as reviewer, would appear to be an effective mechanism with minimal introduction of complication. In the Committee's discussion there emerged the suggestion that a stipulation that two members of the Ph.D. examination be outside of the Major Department could effectively, and simply, provide the basis for attaining some of the goals which are being sought." Professor Dahl also mentioned that since this committee handles a smaller number of programs, their review of the "flexible" minor programs would not increase their burden to any great extent.

Dr. Barnum commented that he feels, as the student's major adviser, that he would wish the student to get advice from someone competent in the areas of the coherent program and cognizant of Graduate School policy as well.

Dean Boddy said that there would seem to be two choices here. One, the student would be sent to someone representing all areas in the "coherent" minor; two, there would need to be a representative from the major department who would take the responsibility of knowing about the courses in the various areas. There would be some advantage in having a "Graduate Counselor" acting upon all "coherent" programs in an area for he could see what trends and traditions are developing. A departmental position can be taken as well. The "Graduate Counselor" would be responsible to both the department and the group committee.

Dr. Barnum brought out that the "Graduate Counselor" would merely make his recommendation to the group committee, which would, as usual, take final action.

Dean Boddy then suggested that, since there is a difference of opinion on the subject, perhaps it might best be left to the group committees to decide which procedure to adopt.

Professor Dahl said that "Counselors" could be called in by the group committees should it be necessary.

Dr. Barnum, speaking for the Medical Sciences Group Committee, approved the proposal stating that the "Graduate Counselor" would be a substitute for the minor adviser--and that advising at an early stage would be a real advantage. Professor Russell, for the Education Group Committee, went along with a general approval pointing out that in the Education Committee, a Graduate Counselor would be advantageous because of the diversity of fields. At present, it isn't possible to have each one represented on the group committee. Professor Ibele, for the Physical Sciences Group Committee, said that the proposal was approved in principle, but that some members believe that the Graduate Counselor would complicate the number of steps, and might interfere with the role of the major adviser. He said, also, that perhaps the role of the Graduate Counselor was not clear. Very likely the committee didn't take into account the additional work which would be imposed by reviewing these new programs. Administration of the "flexible" minor, according to Dean Boddy, would be more awkward than that of the present minor. However, this is to be expected and certainly the advantages of a "coherent" program for some students would make it worthwhile.

Dean Crawford then asked the Executive Committee to consult with their group committees to determine which procedure they would wish to use. If the "Graduate Counselor" plan is the choice, names of potential Graduate Counselors should be indicated. (These people are not to be contacted at this time, however.)

Dean Boddy suggested that the group committees might nominate a Graduate Counselor in each major field or establish a panel of Graduate Counselors representing the general areas within the group committees. The major adviser and student would plan the program and choose from the panel the person most closely associated with the coherent program.

Professor Comstock asked how one is to view this "flexible" minor--does one look at the whole including the major and related fields? Dean Crawford remarked that the student's major is really what holds the program together--thus the program is to be considered as a whole. The major adviser and student would be expected to fill the Graduate Counselor in on why the program is a "coherent" one.

Dean Crawford asked the Executive Committee for an opinion on how widespread the flexible minor program should be. Should it, at first, be opened up to only a few fields where the need is apparent, or should it be available immediately in all fields? Dean Boddy wondered whether departments should authorize the "coherent" program for their specific departments? Dean Crawford suggested that perhaps the Graduate Faculty in a major discipline should agree that the alternative minor is permissible. Or perhaps the use of the flexible minor could be left to the discretion of the major adviser and handled on an individual basis.

It was finally concluded that in the "definitive document" to be prepared in the Graduate School, there will be included a statement to the effect that the Graduate Faculty in all major fields will be asked if they wish the alternative minor to be implemented in their particular areas.

The date for the December Executive Committee Meeting was set for Friday December 6. It will be held at 12:00 noon in the Board Room of the Campus Club.

Respectfully submitted,

Mrs. Shirley McDonald
Secretary

November 8, 1963

SPECIALIST IN EDUCATION - COUNSELING

An advanced graduate program (90 credit) leading to the certificate Specialist in Education - Counseling is offered by the University of Minnesota.* This program is designed for preparation of counselors, supervisors, and directors or coordinators of guidance and counseling programs in school systems. Persons desiring to prepare for counseling positions in other settings may be admitted on an individual basis.

Students must satisfy all requirements for the Master's degree either at the University of Minnesota or elsewhere before being admitted to the Specialist program.

Admission to the Specialist program requires approval of the Graduate School and a major adviser in Counselor Education in the Department of Educational Psychology. While the program will be adapted to the individual student's needs and interests, all students are required to complete certain course work selected from designated core areas. The additional credits may be selected from other Graduate School offerings to complete the required 90 credits.

A prospective student must complete an application form for admission to Graduate School. This will include official duplicate copies of transcripts of all college work completed to date plus the names and addresses of three persons who are able to comment in detail on the applicant's qualifications for the six-year program. Applicants are required to provide results of a graduate form of the Miller Analogies Test before the application will be reviewed. The selection committee may request additional test information on an individual basis for certain applicants.

The minimum residence requirement for the Specialist program is 45 credits earned at the University of Minnesota. Qualifying examinations in specified areas

*See University of Minnesota Graduate Bulletin for detailed requirements pertaining to the Specialist Certificate in Education.

may be required, by the major adviser and the departmental faculty, of students who bring credits from other institutions. After admission to the Graduate School for the Specialist program and satisfactory completion of at least 9 credits beyond the Master's degree, the student must file a program for the certificate on the appropriate form available in the Graduate School office. This program form will list all courses completed beyond the Bachelor's degree which will be presented for the Specialist Certificate, as well as those courses which he proposes to complete in fulfillment of the requirements for the award of the certificate.

Although a student who later becomes a doctoral candidate may include in his program courses completed for this Specialist Certificate, candidates for the certificate will not ordinarily be considered as beginning work leading to the Ph.D. degree.

Persons interested in enrolling in this program should write to the Dean, Graduate School, University of Minnesota, for an application for admission to the Specialist program. Those students who have completed the M. A. degree at the University of Minnesota will file a Graduate School Change of Status form to request consideration for admission to the Specialist program. Those who want further information about the program or who have other questions should write to Professor Willis E. Dugan, Department of Educational Psychology, 139 Burton Hall, University of Minnesota, Minneapolis 14, Minnesota.

I. Core Program - The core program must include a minimum number of credits as indicated in each of the following areas:

| | |
|--|------------|
| Area 1 - Foundations of Student Personnel Work | 15 credits |
| Area 2 - Foundations of Education | 12 credits |
| Area 3 - Psychological Foundations | 15 credits |
| Area 4 - Learning | 6 credits |
| Area 5 - Statistics | 6 credits |
| Area 6 - Measurement and Appraisal | 9 credits |
| Area 7 - Research Methods and Problems | 9 credits |
| Area 8 - Practicum | 9 credits |

II. Elective Credits

Breadth of liberal studies is expected in the undergraduate background of persons entering counselor preparation. Candidates for graduate degrees in Counselor Education who lack such foundation courses will be expected to add to their program work in the social, behavioral, and biological sciences.

Additional elective courses may be selected from the core areas and related disciplines with the consent of the adviser, completing the 90 credits required for the Specialist Certificate. In selecting elective courses, careful consideration should be given to the needs and interests of the individual student.

III. Course Selections Satisfying the Core Requirements

At the University of Minnesota, the following courses may be used in meeting core course requirements. Students selecting courses from this listing to meet course requirements will be expected to satisfy prerequisite course requirements. Other closely related courses in core areas may be approved by the adviser.

Area 1: Foundations of Student Personnel Work (15 credits)

| | | |
|--------------|---|-------------|
| Ed Psych 133 | Procedures in Student Personnel Work | 3 credits |
| Ed Psych 134 | School Counseling Procedures | 3 credits |
| Ed Psych 152 | Introduction to School Psychological Services | 3 credits |
| Ed Psych 225 | Counseling Theory and Procedure: I | 3 credits |
| Ed Psych 226 | Counseling Theory and Procedure: II | 3 credits |
| Ed Psych 234 | Advanced Counseling Procedures | 3 credits |
| Ed C. I. 124 | Foundations of Career Development | 3 credits |
| Ed C. I. 125 | Occupational Information Laboratory | 3 credits |
| Ed Psych 200 | Seminar - Institute in Guidance | 1-3 credits |
| Ed Psych 201 | Seminar - Counseling Needs of Able Students | 3 credits |

Area 2: Foundations of Education (12 credits)

| | | |
|--------------|--|--------------------------|
| Ed C. I. 113 | High School Curriculum | 3 credits |
| Ed C. I. 119 | Elementary School Curriculum | 3 credits |
| Ed C. I. 169 | Extra-curricular Activities | 3 credits |
| Ed C. I. 250 | Higher Education in the United States | 3 credits |
| Ed. Ad. 201 | Foundations of Educational Administration | 3 credits |
| Ed. Ad. 202 | Foundations of Educational Administration | per quarter 3 credits |
| Ed. Ad. 167 | The Junior High School | per quarter 3 credits |
| Ed. Ad. 230 | Public School Community Relations | 3 credits |
| Ed. Ad. 265 | The High School Program | 3 credits |
| Ed. Ad. 274 | The Junior College | 3 credits |
| H. Ed. 101 | Historical Foundations of Modern Education | 3 credits |
| H. Ed. 131 | Comparative Education | 3 credits |
| H. Ed. 141 | Critical Issues in Contemporary Education | 3 credits |
| H. Ed. 182 | Comparative Philosophies of Education | 3 credits |

Area 3: Psychological Foundations (15 credits)

| | | |
|--------------|--------------------------------------|-----------|
| Psych 125 | Differential Psychology | 3 credits |
| Psych 126 | Differential Psychology | 3 credits |
| Psych 144-45 | Abnormal Psychology | 6 credits |
| Psych 171-72 | Clinical Psychology | 6 credits |
| C. D. 248 | Child Clinical Psychology | 3 credits |
| Ed Psych 182 | Education of Exceptional Children | 3 credits |
| Ed Psych 259 | Personality Theory in Mental Hygiene | 3 credits |

Area 4: Learning (6 credits)

| | | |
|--------------|--|-----------|
| Psych 128 | Psychology of Learning | 3 credits |
| or | | |
| Ed Psych 193 | Psychology of Human Learning | 3 credits |
| and either | | |
| Ed Psych 293 | Psychology of Learning | 3 credits |
| Ed Psy 294 | Recent Theory and Research in Human Learning | 3 credits |

Area 5: Statistics (6 credits)

| | | |
|---------------------------|--|--------------------------|
| Ed Psych 116 | Introduction to Statistical Methods | 3 credits |
| Ed Psych 216 | Statistical Methods in Education | 3 credits |
| Ed Psych 217 | Statistical Methods in Education | 3 credits |
| Ed Psych 218 | Statistical Methods in Education | 3 credits |
| Ed Psych 216a, 217a, 218a | Statistical Methods in Education - Laboratory | 2 credits per quarter |

Area 6: Measurement and Appraisal (9 credits)

| | | |
|--------------|--|-----------|
| Ed Psych 100 | Individual Appraisal for Counseling | 3 credits |
| Ed Psych 117 | Basic Principles of Measurement | 3 credits |
| Ed Psych 140 | Instruments and Techniques of Measurement | 3 credits |
| Ed Psych 210 | Individual Mental Testing | 3 credits |
| Ed Psych 211 | Advanced Individual Mental Testing | 3 credits |
| Ed Psych 264 | Assessment of the Handicapped | 3 credits |
| Ed C. I. 151 | Diagnosis and Treatment of Learning Difficulties | 3 credits |
| Ed C. I. 145 | Reading Difficulties | 3 credits |

Area 7: Research Methods and Problems (9 credits)

| | | |
|--------------|---------------------------------------|-------------|
| Ed Psych 208 | Methods in Educational Research | 3 credits |
| Ed Psych 233 | Problems: Guidance and Personnel Work | 3-9 credits |
| Ed Psych 253 | Research Problems | 3 credits |

Area 8: Practicum (9 credits)

| | | |
|---------------|------------------------------------|-----------|
| Ed Psych 282A | Field Practice in Guidance | 3 credits |
| Ed Psych 282B | Supervised Practicum in Counseling | 3 credits |
| Ed Psych 290 | Advanced Counseling Practicum | 3 credits |
| Ed C. I. 280 | Supervision of Counseling | 3 credits |