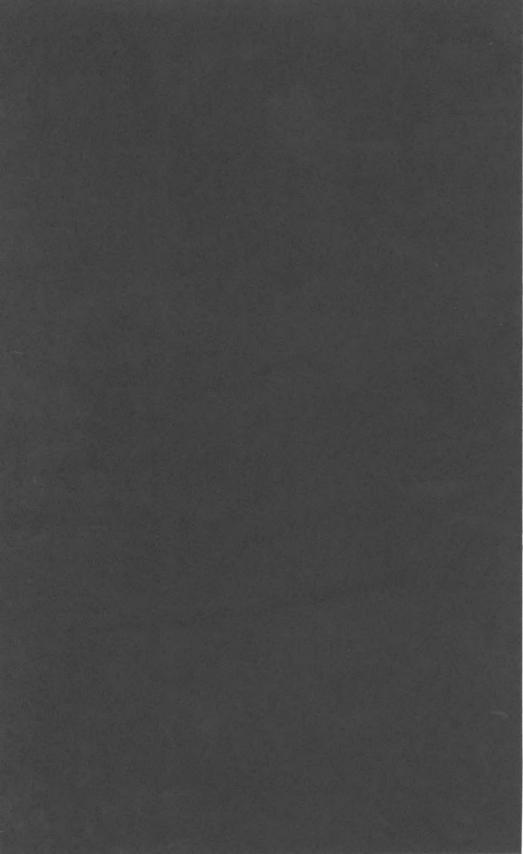


Cornell University Announcements

Field of Education



Field of Education

1974-75

Cornell University Announcements

Volume 65 of the Cornell University Announcements consists of twenty-one catalogs, of which this is number 21, dated September 4, 1973. Publication dates: twenty-one times a year (four times in August; three times in March and July; twice in January, June, and October; once in April, May, September, November, and December). Publisher: Cornell University, Sheldon Court, 420 College Avenue, Ithaca, New York 14850. Second-class postage paid at Ithaca, New York.

Cornell Academic Calendar

Registration, new students Registration, continuing and rejoining students Fall term instruction begins Thanksgiving recess: Instruction suspended, 1:10 p.m. Instruction resumed, 7:30 a.m. Fall term instruction ends, 1:10 p.m. Final examinations begin Final examinations end Registration, new and rejoining students Registration, continuing students Spring term instruction begins, 7:30 a.m. Spring recess: Instruction suspended, 1:10 p.m. Instruction resumed, 7:30 a.m. Spring term instruction ends, 1:10 p.m. Final examinations begin Final examinations end Commencement Day

The dates shown in the Academic Calendar are subject to change at any time by official action of Cornell University.

Thursday, August 29 Friday, August 30 Monday, September 2

Wednesday, November 27 Monday, December 2 Saturday, December 7 Friday, December 13 Saturday, December 21 Thursday, January 23 Friday, January 24 Monday, January 27

Saturday, March 22 Monday, March 31 Saturday, May 10 Monday, May 19 Wednesday, May 28 Monday, June 2

In enacting this calendar, the University Senate has scheduled classes on religious holidays. It is the intent of Senate legislation that students missing classes due to the observance of religious holidays be given ample opportunity to make up work.

Summer Sessions Calendar, 1974

Registration, three week summer session,*
three-week summer session instruction begins
Registration, eight-week summer session,
eight-week summer session instruction begins
Three-week summer session instruction
suspended

Three-week summer session final examinations, three-week summer session ends
Registration, six-week summer session
Six-week summer session instruction begins

Six- and eight-week summer sessions instruction suspended

Six- and eight-week summer sessions final examinations begin

Six- and eight-week summer sessions end

Wednesday, June 5

Monday, June 17

Monday, June 24

Tuesday, June 25 Wednesday, June 26 Thursday, June 27

Wednesday, August 7

Thursday, August 8 Friday, August 9

^{*} All dates for the three-week session are tentative.

Announcement

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The courses and curricula described in this *Announcement*, and the teaching personnel listed herein, are subject to change at any time by official action of Cornell University.



Field of Education

The graduate Field of Education at Cornell is concerned with the scholarly study of education through relevant disciplines, through the development of basic theory and research, and through the application of theory and research to contemporary education problems.

Students prepare for positions in public and private school systems, two and four-year colleges, universities, state and federal educational agencies, government and industrial enterprises, both in the United States and overseas. In addition to the usual university teaching and research positions, specialized educational careers include administration, teacher education, counseling, instructional materials development, organizational planning.

Graduate work at Cornell is largely individualized. The several specializations within the Field of Education provide opportunity for students to select an appropriate area within which to carry out this scholarly study. Each student plans a program of studies with the advice of a Special Committee of faculty members selected by him, whose teaching and research interests are concentrated in the program area.

Major and minor program areas of study in Education are Agricultural and Occupational Education, Community Service Education, Counseling and Student Personnel Administration in Higher Education, Curriculum and Instruction, Economics-History-Philosophy-Sociology of Education, Educational Administration, Educational Psychology and Measurement, Educational Research Methodology, Extension and Continuing Education, Home Economics Education, Science and Environmental Education.

This Announcement presents the program areas and the courses of instruction offered by the Department of Education in the New York State College of Agriculture and Life Sciences, and in the Department of Community Service Education in the New York State College of Human Ecology. Further information regarding any major subject may be obtained from

the coordinator of that graduate program or from the Office of the Field Representative, Education, Stone Hall.

Graduate Programs

Agricultural and Occupational Education

W. E. Drake, Coordinator; J. P. Bail, A. L. Berkey, H. R. Cushman, F. K. T. Tom

The program in agricultural and occupational education focuses on preparing students for specialized positions as teacher educators in agriculture and administrators of occupational education enterprises. Candidates are encouraged to take a significant amount of course work in a related field of study that contributes to professional and technical competence.

Current research interests are in areas of college teaching, assessment of inservice needs, task analysis, agricultural images.

Community Service Education

I. Lazar, Coordinator; J. Archibald, R. J. Babcock, D. Barr, S. E. Blackwell, H. Brenden, J. Ford, R. Hunt, I. I. Imbler, M. E. Minot, B. J. Mueller, H. Y. Nelson, L. A. Noble, K. Rhodes, L. Street, J. Wright.

The program in community service education focuses on analysis of a wide range of community services intended to help people improve or maintain the quality of everyday life. The aim of such analysis is to identify skills required by human service professionals and auxiliary workers, to design appropriate education programs, and to develop methods of coordinating and evaluating human services.

Current research interests include development of consolidated human services systems; study of ethnically-owned communities; effectiveness of paraprofessionals in community service; concepts of individual family and community

differentiation: methodologies to measure consumer responses.

Counseling and Student Personnel Administration in Higher Education

K. M. Moore, Coordinator; H. G. Andrus, D. J. Barr, J. R. Egner, J. Failing, D. E. Hedlund, W. J. Pauk, R. E. Ripple.

The program in counseling and college student personnel administration is an interdisciplinary behavioral science study concerned with administration of higher education and with application of psychological counseling and intervention skills to effect change on an individual, group, or organizational level.

Current research interests include counseling in higher education, student-faculty relations, women in two year colleges, occupational decision making, occupational education curriculum development in two year colleges, placement services in collegiate institutions.

Curriculum and Instruction

- G. Posner, Coordinator; B. Adams, J. P. Bail, W. L. Brittain, R. L. Bruce, W. E. Drake, H. A. Geiselmann, D. B. Gowin, D. Hedlund,
- D. Henderson, B. Nichols, J. D. Novak, K. Rhodes, R. E. Ripple, V. N. Rockcastle, K. Strike, F. H. Stutz, H. Wardeberg, J. Wilcox.

The program in curriculum and instruction is devoted to study of the curriculum and its relation to instruction. Students may focus on the curricula of subject areas such as science, mathematics, reading, and occupational

education, or on general curriculum topics from various disciplinary perspectives such as philosophy, psychology, and sociology. A strong foundation in the basic concepts and skills of curriculum development and instructional planning is expected.

Current research deals with the structure of knowledge, process curricula, the relation-

ship between theories of learning and curriculum development, models of curriculum buildings, and design of instructional materials.

Economics, History, Philosophy, and Sociology of Education

K. A. Strike, Coordinator; D. B. Gowin, E. J. Haller, K. M. Moore, F. H. Stutz.

Students in this program specialize in one or more of the cognate disciplines underlying the social, cultural and intellectual context of education. Philosophy of education pursues the analysis of conceptual problems and of values. History of education is concerned with the educational heritage, with comparative educational systems, and with development of college and university systems. Sociology of education deals with the social structures of schools and classrooms, and sociology of the teaching profession. Economics of education is concerned with resource allocation within the educational system, with analysis of relationships between the educational system and the society as a whole.

Current research deals with philosophy of the behavioral sciences; political and legal philosophy; conceptualization of freedom and authority; decision making from a disciplinary perspective.

Educational Administration

L. B. Hixon, Coordinator; J. P. Bail, R. L. Bruce, R. E. Doherty, J. R. Egner, E. J. Haller, K. M. Moore, F. H. Stutz, H. Wardeberg, J. Wilcox.

The program in educational administration focuses on theoretical concepts of administration, basic disciplines that deal with the relationships between individuals and groups within an organization and between organizations, and environmental factors which influence the educational enterprise.

Current research interests include regional studies, organizational consequences of planning, programming and budgeting systems; political socialization of school children; school paraprofessionals; procedural models for organizing and conducting occupational education programs; career decision making.

Educational Psychology and Measurement

R. E. Ripple, Coordinator; M. D. Glock, J. S. Harding, H. Levin, J. Maas, G. W. McConkie, J. Millman.

The program in educational psychology and measurement emphasizes cognition, social interaction and the nature of human growth and development. The major focuses on behavioral sciences relevant to the improvement of classroom and individual learning. Students will develop a thorough knowledge of measurement tools and data processing.

Current research deals with cognitive processes, such as reading, problem solving, learning and memory; relationships of learner and teacher characteristics; design of measurement materials.

Educational Research Methodology

J. Millman, Coordinator; R. L. Bruce, R. Darlington, D. B. Gowin, K. A. Strike.

The task of educational research methodology is to appraise scientifically generative ideas, methods, products, and values by describing and explaining them, identifying limitations and advantages, and projecting judgments about consequences of their use in the educational

enterprise. Students take work in applied statistics, methods of program evaluation, and conceptual problems in educational inquiry.

Current research interests include program evaluation, instructional objectives validation, teaching performance tests, models for training of researchers.

Extension and Continuing Education

J. P. Leagans, Coordinator; G. Broadwell, R. L. Bruce, I. I. Imbler, L. A. Noble, J. Wright.

The program in extension and continuing education focuses on understanding the nature and role of the continuing education process for adults and how to utilize it effectively as the activating force in planned programs of economic and social change. The curriculum is interdisciplinary, designed to further understanding of problems encountered in plannned change through the education of adults.

Current research interests include the structure of extension and other continuing education organizations for adults; design of programs; learning and communication processes; and evaluation of programs.

Home Economics Education

I. Lazar, Coordinator; S. E. Blackwell, J. Ford, I. I. Imbler, M. E. Minot, B. Mueller, H. Y. Nelson, L. Noble, K. Rhodes.

The program focuses on analysis of education as an instrument for change, with emphasis on improving the quality of life. Central to the program is study of the nature of changedescribing, predicting, effecting, and measuring it.

Current research includes evaluation of programs in homemaking and consumer education designed for socioeconomically disadvantaged adults; programs to prepare teachers of home economics for disadvantaged urban areas; programs for paraprofessionals in the human services; and cross-cultural studies relating educational and sociological factors to individual behavior and family development.

Science and Environmental Education

V. N. Rockcastle, Coordinator; R. B. Fischer, J. D. Novak.

The program in science and environmental education focuses on preparing students for careers in science teaching or as specialists in environmental education in schools, private or governmental agencies. Candidates are encouraged to take a significant amount of course work in a related field of study that contributes to professional and technical competence.

Current research interests include application

of learning theory to science education, improvement of instructional materials: audiotutorial learning systems, evaluation of nature center programs.

Career Education

The Institute for Research and Development in Occupational Education at Cornell University functions cooperatively with the New York State Education Department and local education agencies to strengthen and enhance occupation and career education programs and services. Objectives of the Institute are to provide training for present and future professional leaders and researchers in the area of occupational education: to initiate and conduct research related to occupations and career education, and to disseminate information regarding occupational and career education research. Consistent with these objectives, graduate study and research projects are supported by the Institute.

Degree Requirements

Students majoring in the Field of Education may be admitted for either of two types of advanced degrees: the general degrees of M.A., M.S., and Ph.D., administered by the Graduate School, and the professional degrees of M.P.S., administered by the College of Agriculture and Life Sciences, and the M.A.T. or Ed.D. administered by the Field of Education of the Graduate School.

It is the responsibility of the candidate to become familiar with the various regulations which apply to his degree candidacy and to satisfy them in the proper manner. The general regulations are contained in the Code of Legislation of the Graduate Faculty; specific requirements and/or exceptions to the general regulations are found below.

General Degrees

Students admitted for the degrees of Master of Arts, Master of Science, or Doctor of Philosophy may either major or minor in any of the graduate programs offered.

Residence. The Graduate School faculty requires that each candidate for a master's degree earn two units of residence and for the Ph.D. degree, six units of residence. All requirements for these degrees must be completed within four and seven years, respectively, of the time of first registration in the Graduate School.

Language Requirement. There is no language requirement for the M.A. or M.S. degree. Any language requirement for the Ph.D. degree is at the discretion of the candidate's Special Committee.

Field Experience. All graduate students as a part of the requirements for an advanced degree must have practical experience prior to or during their graduate program. The Special Committee will assess the candidate's experiences that satisfy this requirement.

Examinations. For the master's degree, a final examination is required. For the Ph.D. degree, a comprehensive admission to candidacy examination and a final examination are required. Examinations may be oral or both oral and written.

Thesis. Candidates for the M.A., M.S., or Ph.D. degree are required to submit a thesis in fulfillment of the requirements for the degree.

Professional Degrees

Advanced professional degrees are designed as preparation for the practitioner in education. Three professional degrees, Doctor of Education, Master of Professional Studies, and Master of Arts in Teaching are awarded.

Doctor of Education (Ed.D.)

Admission. Applicants must have completed a minimum of three years of successful experience appropriate to their proposed area of professional service.

Residence. A minimum of five units of residence is required beyond the bachelor's degree. Three units must be earned in residence at Cornell. Two units of residence beyond the master's degree or its equivalent must be earned at Cornell in regular terms, consecutive except on petition. No more than two units may be earned through extramural registration or in summer sessions at Cornell or elsewhere.

Program of Studies. A minimum of sixty-five credit hours beyond the bachelor's degree, or thirty-five hours beyond the master's degree or its equivalent, shall include advanced work in each of these subjects: educational psychology, history and philosophy of education, educational measurement and statistics, and research in education. At least fifteen hours of credit must be earned in courses other than those in professional education.

Directed Field Experience. Two consecutive academic terms of full-time experience appropriate to the candidate's field of professional service is required. This directed field experience will follow completion of two units or more of residence at Cornell beyond the master's degree or its equivalent.

The opportunity for the field experience is to be sought by the candidate with the advice and assistance of the Special Committee. The proposed plan must be approved by the Committee and filed in the Field Office.

Examinations. Two examinations are required: an admission to candidacy examination and

a two-part final examination. The admission to candidacy examination is both written and oral and is given before or during the third unit of residence. Final Examination A may be taken at the end of the fourth unit of residence, and Examination B after the thesis is approved by the Special Committee. Examination A may be written or oral or both. Examinations A and B may precede or follow the period of directed field experience.

Thesis. The candidate is required to present a thesis which will give evidence of his ability to apply knowledge to a professional problem.

Master of Professional Studies Degrees

The College of Agriculture and Life Sciences offers the Master of Professional Studies degree. The degree is oriented to applicants such as those who are employed in public or private agencies and wish to obtain advanced professional work, and recent graduates who wish to further their training for nonacademic or practitioner-type work and who find the research-oriented degrees do not meet their needs.

Admission. Applicants for admission will be required to provide either of the following:

1. a record of academic performance and scores on Graduate Record examination or Miller Analogy test consistent with those required for admission to candidacy for the degree of Master of Science, or

2. evidence of superior performance in the professional field, normally for at least three years, with evidence of intellectual and personal development, undergraduate record, test scores, special course work, and similar documentation.

Residence. A minimum of two units of residence is required, at least one of which must be earned in a semester during the academic year.

Program of Studies. Completion of thirty course hours related to the student's professional interests are to be agreed upon with the Special Committee. Twenty of the course hours must be within the College of Agriculture and Life Sciences. No more than six hours of the required credit may be earned in the problem-solving project.

A minimum grade point average of 2.5 is required. A problem-solving project approved in advance by the Special Committee and pertinent to the subject matter of the major area of concentration is required. This may be the execution of a professional action program designed under the guidance of the Special Committee. It may be the development of professional plan of attack on a pertinent problem, the development of professional materials suited to the student's situation, or the development and execution of research appropriate to the profession.

Master of Arts in Teaching (M.A.T.)

The Master of Arts in Teaching (M.A.T.) is offered for those with a baccalaureate degree planning professional preparation in the fifth year. Teaching areas include agriculture, biology, chemistry, earth science, English, foreign languages (French, German, Russian, Spanish), home economics, mathematics, physics.

Admission. Applicants must have adequate academic preparation in their intended teaching field, and give evidence of a serious career interest in teaching. Graduates of a teacher-training program are not eligible for this degree.

Residence. A minimum of two regular semesters and one summer of full-time study or two and two-fifths residence units is required. Full-time study will be required in all but exceptional cases.

Special Committee. A candidate will select a Special Committee of two or more members of the graduate faculty, one of whom will represent the M.A.T. program and serve as chairman.

Program of Studies. The program will be determined by the candidate and his Special Committee. Each candidate will be required to demonstrate teaching skill in a supervised field experience.

Final Examination. A candidate must pass a final examination conducted by the Special Committee. The examination may be written or oral or both.

Admission

It is the policy of Cornell University actively to support equality of educational opportunity. No student shall be denied admission to the University or be discriminated against otherwise because of race, color, creed, religion, national origin, or sex.

Applications for admission to the Graduate School are submitted to the Office of the Dean, Sage Hall.

All applicants in Education who are residents of the United States or Canada and whose native language is English are required to submit with their application a score from the Graduate Record Examinations Aptitude Test. Scores of the Miller Analogies Test may be substituted under certain circumstances. The GRE score is necessary for University fellowships.

Registration Deposit. An amount of \$50 must be paid by every applicant for admission after the applicant has received notice of acceptance unless the candidate has previously matriculated as a student at Cornell University. The deposit will not be refunded to any candidate

who withdraws his application after May 10 or more than fifteen days after his admission approval.

Tuition

A student whose major work is in the Field of Education pays tuition of \$775 a term. In the College of Agriculture and Life Sciences and the College of Human Ecology tuition is waived for assistantship holders. Tuition is based on residence eligibility.

Tuition or any fees may be changed by the University Board of Trustees to take effect at any time without previous notice.

Financial Aid

A limited number of graduate assistantships, scholarships, and fellowships are available in the Field of Education. Information is available from the Field Representative for Education, Stone Hall, Cornell University, Ithaca, New York 14850. Completed applications must be received by March 15 in order to receive notification by April 1.

Students who are awarded graduate assistantships ordinarily spend fifteen hours a week helping with instruction, research, or extension work. Appointments are for nine or twelve months.

Graduate students are eligible to apply for loans through the Office of Scholarships and Financial Aid, Day Hall. Residents of New York State may also obtain information from this Office concerning the Scholar Incentive Program.

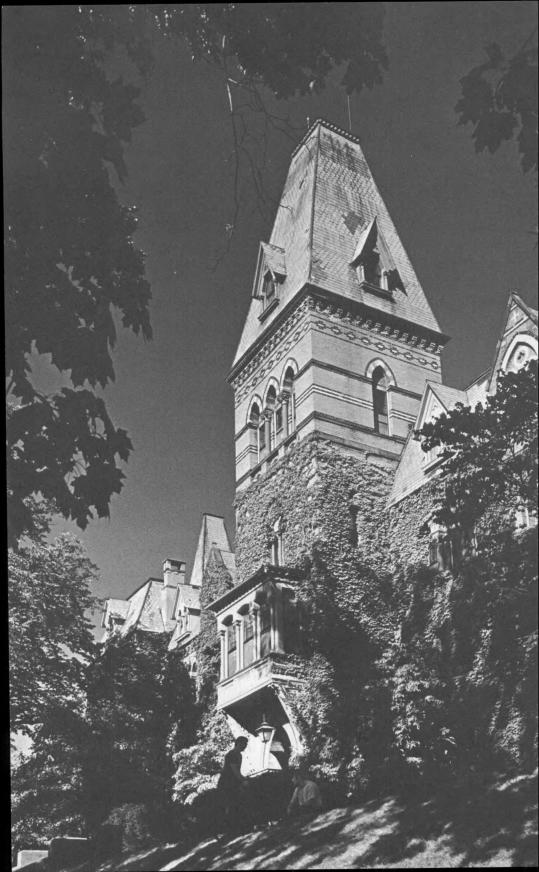
Educational Placement

An educational placement service is maintained in the Career, Summer Plans, and Placement Center, 14 East Avenue, for qualified Cornellians who wish to secure professional positions in public or private schools, colleges or universities, and other agencies.

Services include a permanent file of credentials available throughout each registrant's professional career, and up-to-date information concerning current positions, salary ranges, and certification requirements in each state.

Eligibility for registration in the Bureau is dependent on enrollment in or completion of a regular Cornell program. In order to register, students should communicate with the Assistant Director for Educational Placement, at the Career, Summer Plans, and Placement Center.

Professor L. B. Hixon serves as the certification officer for the University. Further information may be obtained from the Department of Education, Stone Hall.



Courses of Instruction

The courses of instruction listed in this Announcement are those designed primarily for graduate students pursuing the study of Education. The following courses are taught in the Department of Education in the College of Agriculture and Life Sciences.

Ed. 401 Our Physical Environment. Fall or spring term. Credit three hours. Open by permission only. Limited to eighteen students. Lecture, T 1:25; practical exercises T 2:30–4:25 and one hour to be arranged. V. N. Rockcastle. A study of the commonplace phenomena and substances in our physical environment, and their use in demonstrating basic scientific principles. Frequent field trips and firsthand examination will be used in studying air, water, soil, light, and sound, and some elementary mechanical and electrical devices. Emphasis will be placed on the physical environment as an aid to teaching the physical sciences in the public secondary schools.

Ed. 402 Literature in Conservation and Environmental Education. Spring term. Credit two hours. Open only to students above sophomore rank. T Th 11:15. R. B. Fischer. An examination of books, periodicals, and reports dealing with historical and present aspects of environmental quality and education. Students are involved in planning and offering the lectures, discussion, and literature reports.

Ed. 403 Environmental and Natural History Writing. Fall term. Credit two hours. Open to students above sophomore rank. T Th 11:15. R. B. Fischer.

For persons who wish to improve their ability to reach and influence others by publishing in magazines and newspapers. The class produces a weekly column for a local newspaper in addition to other types of articles. Subject matter, outlets for articles, news releases, posters, newsletters, and brochures are discussed. A working knowledge of biology and ecology is assumed.

Ed. 404–405 Field Natural History. Fall or spring term. Credit three hours. Limited to forty students. Lecture, M 10:10. Weekly field trips and lecture, T or Th 1:30–4:30. R. B. Fischer.

Devoted to biology and ecology of Northeastern plants and animals and their use in the environmental education programs of interpretive centers, schools, and field biology courses. Man's impact on plant and animal communities is stressed.

Ed. 407 The Teaching of Elementary School Science. Fall and spring terms. Credit three hours. Registration by permission. Limited to eighteen students. Lecture, W 1:25; practical exercises, W 2:30–4:25 and one period of public school classroom teaching to be arranged. V. N. Rockcastle.

The content and methods of elementary-school science with field work and laboratory emphasis on modern and experimental curricula. Includes class observation and experimentation. Designed particularly for those who are intending to teach or supervise elementary school science.

Ed. 408 Methods of Teaching Science in Secondary Schools. Fall term. Credit three hours. For seniors or graduate students without teaching experience. Permission of instructor required. M W 3:35–5. Staff.

Consideration of current methodology, curricula and materials for teaching science in secondary schools.

Ed. 409 Practice in Teaching Science in Secondary Schools. Fall term. Credit twelve hours. Permission of instructor. For seniors and graduate students. Hours to be arranged. Staff. Supervised practice in teaching science.

Ed. 411 Educational Psychology. Fall or spring term. Credit three hours. Prerequisite: an introductory course in psychology. Fall term: Section 1, M W F 11:15, R. E. Ripple; Section 2, special section for agricultural education majors, time to be arranged, M. D. Glock. Spring term: M W F 9:05, M. D. Glock.

Designed for students in teaching programs and/or those interested in the educational process. Consideration of the outstanding facts and principles of psychology bearing upon classroom problems. In the spring term emphasis is on measurement and evaluation.

Ed. 417 Psychology of Adolescence. Spring term. Credit three hours. Freshmen and sophomores not admitted. Prerequisite: an introductory course in psychology. Enrollment limited to 100 students. T Th 1:25-3:20. R. E. Ripple.

A survey of the nature of adolescent growth and development with emphasis on some of the causal factors pertaining to adolescent behavior.

Ed. 432 Methods, Materials, and Directed Practice in Teaching Agriculture in the Secondary School. Fall term. Credit nine hours. Staff.

Directed participation in off-campus centers in the specific and related problems of teaching agriculture on the junior and senior high school levels which includes adjustment in the school and community; evaluation of area resources, materials of instruction, and school facilities; organization and development of courses of study; launching and directing work experience programs; planning for and teaching all-day classes; advising occupational youth organizations; and other problems relating to development of a balanced program.

Ed. 433 Special Problems in Agricultural Education. Spring term. Credit one or two hours. S/U grades optional. Graduate and undergraduate. Th 1:25. Staff. The purpose is to provide students an opportunity to study individually or as a group

selected problems in agricultural education. Ed. 434 Organization and Direction of Adult Education Programs. Fall term. Credit three

hours. H. R. Cushman. Emphasis will be placed on determining instructional needs and planning programs of instruction, teaching in groups, giving individual instruction, and evaluating adult education program offerings in agricultural and occupational education.

Ed. 440 Introduction to School Learning. Spring term. Credit three hours. Prerequisite: Ed. 411. M W 10:10 and one hour to be arranged. J. D. Novak.

Cognitive learning theory will be studied as a basis for analyzing various school practices. Various forms of motivation will be examined for the effects on student's development of value structures.

Ed. 444 Teaching of Secondary Mathematics. Spring term. Credit three hours. Permission of the instructor required. T Th 3:35-5:15. H. A. Geiselmann.

For students who have had a basic mathematics methods course or have had some experience in teaching mathematics. Attention will be given to new materials and methodology in mathematics education. Special interests of the students will serve as a guide for the further selection of topics.

Ed. 445 Teaching Reading and Study Skills. Spring term. Credit three hours. T 1:25-3:30, Olin 375. W. Pauk.

For teachers, administrators, counselors, and supervisors. Pertinent research as well as the psychology and philosophy of developmental reading and study skills will be examined. Teaching methods and sample materials for classroom use will be demonstrated and discussed.

Ed. 446 General Curriculum Development. Fall term. Credit three hours. T Th 10:10-11:30. G. J. Posner, V. N. Rockcastle, and Staff. A general "how-to-do-it" course for those interested in designing plans for teaching. Focuses on specifying educational purposes. Includes instruction in setting and refining goals; designing content outlines; constructing behavior-content matrices, sequencing objectives; specifying behavioral evidence; and, to a lesser degree, implementation of this plan through instructional planning. Students will be expected to develop curriculum modules as a term project.

Ed. 452 Interpretation of Statistics Used in Education. Fall and spring terms. Credit one hour. Registration in spring term limited to those concurrently enrolled in 453. Fall term, T 12:20. Spring term, time to be arranged. J. Millman.

A brief introduction to the vocabulary and symbolism used in reporting empirical research in education. Both univariate and multivariate statistical procedures will be covered from an intuitive point of view.

Ed. 453 Introduction to Educational Statistics. Spring term. Credit three hours. Prerequisite: course 452 (may be elected concurrently), or permission of the instructor. T Th 9:05-11. J. Millman.

A study of common statistical procedures encountered in educational literature and research. The course includes the mathematical bases, computation, and interpretation of univariate and multivariate descriptive and inferential statistics.

Ed. 463 Sociology of Education. Spring term. Credit three hours. M W 1:25-3. E. J. Haller. Introduction to major themes in the contemporary literature in the sociology of education. These include social stratification and education, the school as an organization and as an institution, minority groups in the school, socialization, professionalization of teaching,

bureaucratization, the teacher-student roles. and the career patterns of teachers.

Ed. 467 Education Law. Fall term. Credit three hours. T 1:25-3:25. L. B. Hixon. Review and analysis of federal and state legislation, court decisions, opinion, and regulations which affect public and higher institutions.

Ed. 470 Issues in Educational Policy. Fall and spring terms. Credit three hours. M W F 10:10. S. Klees, K. A. Strike, F. H. Stutz. A consideration of selected issues concerning the relation of the school to society, social and individual values, and public policy. Varying emphasis will be given to historical, philosophical, sociological, political or economic approaches depending on the instructor. Typical of the issues to be treated are equality of opportunity, alternatives in education, educational authority, and the allocation of educational resources. Especially for those intending a career in teaching.

Ed. 472 Philosophy of Education. Fall term. Credit three hours. T 2:30–5. K. A. Strike. A study of central issues in the philosophy of education. Questions of ethics, political philosophy and the theory of knowledge will be examined and the implications for education

Ed. 473 Contemporary Topics in Philosophy of Education. Spring term. Credit three hours. M W 12:20-2:20. D. B. Gowin. An intensive treatment of one or two selected topics in contemporary philosophy of education.

Ed. 475 Freedom and Authority in Education. Spring term. Credit three hours. T 2:30-4:30. K. A. Strike.

An analysis of the concept of freedom in both political and psychological contexts and an application of the resulting analysis to problems of freedom and authority in education.

Ed. 499 Informal Study in Education. Credit one to three hours per term. S/U grades optional. Staff.

A student may, with approval of a faculty adviser, study a problem or topic not covered in a regular course or undertake tutorial study of an independent nature in the area of educational interests.

Ed. 500 Special Studies. Fall and spring terms. Credit arranged. S/U grades optional. Staff.

Limited to graduate students working on theses or other research projects. Each registration must be approved by a staff member who will assume responsibility for the work.

Ed. 507 The Teaching of Science. Fall term. Credit three hours. M 1:25-4:25. J. D. Novak. A consideration of learning theory as applied

to problems of selection and organization of subject matter, methods of teaching, and instructional innovation, and of curriculum innovations that embody basic learning principles.

Ed. 509 Development of Curriculum in Science. Spring term. Credit three hours, M 1:25–4:25. J. D. Novak. Study of new science curriculum programs, including: philosophy and rationale of the programs, observation of classes using new materials, and concentrated study of science curriculum development in the area of individual student's interest. Course is conducted in a seminar style.

Ed. 511 Educational Psychology. Fall term. Credit three hours. Permission of the instructor. M W F 1:25. R. E. Ripple. A basic course in educational psychology for graduate students.

Ed. 522 Educating for Community Action. Spring term. Credit three hours. Open to juniors and seniors by consent. W 11:15-1:10; F 11:15. R. L. Bruce. Design and execution of educational aspects of community action programs. Deals with the identification and statement of educational goals, selection of teaching strategies, and evaluation of outcomes.

Ed. 523 Administration of Continuing Education Programs. Spring term. Credit three hours. W 1:25-4. G. J. Broadwell. Emphasis is on identifying, describing and analyzing alternative models for planning, organizing, staffing, directing, controlling, and financing an adult education enterprise.

Ed. 524 Designing Extension and Continuing Education Programs. Fall term. Credit three hours. T 1:25-4. J. P. Leagans. Analysis of current theories, concepts, principles, and procedures central to the process of developing programs for the continuing education of adults. Emphasis is on such problems as selecting objectives from alternatives, creating support at macro level, organizing program resources at micro level, and planning for program execution.

Ed. 525 Educational Communication. Spring term. Credit three hours. T 1:25-4. J. P. Leagans. Emphasizes the centrality of useful technology and effective communication in continuing education programs. Emerging models of the communication process are reviewed as a framework for analyzing major elements including communicator credibility, program content, messages, organization and use of transmission channels, message treatment, audience identification, feedback and the design of operation communication programs.

- Ed. 526 Practicum in Continuing Education. Fall and spring terms. Credit one to three hours. Hours to be arranged. Staff. Provides opportunity for students to supplement the formal aspects of their curriculum through systematic participation in an ongoing continuing education program. Open only to graduate majors and minors in extension and continuing education.
- Ed. 527 Evaluation for Program Management. Fall term. Credit three hours. S/U grades optional. M 2:30-5. R. L. Bruce. Primary attention is given to educational and other community change programs but inferences to other program management tasks are possible. The course has a series of lecturediscussions, a continuing workshop, and individual student evaluation projects.
- Ed. 532 Teaching Agricultural and Occupational Education. Spring term. Credit three hours. M 2:30-5. A. L. Berkey. Consideration is given to an analysis of selected teaching techniques and to the selection, preparation, and use of instructional materials.
- Ed. 533 Developing Curriculum in Agricultural and Occupational Education. Fall term. Credit three hours. M 1:25-4:25. W. E. Drake. Guiding principles, objectives, and sources of information will be developed for planning the curriculum. Consideration will be given to functions of occupational experience programs and how they are planned, developed, and used as a means of instruction.
- Ed. 534 Leadership of Adult Education Programs. Fall term. Credit three hours. F 1:25-3:20. Warren 361. H. R. Cushman. Three alternative procedural models for organizing and conducting adult occupational education courses will be presented. Emphasis will be placed on guidelines and procedures for implementing the models in secondary and postsecondary school settings.
- Ed. 535 Teacher Preparation in Agriculture. Fall term. Credit three hours. W 1:25-4:25. F. K. T. Tom.

Open to persons with teaching experience in agriculture who are preparing for or are engaged in the preparation of teachers or related educational service.

Ed. 536 Administration and Supervision of

Occupational Education Programs. Spring term. Credit three hours. Offered in alternate years. W 2:30-4:25. J. P. Bail. The practices followed and problems faced in the administration and supervision of occupational programs at the secondary and postsecondary level will be stressed. Attention will be given to the role of the occupational director and supervisor in program planning and

implementation. Open to students with experience in teaching, industry, or related work.

- Ed. 539 Evaluating Programs of Occupational Education. Spring term. Credit three hours. Offered in alternate years. Open to students with experience in teaching or by permission only. T 1:25-3:20. W. E. Drake. Students will study objectives and evaluative criteria and develop procedures for evaluation of programs of occupational education in secondary and postsecondary schools.
- Ed. 545 The Curriculum. Fall term. Credit three hours. M W 10:10-11:30. G. J. Posner. An examination of the basic elements involved in making curriculum decisions and an analysis of current approaches to curriculum.
- Ed. 547 Career Education. Fall term. Credit three hours. M 3:35-6. S/U grades optional. J. Wilcox. Current problems and research in career education.
- Ed. 551 Educational Measurement. Spring term. Credit three hours. Permission of the instructor required. T 1:25-4:25. M. D. Glock. Study of construction of achievement tests and use of other measuring instruments in the classification and guidance of pupils for improvement of instruction.
- Ed. 555 Use and Interpretation of Standardized Tests. Fall term. Credit three hours. Th 3:35-6. H. G. Andrus. Open to students in counseling or personnel administration and to classroom teachers who expect to work with standardized group tests. Deals with the use and interpretation of tests in the evaluation of instruction or as a basis for guidance and selection in public schools,
- Ed. 561 Administration of Educational Organizations. Fall term. Credit three hours. W 3:35-6. E. J. Haller; J. R. Egner. A consideration of current approaches to understanding administration and organizations, and their application to the educational setting.

college, and/or industry.

- Ed. 562 The Principalship. Spring term. Credit three hours. For graduate students only. Th 3:35-6. L. B. Hixon; J. R. Egner. Organized to enable recognition and cognition of the administrative functions essential to effective elementary and secondary schools. Analysis will include the elementary and secondary school as institutions, innovation in organization and curriculum, administration of instructional and noninstructional personnel, and community relationships.
- Ed. 564 Educational Finance. Spring term. Credit three hours. T 3:35-6. G. Winter. Introduction to problems of resource procure-

ment and allocation in education. Attention will be focused on existing and alternative strategies of fiscal support for schools and new management techniques for allocating such resources.

- Ed. 565 Supervision and Educational Professions Development. Spring term. Credit three hours. T Th 2:30. H. Wardeberg. Role and function of preservice and inservice programs in educational professions development. Includes analysis of teaching as a means of facilitating improved instruction in educational institutions.
- Ed. 568 Public School Law. Spring term. Credit three hours. W 10–12. L. B. Hixon. Review and analysis of federal and state legislation, court decision, opinion, and regulations which affect New York State public schools.
- **Ed. 569 Personnel Development.** Fall term. Credit three hours. For graduate students only. Th 9:05–11. J. R. Egner.

Focus is on development of a conceptual framework for understanding roles and functions of educational personnel responsible for personnel development, and on developing skills in identifying and analyzing personnel problems, planning alternative strategies to cope with problems, and evaluating selected courses of action.

Ed. 573 Structure of Knowledge. Spring term. Credit three hours. M W 11:15. D. B. Gowin

The concept of the structure of a discipline and the development of a systematic method for the analysis of knowledge claims are the main concerns of this seminar. These concerns are related to the nature of teaching, curriculum theory and research, educational policy, and nontraditional forms of educational practice.

[Ed. 574 History of American Education.Fall term. Credit three hours. For graduate students and seniors. M 3:35-6. F. H. Stutz. Not offered in 1974-75.

An examination of the role of education in influencing the development of the American society.]

- **Ed. 575 Educational Policy Issues**. Fall and spring terms. Credit three hours. For seniors and graduate students. W 2:30–4:30. F. H. Stutz. Topic for 1974: Alternative forms of education.
- Ed. 576 Economics and Educational Policy.
 Fall term. Credit three hours. T 3:35. S. J. Klees.
 An examination of the present state of the research on selected topics in the economics of education. The emphasis will be placed on the implications of the studies examined for educational policy-making.
- **Ed. 578 Comparative Education**. Fall term. Credit three hours. M 3:35–6. F. H. Stutz.

A comparative study of selected institutions, systems and issues, to view educational development in the context of historical, social, and economic trends.

- Ed. 580 The American College Student. Spring term. Credit three hours. T Th 10:10-12:05. K. M. Moore. Study of the student in the American college with emphasis on developmental theories and current research.
- **Ed. 581 Student Personnel Administration.**Fall term. Credit three hours. Prerequisite: permission of the instructor. T Th 1:25–2:45, K. M. Moore.
 Analysis of the objectives, functions, and

Analysis of the objectives, functions, and organization of student personnel services in higher education. Emphasis on behavioral science theories supporting student personnel administration.

- Ed. 583 Counseling. Fall term. Credit three hours. Prerequisite: 555 or equivalent (may be taken concurrently) and consent of instructor. M W 1:25-2:45. D. E. Hedlund. Examination of the process of counseling and of alternative delivery models for counseling services. Introduction to theories of counseling. Basic training in interpersonal helping processes.
- Ed. 584 Group Counseling. Spring term. Credit three hours. Consent of instructor. M W 1:25–2:45. D. E. Hedlund. Techniques and principles of counseling with groups. Critical examination of current literature on group counseling. Student projects to design and test group approaches.
- **Ed. 586** Organization of Higher Education. Spring term. Credit three hours. T Th 1:25-2:45. K. M. Moore.

Designed to provide a broad perspective on the higher education enterprise. Students will gain an understanding of how higher education is organized institutionally, state-wide, and nationally; they will investigate critical roles and relationships which impinge on growth and development, and they will examine current research and commentary.

Ed. 587 Practicum for Counselors in the Use of Tests. Credit two hours. Spring term. Prerequisite: Ed. 555 or equivalent. Th 3:35–6. H. G. Andrus.

The use of standardized tests in the psychological appraisal of individuals. Emphasis will be placed on the case study approach to the interpretation of tests and the application of these diagnostic tools to the counseling process.

Ed. 589 Affective Education. Spring term. Credit three hours. D. E. Hedlund. Utilizes an experience-based, participatory design to develop basic interpersonal and small

group skills and to introduce a conceptual framework for the design, application, and evaluation of humanistic education techniques and courses. Appropriate for counselors. teachers, and administrators concerned with the development of psychological education.

- Ed. 594 College Teaching. Fall term. Credit three hours, M W 1:25-3:20, J. D. Novak, Designed for those who plan to teach in colleges and universities. Concepts of teaching. organization of subject matter, motivation, learning, testing, grading, and similar topics are treated.
- Ed 599 Methods of Educational Inquiry term. Credit three hours. Prerequisite: one course in statistics or 452 elected concurrently. T Th 2:30-4. J. Millman and Staff. For graduate students in their first year of residence. Emphasis will be placed upon describing and analyzing such procedures as forming concepts, making observations and measurements, building models and theories, providing explanations, and making predictions.
- Ed. 600 Internship in Education. Fall and spring terms. Credit two to six hours as arranged. Staff. Opportunity for practical experience in educational administration, agricultural and occupational education, personnel administration, supervision, and other types of professional service in education.
- Ed. 602 Field Laboratory in Student Personnel Administration. Fall and spring terms.
 Credit and hours to be arranged. Permission of instructor required. Staff. Directed field project in student personnel administration.
- Ed. 606 Seminar in Science Education. Fall and spring terms. Credit one hour. S/U grades exclusively, M 4:30-6. J. D. Novak and staff. For all graduate students who major or minor in this program.
- Ed. 613 Seminar in Educational Psychology. Fall term. Credit three hours. Permission of instructor required before first meeting. T 4:15-6:15. M. D. Glock. Theoretical issues in the teaching of reading.
- Ed. 616 Seminar in Educational Research. Fall term. Credit three hours. Prerequisite: 453 and 599 or permission of the instructor. Time to be arranged. J. Millman. Topic to be announced.
- Ed. 617 Seminar in Learning and Memory. Fall term. Credit three hours. Prerequisite: Psychology 306 or equivalent. Hours to be arranged. G. W. McConkie. A study of current issues in the learning, retention, and transfer of verbal information.

- Ed. 618 Seminar in Educational Psychology and Curriculum Development. Spring term, Credit three hours. Permission of the instructor required. Hours to be arranged. R. E. Ripple. Selected aspects of the relationship between curriculum and psychology of education.
- Ed 626 Seminar in Extension and Continuing Education. Fall and spring terms. Credit one hour optional. Staff. Provides opportunity for majors and minors in extension and continuing education and community service education and staff jointly to analyze and reflect on current professional

issues.

- Ed. 627 Behavioral Change in International Rural Modernization. Spring term. Credit two hours. J. P. Leagans. Analysis of concepts and strategies for repatterning human behavior at both the macro and micro levels. Changes in human behavior are viewed as a dependent variable in the rural development process.
- Ed. 628 Problems and Issues in Extension Education. Spring term. Credit three hours. Permission of the instructor. Staff. A major area of concern to extension education will be selected for intensive study by participating students and faculty. For graduate students in extension education and other fields with special relevance to the seminar topic.
- Ed. 630 Seminar in Agricultural Education. Spring term. Credit one hour. S/U grades exclusively. Th 2:30-4:25. Staff. Recommended for master's degree candidates who have had teaching experience and doctoral candidates with majors and minors in agricultural education. The seminar will be primarily centered in current problems and research in the field.
- Ed. 645 Seminar in Curriculum Theory and Research. Spring term. Credit three hours. S/U grades optional, Prerequisite: Ed. 545, 446. or permission of the instructor. Time to be arranged, G. J. Posner. Theoretical issues in curriculum and appro-
- priate areas for curriculum research are discussed. The student is expected to identify and articulate a curriculum-related problem appropriate for research.
- Ed. 663 Seminar in Sociology of Education. Fall term. Credit three hours. Consent of instructor required. T 9:05-11:15. E. J. Haller. Consideration of selected topics in sociology of education relevant to organization and policy issues.
- Ed. 668 Seminar in Educational Administration. Spring term. Credit three hours. Consent of the instructor. Th 9:05-11:15. J. R. Egner.

Consideration of planning and policy issues in public schools and higher education. Attention is directed to educational planning methodology, evaluation of strategies for long range planning, and the uses of futurist techniques in educational planning.

Ed. 669 Studies in Educational Administration. Fall and spring terms. Credit three hours. Consent of instructor required. Th 3:35–6. J. R. Egner, E. J. Haller, L. B. Hixon. Intended to provide beginning graduate students in educational administration with a critical introduction to research topics in this field and to inform them of the potential of those topics for thesis research.

Ed. 670 Seminar in the College and University. Spring term. Credit three hours. S/U grades optional. T Th 12:20–2:20. D. B. Gowin. Conditions of disciplined inquiry in higher education.

Ed. 671 Seminar in Analysis of Educational Concepts. Spring term. Credit three hours. Admission by consent. W 10:10–12. K. A. Strike. Topic for 1974 to be announced.

Ed. 673 Seminar on John Dewey. Fall term. Credit three hours. Consent of the instructor required. T 12:20–2:20. D. B. Gowin. Primary aim is a critical understanding and appraisal of Dewey's philosophy, especially as it centers upon education.

Ed. 674 Seminar in History of Education. Spring term. Credit three hours. Admission by consent. M 3:35–6, F. H. Stutz. Topic for 1974 to be announced.

Ed. 681 Seminar in Student Personnel Administration. Fall and spring terms. S/U grades optional. Credit and hour to be arranged. Prerequisite: permission of the instructor. D. E. Hedlund and K. M. Moore. Topic varies.

Ed. 699 Conceptual Problems in Educational Inquiry. Fall term. Credit three hours. Time to be arranged. K. A. Strike. An examination of such concepts as causation, operationalism, validity, reliability, hypothetical construct, generalization, explanation, probability, and hypothetico-deductive method.

The following courses are taught in the Department of Community Service Education in the College of Human Ecology.

CSE 411 Introduction to Adult Education.
Fall term. Limited to twenty-five students.
Credit three hours. S/U grades optional. T Th 8-9:55. L. Noble.

Focuses on the broad aspects of adult education, types and scope of adult education programs, philosophy and principles of adult

education, and community and organizational factors affecting development of adult programs. Opportunity will be provided for field trips for observation of adult education programs in business and industry and in community organizations and agencies.

CSE 416 The Helping Relationship. Spring term. Credit three hours. S/U grades optional. Enrollment by permission of instructor before preregistration. Limited to twenty students. Small group laboratory. T 2:30-4:25, Th 10:10-12:05. J. Ford.

Includes theory, research, and training in interpersonal skills and attitudes necessary to the helping relationship. Training includes sensitivity sessions and skill practice exercises.

CSE 441-442 Practicum Experience.

(Options 1a and 1b). Permission of option advisers. Prerequisites: Ed 411, CSE 340, CSE 306. Department Staff.

This sequence of courses involves observation and participation in the home economics or health programs of one or more schools in communities near Ithaca. Special scheduling is required for CSE 441 and 442. The instructional resource center is available for independent study throughout the year for all registered students.

CSE 441 The Art of Teaching. Fall and spring terms. Credit two hours. To be scheduled concurrently with CSE 442. This course is blocked during the first seven weeks of the term. T Th 10:10–12:05 and additional hours by arrangement. M. Minot and staff. Consideration is given to major concerns related to evaluation, management, and philosophy of teaching at the secondary level.

CSE 442 Teaching Practicum. Fall and spring terms. Credit six hours. Student teaching full time for last seven weeks of term. Guided student teaching experience with students assigned to cooperating public schools. Student teachers are required to live in the school communities and work under the guidance of both local teachers and department faculty.

CSE 443 Critical Issues in Education. Fall and spring terms. Credit two hours. Prerequisite or corequisite: CSE 441 and 442. Hours to be arranged. First seven weeks. Limited to fifty students. M 12:20–2:15. R. Babcock. An examination of current issues in education. Analysis of the historical, philosophical, social, and political factors that affect the issues.

CSE 444 Career Environment and Individual Development. Spring term. Credit two hours. M 12:20–2:20. R. Babcock. An analysis of the extent to which work, jobs, and careers relate to and shape the behavior

of individuals. Topics considered are theories of occupational choice, job satisfaction, structure of the labor force, manpower projection, and career planning. The course provides opportunities for students to examine their own vocational aspirations. At the same time, emphasis is placed on how the helping professional deals with his clients or students in preparing for, adjusting to, and maintaining iobs and careers.

CSE 471-472 Social Work Practice I and II. Fall and spring terms. Credit nine hours each semester. Enrollment limited to twenty students. Prerequisite: CSE 370. CSE 471 is a prerequisite of CSE 472. Limited to CSE Social Work majors with junior or senior standing. Fall term (CSE 471) W F 10:10-12:05 and T Th full days. J. Mueller, L. Street, and J. Archibald.

An introduction to social work practice through an integrated field and methods course. Comparison and contrast of concepts and skills used in casework, group work, and community work. Field experience in problem-solving activities with individuals, families, groups, and communities. Examination of the value base of social practice. The class meetings are integrated with two days of field instruction each week. Supervised field placements are made in selected social agencies in Tompkins. Tioga, Chemung, and Steuben counties.

CSE 473-474 Special Problems and Fields in Social Work. Fall and spring terms. Credit three hours. Priority to CSE Option II majors, CSE 473 fall; CSE 474 spring. J. Archibald.

These seminars are primarily designed for seniors in the Social Work curriculum. Building on the core curriculum and the social work practice courses, the seminars will attempt to integrate theoretical, research, and practical considerations in the examination, in depth, of specific problems and areas of social work.

CSE 600 (500) Special Problems for Graduate Students. Fall and spring terms. Credit and hours by arrangement. S/U grades optional. Department faculty.

For students recommended by their chairman and approved by the instructor in charge for independent, advanced work.

CSE 602 The Structure of Community Services. Fall and spring terms. Credit two hours. Graduate section of CSE 302. CSE majors have priority. M W 2:30-4:25. First seven weeks. Observation in 302 required. L. Street. Designed to provide a basic understanding of the nature and structure of human services on a community level. Emphasis is placed on the interactions and linkages between institutions and agencies, and the impact of needs, values, goals, and constraints on the structure and delivery of services.

CSE 610 (510) Seminar in Adult Education. Fall term. Credit three hours. S/U grades optional, T 7-9:55 p.m. J. Wright. Designed to deal with significant problem areas in adult education. Implications of theory and research in the problem area will be important considerations. One specific problem area will be considered each time the seminar is offered, the particular area to be announced at preregistration time. The seminar may be repeated with permission of the instructor.

CSE 631 (531) Seminar on Human Service Programs. Spring term. Credit three hours. S/U grades optional. Previous experience as a professional in a human service setting required. T 7-9:55 p.m. J. Wright and C. Reed. For persons who anticipate working with paraprofessionals in community service setting. The course will focus on the nature of professionalization; roots of paraprofessionalism; the New Careers concept; models of utilization of paraprofessionals; recruitment, selection, training, and evaluation of paraprofessionals: and team-building skills required by the professional. Attention will also be given to organizational practices that facilitate differentiated staffing.

CSE 650 (550) Comparative Studies of Family Education Services. Fall term. Credit three hours. S/U grades optional, W 1:25-3:20. K. Rhodes.

Factors related to planning educational human service programs for rural and urban families in developing countries. Methods of need assessment, program development and evaluation appropriate to rural and urban programs.

CSE 670 (570) Seminar in Higher Education. Fall term. Credit three hours. S/U grades optional. Hours to be arranged. K. Rhodes. Analysis of significant current topics in higher education with emphasis on problems of preparation for professional work in community services.

CSE 671-672 (571-572) The Teacher Educator in Home Economics.

For graduate students preparing for teacher education positions involving supervision of student teachers. Permission of the instructors is required. Previous experience in teaching home economics at the secondary level is required for CSE 672.

CSE 679 (579) The Teaching of Home Management in College. Spring term. Credit one to three hours. Permission of the instructor required. A. Davey.

An examination of the ways home management concepts are currently being taught and the exploration of new approaches.

CSE 680 (580) Seminar in Community Service Education. Fall and spring terms. Credit one hour. S/U grades only. T 12:30-1:15. May be repeated with permission of instructor. J. Wright.

An informal seminar for graduate students and faculty. One or two major topics related to community components and dynamics or the provision of education services to be considered each term.

CSE 684 (584) Bases for Instructional Program Planning. Spring term. Credit three hours. For professionals concerned with educational programs. Students without professional experience are admitted by permission of the instructor. K. Rhodes.

Structural-functional analysis as a system for studying instructional programs. The concept of curriculum structure, function and process and its application to practical problems of instructional program and course development. Opportunity provided for students to work on individual or group projects related to their special interests.

CSE 690 (590) Evaluation. Fall term. Credit three hours. For professionals concerned with behavioral change: extension agents, social workers, educational program directors, high school and college teachers and administrators, and research workers. Students without experience in any of these professional positions are admitted by permission of the instructor. T Th 11:15–12:30. H. Y. Nelson.

Basic principles of evaluation studied in relation to specific methods of appraising progress toward objectives of behavioral change. Opportunities will be given to constructing and using evaluation instruments.

CSE 692 Methods of Survey Research. Spring term. Credit three hours. M W 10:30–12. R. Hunt.

This is a basic course covering the use and planning of surveys, instrumental design, sampling, enumeration, interviewing and other data collection methods, editing and validation, codebook design, coding, reliability, cleaning, analysis of survey data, and selected special problems and techniques in field data collection and processing.

CSE 718 (618) Designing Human Service Programs. Fall term. Credit three hours. M 7-10 p.m. I. Lazar. Permission of the instructor is required.

Exploration of methods of translating human services research into programs for service to communities and individuals. Operational design, staffing, budget preparation, fund raising, and community auspice development, as well as evaluation, administration, and program change will be discussed. Students will be expected to fully design a local service program.

CSE 719 (619) Developing Systems for the Delivery of Human Services. Spring term. Credit three hours. M 7–10 p.m. I. Lazar. Permission of the instructor is required. In this seminar descriptions of various attempts to build consolidated systems for delivery of human services at local, state, and federal levels will be presented. An assessment of these efforts will be followed by an examination of new system designs and the specification criteria for the measurement of system effectiveness. It will be assumed that students in this course are already familiar with the present service structure of typical communities.

CSE 773 (673) Internship and Field Work in Teacher Education. Fall and spring terms. Credit two hours. S/U grades optional. Prerequisite: CSE 671 and 672. Hours to be arranged. M. E. Minot and H. Y. Nelson. Involves supervision of student teachers and conferences as needed with college supervisor and cooperating teachers in the schools. Provision made for a follow-up visit to a first-year teacher.

CSE 775 (675) Administration and Supervision Practicum. Spring term. Credit two hours. S/U grades optional. Permission of the instructor required. Th 2:30–4:10. Miss Rhodes. Analysis of principles of supervision and administration in educational institutions through directed observation of the organization of state, city, and college programs concerned with aspects of community service education. (Approximate cost of field trips \$35.)

CSE 790 (690) Seminar in Evaluation.
Spring term. Credit two hours. S/U grades optional. Prerequisite: CSE 690 and education 453 or equivalents. W 2:30-4:10, S. E. Blackwell.

Opportunity for intensive study of literature concerning selected topics in evaluation, refinement of appraisal techniques, and carrying out an evaluative study related to current department research.

CSE 899 Master's Thesis and Research. Fall and spring terms. Credit and hours to be arranged. S/U grades optional. Registration with permission of the chairman of the graduate committee and the instructor. Department graduate faculty.

CSE 999 (699) Doctoral Thesis and Research. Fall and spring terms. Credit and hours to be arranged. S/U grades optional. Registration with permission of the chairman of the graduate committee and instructor. Department graduate faculty.

Register

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Arthur L. Berkey, Associate Professor of Agricultural Education. Ph.D. Michigan State University

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Foundations. Ph.D., Yale University

Emil J. Haller, Associate Professor of Educational Administration. Ph.D., University of Chicago

John S. Harding, Professor of Human Development and Family Studies. Ph.D., Harvard University

Dalva E. Hedlund, Assistant Professor of Occupational Psychology and Guidance. Ph.D., Colorado State University

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Irving Lazar, Professor of Community Service Education and Chairman, Department of Community Service Education. Ph.D., Columbia University

J. Paul Leagans, Professor of Extension Education. Ph.D., University of Chicago

Harry Levin, Kenan Professor of Psychology and Chairman, Department of Psychology. Ph.D., University of Michigan

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George W. McConkie, Associate Professor of Psychology and Educational Psychology. Ph.D., Stanford University

Jason Millman, Professor of Educational Research Methodology. Ph.D., University of

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Benjamin Nichols, Professor of Electrical Engineering. Ph.D., University of Alaska

Lucinda Noble, Associate Professor of Community Service Education and Associate Dean of Public Service and Continuing Education, Human Ecology. Ph.D., University of North Carolina at Greensboro

Joseph D. Novak, Professor of Science Education. Ph.D., University of Minnesota

Walter J. Pauk, Professor of Education and Director of Reading-Study Center. Ph.D., Cornell University

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Lloyd C. Street, Associate Professor of Community Service Education. Ph.D., University of California, Berkeley

Frederick H. Stutz, Professor of History of Education. Ph.D., Cornell University

Kenneth A. Strike, Assistant Professor of Philosophy of Education, Ph.D., Northwestern University

Frederick K. T. Tom, Professor of Agricultural Education. Ph.D., Cornell University

Helen L. Wardeberg, Professor of Education and Chairman, Department of Education. Ph.D., University of Minnesota

John Wilcox, Professor of Education and Director, Institute for Research and Development in Occupational Education, Ed.D., Cornell University

Joan Wright, Assistant Professor of Community Service Education. Ph.D., Cornell University

Master of Arts in Teaching Program Faculty

Agricultural Education

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English

Robert Farrell, Coordinator Barry B. Adams

Home Economics

Helen Y. Nelson, Coordinator Sara E. Blackwell Marion E. Minot Kathleen Rhodes

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Jacques Bereaud, Coordinator LeRoy Benoit John Kronik Herbert Kufner Richard Leed

Mathematics

Alex Rosenberg, Coordinator Harrison A. Geiselmann Anil Nerode

Science

Verne N. Rockcastle, Coordinator Richard B. Fischer Joseph D. Novak

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