Counseling, Educational Psychology and Special Education — Descriptions of Courses

831. Theory of Formal Languages I
Fall. 3(3-0) CPS 382 or approval of department.
Definition of formal languages; acceptors and grammars; regular, linear and context free languages; closure properties.

832. Theory of Formal Languages II
Winter. 3(3-0) CPS 831.
Context sensitive languages; derivation restricted grammars; semantics of formal languages.

835. Analysis of Graph Algorithms
Fall. 3(3-0) MTH 334, CPS 322.
Basic concepts in graphs, fundamental graph algorithms; shortest path, minimum spanning trees, network flows, connectivities, matching, their limitations and complexities, other graph algorithms, NP-complete graph problems.

841. Artificial Intelligence I
Fall, Winter, 4(4-0) CPS 471, STT 441.
Knowledge representation, heuristics, theory of problem solving, expert systems, adaptive systems, natural language understanding, automatic theorem proving, vision systems.

842. Artificial Intelligence II
Spring. 3(3-0) CPS 841.
Representation of inexact knowledge, learning systems, description of intelligent systems, case studies, term project.

876. Performance Measurement Techniques
Fall. 3(3-0) CPS 313, CPS 322, STT 441.
Performance evaluations on computer systems, evaluation of the central processor, system analysis, simulation, programmed measurement, and instrumental measurement techniques. Case studies.

881. Operating Systems Theory I
Winter. 3(3-0) CPS 313, STT 441.
Control of concurrent processes. Deterministic and probabilistic models of processor scheduling. Introduction to auxiliary buffer storage models.

882. Operating Systems Theory II
Spring. 3(3-0) CPS 881.
Auxiliary and buffer storage models. Storage allocation in paging systems. Multiprogrammed memory management.

884. Large Data Base Theory
Summer. 3(3-0) CPS 313, CPS 452, or approval of department.

890. Special Topics
Fall, Winter, Spring, Summer. 2 to 4 credits. May reenroll for a maximum of 10 credits. Approval of department.
Special topics in computer science of current interest and importance.

899. Master's Thesis Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

906. Advances in Pattern Recognition
Fall. 3(3-0) CPS 805, CPS 806, CPS 822.
Current research topics in pattern recognition, exploratory data analysis, syntactic pattern recognition and digital image processing; practical applications of pattern recognition methodology.

911. General Automata Theory I
Fall of odd-numbered years. 3(3-0) CPS 423 or SYS 827 or approval of department. Interdepartmental with Electrical Engineering.
Characterization of machines and programs as automata; mathematical decomposition of finite automata.

921. Multiprocessors and Parallel Processing
Fall. 3(3-0) CPS 812, CPS 815. Interdepartmental with Electrical Engineering.
Massively parallel processor, parallel memory, interconnection network, tightly and loosely coupled multiprocessors, message-passing model, shared-memory model, operating systems, performance, parallel languages and algorithms.

922. Advanced Computer Systems
Winter. 3(3-0) CPS 921, E E 833. Interdepartmental with Electrical Engineering.
VLSI and WSI architectures, mapping algorithms to architectures, functional programing, dataflow computer, concurrent symbol processing and logical programing, computer architecture for artificial intelligence, recent advances in computer systems.

999. Doctoral Dissertation Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

COUNSELING, EDUCATIONAL PSYCHOLOGY AND SPECIAL EDUCATION — CEP

College of Education

400. Classroom Testing and Grading
Winter, Summer. 3(3-0) T E 200 or T E 200A or T E 200B or T E 200C or approval of department.
Construction, use, and evaluation of teacher-made classroom tests, objective and essay, in elementary schools, secondary schools, and colleges. Statistical analysis of test scores and item responses. Grading problems.

401. Standardized Tests and Testing Programs
Fall, Spring, Summer. 3(3-0) Approval of department.
An overview of standardized tests and sources of information about them. Selection and use of standardized tests. Interpretation of standardized test scores. Local and wide scale testing programs.

410. Instructional Design and Technology
Winter, Spring, Summer. 2 to 4 credits. May reenroll for a maximum of 6 credits. T E 200 or T E 200A or T E 200B or T E 200C. Students design plans for implementing instruction via systems approach and application of learning principles.

411. School Learning I
Fall, Winter, Spring, Summer. 3(3-0) T E 200 or T E 200A or T E 200B or T E 200C.
Verbal learning, concept formation, problem solving and transfer with implications for teaching in schools.

412. Human Growth and Development
Fall, Winter, Spring, Summer. (2-4) T E 500 or T E 500A or T E 500B or T E 200C.
Patterns in human growth and mental and emotional development of children 3 through 12 and adolescents 12 through 18; observation and participation in schools is an integral part of the course.

413. Mental Health of School Children
Fall. 3(3-0) T E 200 or T E 200A or T E 200B or T E 200C.
Social and emotional adjustments of children. Emphasis on balancing factors favoring prevention and resolution of behavior difficulties and evaluation of school programs on basis of their contribution to mental health.

428B. Curriculum for the Mentally Impaired
Winter. 3(3-0) CEP 460; CEP 428C, CEP 460C, CEP 467K concurrently or approval of instructor.
Development of curriculum for mentally impaired children and youth emphasizing current practice in pre-school through secondary school programs for the moderately and mildly mentally impaired.

428C. Educational Procedures for the Mentally Impaired
Winter. 3(3-0) CEP 460; CEP 428B, CEP 460C, CEP 467K concurrently or approval of instructor.
Methods of instruction for mentally impaired children and youth including the assessment of individual abilities, the development of instructional objectives, and the teaching of nonacademic and academic skills.

428D. Education of the Severely Impaired
Fall, Spring, 3(3-0) CEP 460 or approval of department.
Procedures in teaching severely impaired children and youth.

431A. Educational Media in Instruction
Fall, Winter, Spring. 3(3-0) Juniors.
Educational media for preservice and inservice teachers, and media specialists. Selection and utilization of flat pictures, slides, films, motion picture films, sound, models, radio, and television. Equipment operation acquired through self instructional laboratory. Field trips required.

431B. Basic Educational Graphics
Fall. 3(3-0) CEP 431A or approval of department.
A course for teachers and prospective teachers in the local production of visual instructional materials.

434. Computers in the Classroom
Fall, Winter, Spring, Summer. 3(3-0) Juniors.
How to teach computer literacy and programming in public schools. Computer aided instruction in the classroom. Applying instructional design principles to the selection, evaluation, modification, and development of computer coursework.
446A. Teaching Science with Microcomputers
Winter, Summer. 3(3-0) CEP 434. Interdepartmental with and administered by the Department of Teacher Education. Survey and critique of software available for science instruction; students adapt generic and create original microcomputer routines and/or teaching strategies for use in science teaching.

446B. Teaching Social Studies with Microcomputers
Winter, Summer. 3(3-0) CEP 434. Interdepartmental with and administered by the Department of Teacher Education. Survey and critique of software available for social studies instruction; students adapt generic and create original microcomputer routines for use in social studies teaching.

460. Education of Exceptional Children
Fall, Winter, Spring. 3(0-3) T E 200. Characteristics and educational needs of students with handicapping conditions and exceptionalities. Special education programs and supportive community services.

460B. Educational Provisions for the Physically Handicapped
Fall. 3(3-0) CEP 460, T E 470. Facilities, programs, trends, methods, materials and terminology in education of the physically handicapped. Field trips to special classes and hospital school programs.

460C. Psychosocial Characteristics of the Mildly Impaired
Winter. 3(0-3) CEP 460, CEP 428B, CEP 426C, CEP 468K concurrently or CEP 466B or concurrently or approval of instructor. Cognitive, affective, and social characteristics of the mildly impaired. Instructional practices that affect school learning and personal adjustment.

460D. Classroom and Behavior Management in Special Education
Spring. 3(3-0) CEP 460. Behavior management procedures for handicapped students in school settings. Specific methods for assessment, teaching, maintenance, and generalization of academic and non-academic behaviors.

460L. Core Seminar in Special Education
Fall, Spring, 2(2-0) CEP 460, T E 310. T E 312, T E 315. Takes concurrently with CEP 460L, CEP 460J, CEP 460K. Consideration of affective interactions with children, parents, other professionals, and self. Attention to sharing field experiences, examining belief behavior consistency, teaching in the affective domain, and the parent-teacher partnership.

463A. The Exceptional Child in the Regular Classroom
Spring. 2(2-0) T E 201B. Exceptional learners characteristics, and instructional strategies-curricular adaptations appropriate to such learners. Legislation mandates educational programs and affecting school practices will be reviewed.

465A. Educational Provisions for Deaf Children and Youth
Winter. 3(3-0) CEP 460, T E 470, ASC 454. Adaptation of educational materials, methods and curriculum to the needs of individuals with severe and profound hearing impairment.

465B. Language Development for the Deaf
Fall. 3(3-0) CEP 460, T E 470, ASC 454. Theories of language development; considerations of systems in both oral and total communication philosophies; practice in manual communication.

465C. Speech Development for the Deaf
Fall. 3(3-0) CEP 465B or concurrently. Techniques for aiding development of intelligible speech in individuals with severe and profound hearing loss.

465D. Manual Communication I
Fall, Winter, Spring. Summer of odd-numbered years. 3(2-2) Approval of department. Development of basic skills in finger spelling and the language of signs, with emphasis on signed English; practice in simultaneous use with spoken English.

465E. Manual Communication II
Fall, Winter. 2 to 4 credits. May reenroll for a maximum of 8 credits. CEP 465D. Continued development of skills in total communication for use in educational service delivery systems. Practice in simultaneous use of speech, finger spelling and the language of signs at an intermediate level.

465K. Field Experience: Deaf Education
Fall, Winter. 2(2-0) T E 470, CEP 465B, CEP 465C or concurrently. Observation/participation in day classes for hearing impaired learners at elementary, secondary, or post-secondary levels. Minimum 60 clock hours.

466B. Remedial Practices: Emotionally Impaired
Winter. 3(3-0) CEP 460; CEP 466C, CEP 466K concurrently or approval of instructor. Emphasis is on the specific learning disabilities of the emotionally disturbed, both in the area of assessment and remediation. Specific methods and materials are surveyed and described in terms of their use.

466C. Behavior Management: Emotionally Impaired
Winter. 3(3-0) CEP 460; CEP 466C, CEP 466K concurrently or approval of instructor. For student teachers in the area of the emotionally disturbed only. The primary emphasis is on psycho-educational curriculum, and management of the emotionally disturbed in school settings.

466K. Field Experience: Emotionally Impaired
Winter. 3(0-9) CEP 460C, CEP 466B, CEP 466C concurrently or approval of instructor. Practicum in elementary and secondary school programs for the emotionally impaired.

467K. Field Experience: Mentally Impaired
Winter, 3(0-9) May reenroll for a maximum of 9 credits. CEP 425B, CEP 428C, CEP 460C concurrently or approval of instructor. Supervised practicum in an educational program for mentally retarded learners.

470J. Teaching Low Vision Skills to Visually Impaired Learners
Fall, Winter. June 1(0-3) T E 473 or CEP 870K or CEP 871 concurrently. Utilizing specialized curricula, instructional strategies, materials and aids to assess and facilitate learning for low vision students in classroom settings.

470K. Aiding Teachers of Visually Handicapped Learners
Winter, Spring. 1(0-3) May reenroll for a maximum of 4 credits. Juniors in education of visually handicapped or blind/ deaf children. Three separate experiences aiding teachers of preschool, primary, intermediate and adolescent-young adult multiply-impaired visually handicapped learners in public and residential school programs.

470L. Teaching Daily Living Skills to Visually Handicapped Learners
Fall, Winter, Spring. 1(0-3) T E 473 or CEP 870K or CEP 871 concurrently. Supervised practice with visually handicapped and blind/deaf learners to develop competencies in teaching orientation and mobility, and the other skills of daily living.

471A. Education of Multiply Handicapped Visually Impaired and Blind/Deaf Students
Fall, Winter, Spring. 3(2-2) May reenroll for a maximum of 9 credits. ASC 225, ASC 274 or concurrently. Methods of teaching severely multiply handicapped visually impaired and blind/deaf learners; readiness, sensory development, curriculum assessment, behavior management and modification, communication and language, including language methods and principles.

471B. Teaching Optacon Reading to Blind School-Age Learners
Winter. 1(0-2) Junior Special Education majors.
A laboratory course emphasizing curriculums, teaching methods and materials designed to enable blind school-age learners to read print using the Optacon.
Counseling, Educational Psychology and Special Education — Descriptions of Courses

471K. Aiding Teachers of Blind/Deaf Learners
   Three separate experiences aiding teachers of blind/deaf learners in teaching low-functioning, preacademic and primary level children.

472A. Braille (CEP 470C) Winter. 4(2-4) CEP 460 concurrently.
   Reading and writing standard English Braille including music, foreign language and scientific notations. Use of braille, slate and stylus.

472B. Teaching Communication Skills to Blind Learners
   Fall. 4(3-6) CEP 472A; CEP 470K concurrently.
   Curriculum, goals, behavioral objectives, methods, assessment and special media in teaching preprimary sensory development, braille and aural reading, and braille, signature and typing.
   Adaptations for multi-handicapped blind students.

472C. Teaching Mathematics to Visually Impaired Learners (CEP 470F) Fall. 3(2-2) CEP 472A.
   Development of basic skills in teaching mathematical readiness concepts and computations to visually handicapped learners. Use of Nemeth Braille Code and abacuses.

472D. Education of Mainstreamed Visually Impaired Learners
   Spring. 4(3-2) CEP 460 or concurrently. CEP 470K concurrently.
   Specialized facilities delivery to visually impaired and blind students in mainstream classes: teacher consultation, providing learning materials in adapted formats, teaching independent living skills, and planning for transition to work.

472E. Provisions for the Visually Impaired and Blind Learners (CEP 470A) Spring. 3(3-2) CEP 460 or concurrently. CEP 434 or concurrently. CEP 470K concurrently.

472F. Principles of Orientation and Mobility
   Fall. 3(3) CEP 460 or concurrently.
   Adaptive travel techniques, navigation, environmental awareness and concept development for handicapped and visually impaired students.

472H. Advanced Techniques of Orientation and Mobility
   Winter, Spring. 4(1-6) CEP 472F.
   Advanced navigation and environmental awareness relating to blindness and application of teaching methods; techniques taught under blindfold conditions in complex environmental settings.

472K. Practicum in Orientation and Mobility
   Spring, Summer. 3 to 15 credits. May reenroll for a maximum of 15 credits. CEP 472G; CEP 472I; CEP 472J; approval of department.
   Supervised field experience in teaching independent travel to visually impaired students.

473. Parent-Teacher Relationships in Special Education
   Fall. 3(3-0) CEP 460 or approval of department.
   Development of skills for parent-teacher conferences and parent-teacher relationships. Strategies for managing home-school relationships particularly in the area of mental impairment.

482. Seminars in Counseling, Educational Psychology and Special Education (MTC)
   Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 9 credits if different topics are taken. Approval of department.
   Seminars in the various fields of emphasis in counseling, educational psychology and special education.

800. Principles of Educational Measurement
   Winter, Summer. 3(3-0) CEP 401 or CEP 400; CEP 401.
   Nature of measurement and types of scales. Units, scores, norms, sampling, item analysis, batteries and profiles. Principles of reliability and validity. Use of test scores in decision making.

801. Seminar in Test Development
   Spring. 3(3-0) CEP 400.
   Techniques in preparing and developing achievement test items and tests.

802A. Appraisal of Individual Intelligence and Personality: Individual Measurement — Binet
   Winter. 3(3-0) CEP 401 or CEP 400 or PSY 415; approval of instructor.

802B. Appraisal of Individual Intelligence and Personality: Individual Measurement — Wechsler
   Fall, Summer. 3(3-0) CEP 401 or CEP 400 or PSY 415; approval of instructor.
   Measurement of intelligence with the Wechsler scales. Observation, practice, supervision, and interpretation.

802C. Appraisal of Individual Intelligence and Personality: Personality Assessment in Education
   Spring. 3(3-0) CEP 400 or CEP 401, CEP 813 or PSY 427A.
   Study of general personality structure and methods in personality assessment related to education.

803. Educational Research Methods
   Fall, Winter, Spring, Summer. 3(3-0) CEP 460 or 3(3-0) CEP 401, CEP 813 or PSY 427A.
   Rationale for and methods of research in education. Emphasis is given to the identification of researchable problems and the interpretation of research studies in the student's major field.

804. Appraising Educational Research
   Winter, Summer. 4(4-0) Approval of instructor.
   Appraisal of educational research from a data analytical point of view. Issues of statistical models and experimental design needed to critically examine research.

805. Educational Program Evaluation
   Fall, Spring. 3(3-0) CEP 803.
   History and current status of program evaluation, including a review of various evaluation models, common problems of implementation and alternative evaluation designs.

809. Case Studies in Program Evaluation
   Winter. 3(3-0) CEP 808. Interdepartmental with the Department of Teacher Education.
   Analysis of previously conducted program evaluations in terms of decisions evaluators must make about evaluation models, purposes, design, conduct, and reporting.

811. Psychology of Classroom Learning
   Fall, Winter, Summer. 3(3-0) CEP 410 or CEP 411.
   Survey of research with special attention to applications to teaching and development of school programs.

812A. Growth and Behavior
   Fall, Summer. 3(3-0) CEP 412 or approval of instructor.
   Survey of research with special attention to applications to teaching and school programs.

812B. Psychology of Adolescence in the Schools
   Winter, Spring. 3(3-0)
   Adolescent growth and development with emphasis on physical maturation, intellectual growth, and self-concept development. Impact of family and peer relationships on social-emotional adjustment, problems teachers face with adolescents.

812C. Psychology of the Gifted Student
   Spring. 3(3-0) CEP 812A or CEP 812B.
   This course will focus on the special characteristics of gifted and talented students, the efficacy of administrative provisions, the development of creativity, and special talents.

813. Social and Emotional Behavior in the Classroom
   Fall, Winter, Summer. 3(3-0) Six credits in Psychology or Educational Psychology.
   Survey of experimental and clinical research related to life factors which affect social-emotional development; implications for teaching.

814. Psychology of Classroom Discipline
   Fall, Summer. 3(3-0) Experience in teaching or pupil personnel work.
   The study and practice of positive strategies for the resolution of classroom discipline problems.

818A. Behavior Disorders in Children
   Winter. 3(3-0) Twelve credits in educational psychology or a related area.
   Characteristics, causes and treatment of school related behavior disorders in children considered within a developmental framework.
818B. Roles and Functions of School Psychologists
Spring, 3(3-0) Admission to Ed.S. program or approval of instructor.
History and current status of the field. Current concerns in assessment, reporting of findings, consultation and legal ethical responsibilities.

818C. Laboratory and Field Experience in School Psychology
Fall, Winter, Spring. 3 to 15 credits.
May reenroll for a maximum of 15 credits. Approval of instructor.
Supervised experience in a public school setting involving individual psychological instruments, preparation of written reports, participation in educational planning, and placement conferences, and consultation regarding handicapped and normal children and youth.

818D. School Psychological Consultation
Spring. 3(3-0) CEP 818A, CEP 818B.
Description and evaluation of the major approaches to psychoeducational consultation as practiced by school psychologists.

819C. Psychological Foundations of Reading Instruction
Fall, Spring, 3(3-0) T E 819A or approval of instructor. Interdepartmental with the Department of Teacher Education.
Instruction in reading as informed by current research in cognitive psychology, with an emphasis on the relationship between cognitive processing and reading comprehension instruction.

820E. Diagnosis of Reading Difficulties
Fall, Winter, Spring, Summer. 3(3-2)
Graduate students in education; T E 820A or approval of department.
Causes and types of reading retardation are considered, and procedures for working with retarded readers are examined. Laboratory experiences in administering and interpreting standardized and informal tests are provided.

820G. Clinical Practice in Remedial Reading
Fall, Winter, Spring, Summer. 3(3-2)
Graduate students in education; T E 820A or T E 820C or approval of department.
Students work with individual cases, observe and practice group procedures in the University reading clinic.

820M. Seminar in Diagnostic and Remedial Reading
Fall, Winter, Spring, Summer. 3(3-0)
CEP 820G.
Focuses on the psychological and physiological nature of reading retardation, the relationships between clinical reading programs and the larger curriculum environment, and the role of the reading diagnostician.

824. Process of Instructional Development
Winter. 3(3-0)
Application of a validated instructional systems approach to the development of practical solutions to critical teaching and learning problems for teachers, administrators, and media specialists.

825. Seminar in Instructional Television
Spring. 3(3-0) Approval of department, Interdepartmental with the Department of Telecommunication.
Television use in instruction, particularly as it concerns the learner, the classroom teacher, the instructional developer and the administration.

826. School Application of Portable ITV
Fall, 3(3-0) CEP 410, CEP 431A, CEP 431B or approval of instructor.
Application of concepts, principles, and skills relevant to portable ITV systems and television teaching techniques.

830. Administration of Instructional Media Centers
Winter. 3(3-0) CEP 831A
Administration models used by media centers; comparison of theoretical and operational characteristics of recommended models and development of models for the students use.

831A. Effective Use of Instructional Media
Fall, Spring. 3(3-0) CEP 831A.
Use of a range of instructional media within the context of a systematically planned program of objectives, learning principles, methods and evaluation.

831B. Graphics Design and Use in Instruction
Winter, Spring. 3(3-0) CEP 831A or approval of department.

831C. Photography in Instruction
Fall, Spring. 3(3-0) CEP 831B or approval of department.
Design, production, and use of photographic materials for instruction. Production of photographs, slides, filmstrips, overhead transparencies, sound tapes, and motion pictures. 35mm still camera (preferably a single lens reflex) required.

831D. Instructional Cinematography
Fall. 3(3-0) Approval of instructor.
Potentials and limitations of motion pictures for instructional and informational programs. Writing and budgeting film proposals, scripting, filming techniques, sound, animation, composition, film editing. Super 8mm format used.

832. Diffusion of Educational Innovations
Fall, Spring. 3(3-0) Approval of instructor.
Operational principles, techniques, and heuristics for gaining and maintaining change in educational and training organizations.

833. Information Handling Systems
Spring. 3(3-0) CEP 830 or approval of instructor.
Design, implementation, and study of information handling systems for print and non-print resources.

834. Computer Applications in Education I
Fall, Winter, Summer. 3(3-0) CEP 115, CEP 434, or approval of instructor.
Fundamentals of computer applications in education, with hands-on experience. History of computer education, computer functioning and its relation to educational problems. Hardware and software available for educational application.

834A. Computer Applications in Education II
Winter, Spring. 3(3-0) CEP 834.
Computer applications in instruction (CAI), administration and research. Direct experience with a broad spectrum of computer software widely used in educational applications.

834B. LOGO for Teachers
Spring, Summer. 3(3-0) CEP 434.
Lesson planning and guided discovery teaching techniques in LOGO.

834C. Teaching Problem Solving Skills with Microcomputers
Winter. 3(3-0) CEP 434.
Using computers to develop selected problem solving skills through appropriate data bases, spreadsheet, and programming strategies.

836. Computer Assisted Instruction
Fall, Spring. 3(3-0) CEP 434.
Teaching applications of computer in instruction including evaluation of commercial course-ware, instruction in use of author languages (PILOT, AUTHOR1, Talk/Tutor), and the process of development of CAI packages.

837. Instructional Product Development
Winter. 3(3-0) CEP 410 or approval of instructor.
Determining a need for, and designing, developing, evaluating, installing and maintaining instructional products in a variety of settings including schools, universities, business, industry and government.

838A. Instructional Design and Technology I
Winter. 3(3-0) Approval of instructor.
Basic skills and principles of instructional unit design: objectives, task description and analysis, and evaluation of instruction.

838B. Instructional Design and Technology II
Spring. 3(3-0) CEP 838A or approval of instructor.
Basic skills and principles of instructional lesson design, including motivation, mental set, exploration, demonstration, practice and feedback.

840A. Counseling Practice
Fall, Summer. 3(3-0) Admission to M.A. Counseling Program. Interdepartmental with the School of Health Education, Counseling Psychology and Human Performance.
The practice of counseling and guidance in schools, community colleges, and rehabilitation agencies.

840B. Introduction to Counseling Theory
Fall, Summer. 3(3-0) Admission to M.A. Counseling Program.
Selected theories of counseling with special attention to the application of theories of learning in the counseling process.

840C. The Guidance Information Service
Winter. 3(3-0) CEP 840A, CEP 840B.
Interdepartmental with the School of Health Education, Counseling Psychology and Human Performance.
The use of occupational, educational, and social information in counseling interviews and guidance programs.

840D. The Counseling Process
Fall, Winter. 3(3-0) CEP 840A, CEP 840B.
The counseling process with emphasis given to students learning a systematic approach to counseling. Students practice interviewing skills in a counseling laboratory.
840E. Counseling and Consulting Strategies
Fall, Winter. 3(3-0) CEP 840A, CEP 840B.
Selected remedial and preventative counseling strategies will be studied. Methods and techniques for assisting with individual and environmental change will be examined. Procedures for consulting with parents, teachers, and agency personnel will be studied.

840F. Counseling Practicum I
Fall, Winter, Spring. 6(4-8) CEP 840C, CEP 840D, Interdepartmental with the School of Health Education, Counseling Psychology and Human Performance.
Supervised counseling experienced in selected schools and agencies followed by analysis and critique of these experiences through group and individual consultation with instructor.

840G. Counseling Practicum II
Fall, Winter, Spring. 6(4-8) CEP 840F.
Continuation of CEP 840F.

840J. Group Procedures in Counseling
Spring of odd-numbered years. Summer. 3(3-0) CEP 840J.
An examination of theories of group counseling with special attention to goal-directed groups. Tapes of group counseling will be analyzed and practiced in leading groups under simulated conditions will be provided.

840K. Research in Counseling
Fall. 3(3-0) CEP 904.
Emphasis on research methods useful to counselor; measuring counseling outcomes, developing local test norms and expectancy tables, evaluating guidance services, studying behavior change in the single case.

840M. Development and Administration of Counseling Services
Fall, Spring. Students in rehabilitation counseling should enroll Fall Term. 3(3-0) CEP 840M.
Identification and study of policy issues in counseling, service development strategies, administrative issues, management and supervisory practices. Students will write a program proposal or issue analysis.

842F. International Aspects of Rehabilitation and Special Education
Spring of odd-numbered years. 3 credits. May reenroll for a maximum of 6 credits. CEP 842F.
International dimensions of rehabilitation and special education including developmental perspectives, current status and issues in the field.

844A. Introduction to Urban Counseling
Fall. 3(3-0) CEP 840A, CEP 840B concurrently.
Problems—health, sociocultural, economic, educational, legal, vocational—as manifested by urban residents and their resolution through counseling. Emphasis on systems and personal change mechanisms.

844B. Systemic Counseling
Fall. 3(3-0) Approval of department.
An evaluation of the theory and philosophy of systemic counseling. Issues pertaining to systemic change will be examined.

844C. Urban Counseling Practicum
Fall, Winter, Spring, Summer. 3 credits. May reenroll for a maximum of 12 credits. CEP 844A or approval of instructor.
A minimum of 12 hours per week of supervised counseling will be performed in an urban agency setting. Emphasis on developing counseling skills applicable to urban residents and agencies.

844D. Urban Career Development System Analysis
Winter. 3(3-0) CEP 844A, approval of department.
Critique of existing theories of vocational (career) development and interest inventories for use with urban residents, examination of barriers to urban residents, and development of alternative models.

844E. Urban Counseling in the Elementary School
Summer. 3(3-0) Approval of department.
Seminar of issues and impact of the urban environment on the elementary child's personal and social responsibilities with implications for the role of the counselor.

844F. Sexism, Racism and Alienation in the Therapeutic Process
Winter. 3(3-0)
Historical perspective, definition, manifestations and consequences of sexism, racism and alienation in promoting social inequality. Emphasis upon creating counseling interventions to address needs of alienated groups.

844G. Community Evaluative Research
Spring. 3(3-0) CEP 844A, CEP 903, CEP 904 or approval of department.
Application of evaluative research methods to the solution of urban problems, review of current evaluative techniques, identification of problems, design, experiments; review of selected studies.

851A. Development of Self-Understanding
Fall, Spring, Summer. 3(3-0)
Development of self-awareness and understanding of how one's personal and interpersonal style influences his/her human relationships in educational settings.

851B. Self-Concept Development and Enhancement
Fall, Spring, Summer. 3(3-0)
Self-concept development from childhood through adulthood; how teachers, parents, and personal life experiences impact self-concept; enhancement strategies.

853A. The Handicapped Student in the Regular Classroom
Summer. 3(3-0) Teacher certification.
Problems and issues involved in educating children in the least restrictive environment (mainstream); emphasis on legal, attitudinal, and practical factors which influence teachers and students.

853A. The Handicapped Student in the Regular Classroom
Summer. 3(3-0) Teacher certification.
Problems and issues involved in educating children in the least restrictive environment (mainstream); emphasis on legal, attitudinal, and practical factors which influence teachers and students.

856A. Issues in Education of Deaf
Spring, 3(2-3) Graduate students.
Designed for graduate non-majors seeking to expand information and understanding of severe and profound hearing loss; educational implications, programs.

865K. Field Experience: Education of Deaf
Spring, 2 to 8 credits. May reenroll for a maximum of 10 credits. Graduate students, prior teaching or clinical experience.
Supervised graduate field experience in educational programs for the deaf and hearing impaired.

865M. Independent Study: Education of Deaf
Spring, 2 to 5 credits. May reenroll for a maximum of 10 credits. Graduate students.
Supervised study in deaf education conducted according to a written agreement stating the problem or topical area of study, the methodology and the product of the study.

866A. Issues in Education of Emotionally Impaired
Summer. 3(3-0) Special Education majors only, approval of instructor.
This seminar focuses on crucial issues related to programming for emotionally impaired students.

866K. Field Experience: Emotionally Impaired
Fall, Winter, Spring. Summer of odd-numbered years. 3 to 12 credits. May reenroll for a maximum of 15 credits. Master's students with an emphasis in emotionally impaired, approval of department.
Supervised graduate field experience in educational programs for the emotionally impaired.

866M. Independent Study: Emotional Impairment
Spring. 2 to 6 credits. May reenroll for a maximum of 12 credits. Graduate students.
Supervised study in emotional impairment conducted according to a written agreement stating the problem or topical area of study, the methodology and the product of the study.

867J. Advanced Methods and Materials in Special Education: Mentally Handicapped Children and Youth
Fall, Winter. 3(3-0) CEP 428A, CEP 428B, CEP 428C, CEP 489C.
An analysis of research, trends, and programs in the area of mental retardation. Emphasis upon the relationship these factors have to problems of curriculum, teaching methods, guidance of students, and general classroom management.

867K. Field Experience: Mental Retardation
Fall, Winter, Spring. 1 to 12 credits. May reenroll for a maximum of 12 credits. Approval of instructor.
Supervised graduate field experience in educational programs for the mentally retarded.

867M. Independent Study: Mental Retardation
Spring. 1 to 12 credits. May reenroll for a maximum of 12 credits. Approval of instructor.
Supervised study in mental retardation conducted according to a written agreement stating the problem or topical area of study, the methodology and the product of the study.
868A. Advanced Methods and Materials in Special Education: Pre-vocational/Vocational Curriculum for SEU/Autistic Students
Fall. 3(3-0) Approval of instructor.
Overview of autism and rehabilitation services. Assessment procedures, placement criteria and pre-vocational/vocational curriculum. Skill development for severely emotionally impaired/autistic students.

868B. Advanced Methods and Materials in Special Education: The Severely Impaired/Autistic Student in the Home and School
Spring. 3(3-0) Approval of instructor.
A comprehensive exploration of autism in terms of diagnosis, treatment and prognosis. The effect of autism on the family unit, the community and the school system.

868C. Advanced Methods and Materials in Special Education: Communication Strategies for Teachers of Autistic Students
Program: Approval of instructor.
Design and implementation of a language and communication curriculum for autistic students. Traditional language development and alternative modes of communication stimulation.

868D. Seminar: Severely Emotionally Impaired/Autistic
Fall, Winter, Spring. 2(2-0) May reenroll for a maximum of 6 credits. Approval of instructor.
Coordination of course work and field experience for the SEU/Autistic emphasis. Information regarding autism, task analysis, curriculum, research.

868K. Severely Emotionally Impaired/Autistic
Fall, Winter, Spring. 3 to 6 credits. May reenroll for a maximum of 18 credits. Approval of instructor.
Students spend 3 days a week in a public school setting for severely emotionally impaired/autistic students applying skills learned in related courses.

869A. Education of Mildly Impaired Learners
Fall. 3(3-0) CEP 460.
Comprehensive introduction to the field of learning disabilities including theory, issues, programs, characteristics, terminology, and major components of the law.

869B. Principles of Formal and Informal Assessment of Mildly Impaired Students
Fall, Winter. 3(3-0) CEP 490, CEP 659A or approval of instructor.
Methods, techniques and instruments for identifying and diagnosing academic problems of analysis of formal and informal assessment strategies. Interpretation of diagnostic profiles.

869D. Teacher Consultant Skills for Mainstreamed Students
Spring. 3(3-0) CEP 669B, two years special education teaching experience or approval of instructor.
Consultant skills including role identification, problem-solving techniques, individual and group communication processes, interverte activities, school survival and study skills curriculum.

869E. Personal Adjustment and Career Preparation for the Mildly Impaired Secondary Student
Winter. 3(3-0) CEP 688A, CEP 986B or concurrent.
Assessment procedures and instructional methodology appropriate for learning disabled students. Various programming options and outcomes will be contrasted. Emphasis on instruction in learning strategies.

869F. Evaluation and Remediaion Strategies for Mildly Impaired Students
Spring. 3(3-0) CEP 690A, CEP 986B.
Strategies for the evaluation and remediation of reading and written language disorders of mildly impaired students. Procedures for the selection, development, evaluation and modification of reading and writing programs.

869G. Diagnosis and Remediation of Mathematics for Mildly Impaired Students
Winter. 3(3-0) CEP 689A, CEP 986B.

869H. Classroom Management-Mildly Impaired
Fall. 3(3-0)
Characteristics of effective classroom management, the nature of sound instructional practices for promoting learning by mildly impaired students and the application of these principles to various special education settings.

869I. Behavior Management: Diagnostic and Remedial Practices for Mildly Impaired Students
Spring. 3(3-0) Graduate special education majors only.
Applied behavior analysis in the behavior management of mildly impaired students. Applications in classroom and consultation skills.

869K. Learning Disabilities Practicum
Fall, Winter, Spring. Summer. 1 to 12 credits. May reenroll for a maximum of 12 credits. Approval of instructor.
Supervised practice working with learning disabled students in educational programs for the learning disabled in a clinic setting on campus; applying skills learned in related courses.

869M. Independent Study: Learning Disabilities
Fall. 12 credits. May reenroll for a maximum of 12 credits. CEP 460J, CEP 690B, CEP 986B, CEP 986C.
Supervised study in learning disabilities conducted according to a written agreement stating the problem or topical area of study, the methodology and the product of the study.

870K. Field Experience: Teaching Visually Handicapped Learners
Winter, Spring. 3 to 12 credits. May reenroll for a maximum of 18 credits. Approval of department.
Supervised graduate field experience in educational programs for the visually handicapped.

871. Field Experience: Teaching Blind/Deaf Learners
Winter, Spring. 3 to 12 credits. May reenroll for a maximum of 18 credits. Approval of department.
Supervised graduate field experience in educational programs for the blind/deaf.

872. Analysis of Special Education Research
Winter of odd-numbered years. 3(3-0)
Approval of department.
Analysis of research studies in special education. Methodology and impact on administration of special education.

874. Community Agency Programs for the Handicapped
Summer of odd-numbered years. 3(3-0)
Approval of department.
Various community agencies which offer programs and services for the handicapped and the relationship of these programs to special education.

875B. Special Education Finance
Winter. 3(3-0) Graduate students.
Analysis of current issues and financial issues related to special education. Includes study of current and precedent setting court decisions.

875D. Administration of Educational Programs: Administration of Special Education Programs
Winter, Summer. 3(3-0) Approval of department.
Designed to promote the study of application of theory and research to specialized program areas. Persons will normally select the section aligned to their major program area. Organization and administration of special education programming. Federal, state, intermediate local district level programs in special education are reviewed.

879. Independent Study: Special Education
Fall. 3 to 6 credits. May reenroll for a maximum of 12 credits. Approval of instructor.
Supervised study in special education conducted according to a written agreement stating the problem or topical area of study in the methodology and the product of the study.

882. Seminars in Counseling, Educational Psychology and Special Education (MTC)
Fall, Winter, Spring, Summer. 1 to 9 credits. May reenroll for a maximum of 15 credits if different topics are taken. Approval of department.
Seminars in the various fields of emphasis in counseling, educational psychology and special education.

883. Reading and Independent Study in Counseling and Educational Psychology
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 15 credits. Approval of department.
Study on an individual or group basis in the various fields of emphasis.
894. Laboratory and Field Experience in Counseling and Educational Psychology
Fall, Winter, Spring, Summer. 1 to 9 credits. May reenroll for a maximum of 15 credits. Approval of department.
Supervised graduate practicums, observations, internships, and externships in the various areas of emphasis.

899. Master's Thesis Research
Fall, Winter, Spring. 2 to 12 credits. May reenroll for a maximum of 12 credits. Approval of department.

900A. Psychometric Theory
Spring of odd-numbered years. 3(3-0) CEP 809, CEP 905.
Advanced theoretical aspects and derivation of formulas involved in reliability, validity, item analysis, weighting and differential prediction, sampling and norm construction, and the relation of item characteristics to test statistics.

900B. Problems of Educational Measurement
Spring of odd-numbered years. 3(3-0) CEP 800, approval of department.
Advanced consideration of the logical and philosophical bases of educational measurement. Theory of test planning and development and evaluation. Problems of test administration and scoring. Issues in test use.

900D. Advanced Topics in Classical Test Theory
Winter of even-numbered years. 3(3-0) CEP 905. CEP 800.
Refinements and extensions of classical test theory approaches to the design and interpretation of educational measures. Primary attention given to generalizability theory and its applications.

900E. Using Standardized Tests for Decision Making
Fall, Spring. 3(3-0) CEP 401 or approval of department.
School administrative decision making based on information yielded by standardized tests. Participants will also engage in private consultations with the instructor concerning system or building data.

904. Quantitative Methods in Educational Research
Fall, Winter, Spring. 4(4-0) Pretest and approval of instructor.
Application of descriptive statistical techniques to educational data. Introduction to estimation and testing of hypotheses. Interpretation of statistical reports.

905. Quantitative Methods in Educational Research: Advanced Quantitative Methods
Fall, Winter, Summer. 4(4-0) CEP 904 or pretest, approval of instructor.
Principles and techniques in the application of inferential statistics to educational data with emphasis on the analysis of variance and multiple comparison procedures. Overview of regression techniques.

906. Quantitative Methods in Educational Research: Experimental Design in Education
Winter, Spring, Summer. 4(4-0) CEP 905.
Theory and practice in the design, analysis and interpretation of experimental and quasi-experimental research.

907A. Advanced Research Methods in Education
Spring. 4(4-0) CEP 803, CEP 904 or CEP 905.
Principles and techniques in survey research with limited consideration of content analysis and observational studies. Sampling, instrumentation, data collection, and data analysis.

908. Issues in Program Evaluation
Spring. 3(3-0) Three courses in measurement, evaluation, statistics, or research design. Issues in program evaluation will include such topics as evaluation and policy decision making, external vs internal evaluation, qualitative vs quantitative evaluation, evaluation vs research, and meta evaluation.

911. Educational Psychology Seminar
Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 15 credits. Doctoral candidates or approval of instructor. Educational psychology doctoral candidates must enroll in the fall.
History of educational psychology, learning and cognition, personality and self-concept development, social psychology of classroom behavior, social learning theory, school psychology, research on teaching.

913. Seminar in Research on Teaching
Winter. 3(3-0) Approval of instructor. Interdepartmental with the Department of Teacher Education.
Critical survey of five approaches to research on teaching. Students develop a framework for organizing the literature, methods, and issues in the field.

915. Language, Literacy, and Learning
Spring. 3(3-0) CEP 811, CEP 904, PSY 414, LIN 401 or approval of instructor.
An overview of the psychological foundation of language processes (reading, writing, speaking, listening) with emphasis on the unique and the overlapping features across the four language areas.

917. Cognitive Theories of Knowledge Acquisition
Winter of even-numbered years. 3(3-0) CEP 411 or CEP 811 or approval of instructor. Interdepartmental with the Department of Teacher Education.
Cognitive research and theories about the growth of knowledge in academic disciplines and the acquisition of disciplinary knowledge by elementary and secondary school students.

919. Psychology and Pedagogy of Reading
Spring. 3(3-0) CEP 811, T E 520A, CEP 915 or approval of instructor. Interdepartmental with the Department of Teacher Education.
Psychological foundations of reading process, and instruction in reading. Cognitive processes and implications for models of reading are emphasized.

928. Conceptual Foundations of Educational Research
Fall. 3(3-0) Approval of instructor. Interdepartmental with and administered by the Department of Teacher Education.
Epistemology and ideology in educational research. Analysis of concepts of method, causation, objectivity and subjectivity in historical perspective.

931A. Seminar in Instructional Technology: Research and Development
Fall. 3(3-0) Approval of department.
History and development of instructional technology emphasizing leaders, events, research and legislation affecting use of instructional technology in education.

931B. Seminar in Instructional Technology: Research and Development
Winter. 3(3-0) Approval of department.
Analysis and appraisal of selected research studies in instructional technology with attention to purposes, rationales, assumptions, designs, methodologies and findings.

931C. Seminar in Instructional Technology: Research and Development
Spring. 3(3-0) Approval of department.
Analysis and appraisal of student's dissertation proposals and reports on surveys of related literature.

934A. Seminar in LOGO Educational Research
Fall, Summer. 3(3-0) CEP 834B.
Survey of current research and educational applications of LOGO; analysis of LOGO list-processing characteristics.

935. Seminar in Principles and Practice of Instructional Consultation
Spring. 3(3-0) CEP 931A, CEP 931B, CEP 410, approval of instructor.
Theoretical framework for consultation with instructional development clients. Case studies, role play simulations, debriefings. Application of the principles and development of consultation strategies and styles.

939. Policy and Legal Issues in Testing
Spring of even-numbered years. 3(3-0) CEP 401. Interdepartmental with and administered by the Department of Teacher Education. Public policy and legal issues concerning the use of standardized tests to make critical decisions about individuals in American public education.

940. Educational Applications of Item Response Theory
Spring of odd-numbered years. 3(3-0) CEP 809; CEP 905.
Assumptions, model selection, model fit, estimation of item/ability parameters, equating, scaling, item banking and test construction with the Rasch, two- and three-parameter logistic models. Computer experience using BICAL and LOGIST.

942. Multivariate/Data Analysis in Education
Spring of even-numbered years. 4(4-0) CEP 904, CEP 905, CEP 906.
Multivariate analysis techniques used in educational and educational psychology; emphasis on techniques for analysis of designed experiments and methods for analysis of repeated measures data including application and interpretation.

945A. Counseling Theories
Fall. 3(3-0) Approval of instructor. Interdepartmental with and administered by the School of Health Education, Counseling Psychology and Human Performance.
Survey of counseling theories and research with emphasis on current issues which have implications for counseling practice or for counselor education.
94B. Professional Descriptions in Counseling and Educational Psychology and Special Education of Courses

94B. Psychology of Vocational Development
Winter. 3(3-0) Approval of instructor.
Interdepartmental with and administered by the School of Health Education, Counseling Psychology and Human Performance.
Relationship between psychological concepts and vocational development.

94B. Learning Foundations of Counseling Psychology
Fall. 3(0-9) HCP 948A or approval of instructor. Interdepartmental with and administered by the School of Health Education, Counseling Psychology and Human Performance.
Principles of learning and their application to the counseling process.

953. Ethics in School and Counseling Psychology
Spring. 3(3-0) Doctoral students in counseling psychology or school psychology. Interdepartmental with and administered by the School of Health Education, Counseling Psychology and Human Performance.
Professional ethics, standards, principles, guidelines and issues concerning the training and professional activities of counseling psychology and school psychology. Relevant legal issues and precedents.

975A. Field Experience: Special Education Administration Simulation
Spring. 3(0-9) Approval of instructor.
Supervised graduate practicum in administration of the Special Education program of a simulated school district.

975B. Field Experience: Special Education Administration
Fall, Spring. 3 to 12 credits. May reenroll for a maximum of 18 credits. Approval of department.
Supervised graduate practicum or internship in special education administration.

976. Policy Issues in Special Education
Fall. 4(4-0) Graduate students and approval of school.
Policy concerns in special education including economic, social, legal, and organizational issues. Policy implications within the theoretical framework of organizational change.

982. Seminars in Counseling, Educational Psychology and Special Education (MTC)
Fall, Winter, Spring. 1 to 9 credits. May reenroll for a maximum of 15 credits if different topics are taken. Approval of department.
Seminars in the various fields of emphasis in counseling, educational psychology and special education.

983. Readings and Independent Study in Counseling and Educational Psychology
Fall, Winter, Spring. 1 to 6 credits. May reenroll for a maximum of 15 credits. Approval of department.
Study on an individual or group basis in the various fields of emphasis.

954. Laboratory and Field Experience in Counseling and Educational Psychology
Fall, Winter, Spring. Summer. 1 to 9 credits. May reenroll for a maximum of 15 credits. Approval of department.
Supervised graduate practicums, observations, internships, and externships in the various areas of emphasis.

999. Doctoral Dissertation Research
Fall, Winter, Spring. Summer. Variable credit. Approval of department.

CRIMINAL JUSTICE

C J

College of Social Science

110. Introduction to Criminal Justice
Fall, Winter, Spring. 3(0-0)
Agencies and processes of criminal justice, emphasizing historical, constitutional (legal), ethical and political considerations. Criminal Justice is also analyzed as a system, with the problems and prospects for change.

210. Introduction to Forensic Science
Spring. 3(0-0) Not open to majors in Criminalistics.

312. Criminalistics I
Fall. 3(0-6) Criminalistics majors.
Criminalistics laboratory techniques. Photography, crime scene recording, reproduction of evidence, latent fingerprints.

313. Criminalistics II
Winter. 3(0-6) C J 312, approval of school.

314. Criminalistics III
Spring. 3(0-6) C J 313, approval of school.

315. Criminal Investigation
Fall, Winter. 4(4-0) C J 375.
Theory of investigation, crime scene conduct, collection and preservation of physical evidence and methods used in scientific interpretation of evidence.

316. Crime and the Community
Fall, Spring. 4(4-0) C J 320.
Interdisciplinary survey of police-criminal justice and community relations. Stresses the community role and responsibility for crime, crime-coping programs, and the need for the improvement of criminal justice processes.

320. Criminology
Fall, Winter, Spring. Summer. 4(4-0)
SOC 241 or C J 110 or approval of school. Interdepartmental with and administered by the Department of Sociology.
Criminal activity as analyzed from sociological perspective; meaning of "crime," crime statistics, and measurement; theories of crime causation, crime types, e.g., professional organized, violent, sex, white-collar crimes, juvenile delinquency.

330. Organizational Theory and the Politics of Criminal Justice
Fall, Spring. 4(4-0) C J 320 or approval of school.
An historic and comparative overview of the principles of organization used by criminal justice agencies. Current theories and research on organization, with special attention to the impact of policies on system objectives and policy development.

335. Police Process
Fall, Winter, Spring, Summer. 4(4-0)
C J 320, C J 330.
Functions of law enforcement and the roles of the police in modern society. Study of the police from several perspectives; historical, sociological, psychological, organizational and political.

355. Juvenile Justice Process
Fall, Winter, Spring, Summer. 4(4-0)
C J 320.
Variables related to the duties and responsibilities of criminal justice practitioners working with delinquents. Prevalent interdisciplinary issues, ideas, principles and assumptions pertaining to delinquency.

365. Corrections Process
Fall, Winter, Spring, Summer. 4(4-0)
C J 320.

375. Criminal Law Process
Fall, Winter, Spring. 4(4-0)
C J 320.
Administration of criminal justice: investigation, detection, arrest, search, seizure, charging, adjudication, sentencing, probation, corrections, parole. Constitutional safeguards and legal controls on official action emphasized.

400H. Honors Study
Fall, Winter, Spring. Summer. 1 to 3 credits. May reenroll for a maximum of 6 credits. Seniors or approval of instructor.
Individually selected programs of supervised group or individual study dealing with some phase of the criminal justice system.

401. Independent Study
Fall, Winter, Spring. Summer. 1 to 3 credits. May reenroll for a maximum of 6 credits. C J 335, C J 365, C J 375 or approval of school.
Individual study of the various fields of emphasis in criminal justice, under direct supervision of appropriate faculty member.

409. Issues in Criminal Justice
Fall, Winter, Spring. Summer. 3 or 4 credits. May reenroll for a maximum of 15 credits when different topics are taken. C J 335, C J 355, C J 365, C J 375 or approval of school.
Forum for course offerings on special issues in criminal justice, by visiting instructors or regular faculty.

425. Women in Criminal Justice
Winter. 3(3-0) C J 320 or SOC 320 or approval of school.
Women as offenders and victims. Women professionals in criminal justice. Literature in criminology and victimology.