COMPUTER SCIENCE   CPS

Department of Computer Science
College of Engineering

100.   Using Computers
Fall, Spring, Summer. 3(2-2)
R: Freshmen and sophomores only. Not open to students in the College of Engineering and the College of Natural Science.
Applications of computation. Computer hardware, software, communication and networks. Impact of computation and computers on the individual and society. Hands-on application exercises. Databases, files, systems, graphics, spreadsheets, wordprocessing.
QA: CPS 100

130.   Introduction to Computing
Fall, Spring, Summer. 3(2-2)
Computer Aided Software Engineering for design. Structured, modular BASIC for programming. Selection, loops, arrays, sequential and direct files, character and pixel graphics, and spreadsheets. Applications from business, science and humanities.
QA: CPS 115

131.   Introduction to Technical Computing
Fall, Spring. 3(2-2)
P: MTH 103 or MTH 110 or MTH 116; or MTH 120 or MTH 124 or MTH 132 or concurrently.
Computing systems and applications. Design and implementation of programs using ForTRAN. Examples from engineering, mathematics and science.
QP: MTH 109 or MTH 111 QA: CPS 112

230.   Algorithms and Computing
Fall, Spring. 4(3-2)
P: MTH 132.
Computer systems and problem solving. Software development. Structured design and implementation of algorithms. Procedural and object-oriented programming. Compilation and linking.
QP: MTH 112 QA: CPS 252

260.   Discrete Structures in Computer Science
Fall, Spring. 3(3-0)
P: MTH 133.
Propositional and first order logic. Equivalence, inference. Mathematical induction, diagonalization principle. Set operations, relations, functions. Lattices, Boolean algebras. Truth tables and minimization of Boolean expressions. Applications to CPS.
QP: MTH 214, CPS 252 QA: CPS 321

290.   Independent Study in Computer Science
Fall, Spring. 1 credit. A student may earn a maximum of 3 credits in all enrollments for this course.
R: Approval of department; application required.
Supervised individual study in an area of computer science.
QA: CPS 295

291.   Selected Topics in Computer Science
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
R: Approval of department.
Topics selected to supplement and enrich existing courses and lead to the development of new courses.
QA: CPS 292

320.   Computer organization and Assembly Language Programming
Fall, Spring. 4(3-2)
P: CPS 230. Not open to students with credit in EE 331.
Machine representation of data and instructions. Machine organization, primary storage, registers, arithmetic logic unit, control unit, operations. Assembly language programming, interface to high level languages. Assemblers and loaders.
QP: CPS 252, MTH 214 QA: CPS 311

330.   Data Structures and Programming Concepts
Fall, Spring. 4(3-2)
P: CPS 230, CPS 260. R: Open only to Computer Science, Computer Engineering, Computational Mathematics, Electrical Engineering, and LBS Computer Science students.
Data types and structures. Algorithms including searching, sorting and hashing. Program correctness, program analysis. Abstract data types including stacks, queues, and trees. Object-oriented programming, introduction to various program libraries.
QP: CPS 311, CPS 252, CPS 321 QA: CPS 333

360.   Automata and Formal Language Theory
Fall, Spring. 3(3-0)
P: CPS 230, CPS 260. R: Open only to Computer Science, Computer Engineering, Computational Mathematics, Electrical Engineering, and LBS Computer Science students.
Regular languages, regular grammars, finite-state automata, transducers and relationships among them. Context-free languages and grammars. Language recognition, parsers. Properties of formal languages. Turing computability and undecidability.
QP: CPS 321, MTH 215 QA: CPS 322

410.   Operating Systems
Fall, Spring. 4(3-2)
P: CPS 330; CPS 320 or EE 331. R: Open only to College of Engineering Computer Science, Computer Engineering, and Electrical Engineering majors.
History and evolution of operating systems. Process and processor management. Primary and auxiliary storage management. Performance evaluation, security, distributed systems. Case studies of modern operating systems.
QP: CPS 333 QA: CPS 413, CPS 881

420.   Computer Architecture
Fall, Spring. 4(3-2)
P: CPS 330; EE 331 or CPS 320, CPS 360. R: Open only to Computer Science, Computer Engineering, Electrical Engineering, and LBS Computer Science majors.
Digital logic and sequential machine design. Computer organization, control unit and arithmetic logic unit implementation. Input-output, memory organization, parallel operations. Digital system simulation.
QP: CPS 311, CPS 322 QA: CPS 424

422.   Computer Networks
Fall, Spring. 3(3-0)
P: STT 351; CPS 320 or EE 331. R: Open only to College of Engineering Computer Science, Computer Engineering, and Electrical Engineering majors.
Computer network architectures and models. Medium access control. Physical, data link, network, transport, and session layers. Local-area and wide-area networks.
QP: STT 351 or STT 441 and CPS 311 QA: CPS 412, CPS 812

440.   Artificial Intelligence and Symbolic Programming
Fall. 4(3-2)
P: CPS 330, CPS 360. R: Open only to College of Engineering Computer Science and Computer Engineering majors.
Machine intelligence. Heuristic programming. Representation and control in LISP and PROLOG. Applications to search, rule-based diagnosis, and parsing.
QP: CPS 322, CPS 333 QA: CPS 441, CPS 442

449.   Design of Intelligent Systems
Spring. 4(2-4)
P: CPS 440; CPS 320 or EE 331. R: Open only to College of Engineering Computer Science seniors and graduate students. Not open to students with credit in CPS 479.
Intelligent system applications such as natural language, machine vision, or a diagnostic expert system. Team development, software engineering, project management.
QP: CPS 441 QA: CPS 442

450.   Translation of Programming Languages
Spring. 4(3-2)
P: CPS 330, CPS 360; CPS 320 or EE 331. R: Open only to College of Engineering Computer Science and Computer Engineering majors.

Theory and practice of programming language translation. Languages, grammars and parsing. Lexical, syntactic and semantic analysis. Compile-time error handling. Code optimization and code generation.
QP: CPS 322, CPS 333 QA: CPS 452

452.   Organization of Programming Languages
Fall. 3(3-0)
P: CPS 330, CPS 360; CPS 320 or EE 331. R: Open only to College of Engineering Computer Science majors.
Organization of programming languages including language processors, syntax, data types, sequence control, storage management. Comparison of language features from the functional, imperative, logical and object-oriented paradigms.
QP: CPS 322, CPS 333 QA: CPS 400

470.   Software Engineering
Fall. 4(3-2)
P: CPS 330, CPS 360; CPS 320 or EE 331. R: Open only to College of Engineering Computer Science and Computer Engineering majors.
Software life cycle including specification, design, coding, testing, and verification of a software product. Stepwise refinement and rapid prototyping. Software portability, reusability and maintenance. Construction of a large software product.
QP: CPS 322, CPS 333

472.   Computer Graphics
Spring. 3(2-2)
P: CPS 330, MTH 314. R: Open only to College of Engineering Computer Science majors.
Graphics hardware. Fundamental algorithms. Two- and three-dimensional imaging geometry and transformations. Curve and surface design, rendering, shading, color, and animation.
QP: CPS 333, MTH 334 QA: CPS 414

474.   Vector and Parallel Programming
Fall. 3(2-2)
P: CPS 420, MTH 314. R: Open only to College of Engineering Computer Science and Electrical Engineering or Computer Engineering majors.
Programming of high-performance supercomputers. Hardware, algorithms, numerical accuracy, compilers. Vector, multiple-instruction multiple-data-stream, and single-instruction single-data-stream machines.
QP: CPS 424, MTH 334

479.   Software Tools for Concurrent Systems
Fall, Spring. 4(2-4)
P: CPS 330, CPS 360; CPS 422 or CPS 474. R: Open only to College of Engineering Computer Science seniors and graduate students. Not open to students with credit in CPS 449.
Design, development and application of software tools for parallel and distributed systems. Program development, debugging, performance monitoring, simulation, data and control flow analysis, and visualization.
QP: CPS 412, CPS 322, CPS 333

480.   Database Systems
Spring. 4(3-2)
P: CPS 330, CPS 360; CPS 320 or EE 331. R: Open only to College of Engineering Computer Science and Computer Engineering majors.
Storage of and access to physical databases including indexing, hashing, and range accesses. Data models, query languages, transaction processing, recovery techniques. Object-oriented and distributed database systems. Database design.
QP: CPS 322, CPS 333 QA: CPS 483

490.   Independent Study in Computer Science
Fall, Spring. 1 credit. A student may earn a maximum of 3 credits in all enrollments for this course.
R: Open only to Computer Science majors. Approval of department; application required.
Supervised individual study in an area of computer science.
QA: CPS 495

491.   Selected Topics in Computer Science
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
R: Open only to College of Engineering Computer Science majors. Approval of department.
Topics selected to supplement and enrich existing courses and lead to the development of new courses.
QA: CPS 490

802.   Pattern Recognition and Analysis
Spring. 4(4-0)
P: CPS 330, MTH 314, STT 441. R: Open only to Computer Science or Electrical Engineering majors.
Algorithms for classifying and understanding data. Statistical and syntactic methods, supervised and unsupervised machine learning. Cluster analysis and ordination. Exploratory data analysis. Methodology for design of classifiers.
QP: MTH 334, STT 442, CPS 301 or CPS 304 QA: CPS 805, CPS 806

803.   Computer Vision
Fall. 3(3-0)
P: CPS 330, MTH 314, STT 351. R: Open only to Computer Science or Electrical Engineering majors.
Visual information processing problems. Human and machine vision systems. Image formation and transforms. Encoding, enhancement, edge detection, segmentation. 2D and 3D object description and recognition. Scene analysis. Applications.
QP: CPS 252, MTH 334, STT 441 QA: CPS 822

807.   Computer System Performance and Measurement
Spring of even-numbered years. 3(3-0) Interdepartmental with Electrical Engineering.
P: CPS 410, STT 441. R: Open only to Computer Science or Electrical Engineering majors.
Queueing network modelling, general analytic techniques, workload characterization, representing specific subsystems, parameterization. Software and hardware monitors, performance measures. Case studies, software packages.
QP: CPS 413, STT 441 QA: CPS 876

808.   Modelling and Discrete Simulation
Fall of even-numbered years. 3(3-0) Interdepartmental with Electrical Engineering.
P: CPS 330, STT 441. R: Open only to Computer Science or Electrical Engineering majors.
Simulation examples, and languages. Mathematical models, petri nets, model validation, random variate generation. Analysis of simulation data. Case studies.
QP: CPS 413, STT 441 QA: CPS 876

812.   Advanced Operating Systems
Spring. 3(3-0)
P: CPS 410, CPS 420. R: Open only to Computer Science or Electrical Engineering majors.
Parallel and distributed operating systems. Load sharing, scheduling, reliability, recovery, memory management. Distributed file systems, distributed agreement, and object-oriented operating systems.
QP: CPS 881 QA: CPS 890

814.   Formal Methods in Software Development
Fall of odd-numbered years. 3(3-0)
P: MTH 472. R: Open only to Computer Science or Electrical Engineering majors.
Formal specification languages, integrating verification with development. Design and the implementation of term project.
QP: MTH 471 QA: CPS 890

820.   Advanced Computer Architecture
Fall, Spring. 3(3-0) Interdepartmental with Electrical Engineering.
P: CPS 410, CPS 420. R: Open only to Computer Science or Electrical Engineering majors.
Instruction set architecture. Pipelining, vector processors, cache memory, high bandwidth memory design, virtual memory, input and output. Benchmarking techniques. New developments related to single CPU systems.
QP: CPS 413, CPS 424 QA: CPS 815

822.   Parallel Processing Computer Systems
Spring. 3(3-0) Interdepartmental with Electrical Engineering.
P: CPS 820. R: Open only to Computer Science or Electrical Engineering majors.

Massively parallel SIMD processors, multiprocessor architectures, interconnection networks, synchronization and communication. Memory and address space management, process management and scheduling. Parallel compilers, languages, performance evaluation.
QP: CPS 815 QA: CPS 921

830.   Design and Theory of Algorithms
Fall, Spring. 3(3-0)
P: CPS 330, CPS 360. R: Open only to Computer Science or Electrical Engineering majors.
Analysis of algorithms. Algorithm design techniques. Efficient algorithms for classical problems. Intractable problems and techniques to handle them.
QP: CPS 322, CPS 333 QA: CPS 834

835.   Algorithmic Graph Theory
Fall. 3(3-0)
P: CPS 330, CPS 360, MTH 314. R: Open only to Computer Science or Electrical Engineering majors.
Classical concepts in Graph Theory. Algorithmic aspects of graphs such as finding paths, network flow, spanning trees and matching.
QP: CPS 322, CPS 333, MTH 334 QA: CPS 835

838.   Design of Parallel Algorithms
Spring. 3(3-0)
P: CPS 420, CPS 830. R: Open only to Computer Science or Electrical Engineering majors.
Current research topics and issues. Models of parallel computation. Implementation of algorithms on SIMD and MIMD machines. Relationship to VLSI.
QP: CPS 834 QA: CPS 890

841.   Artificial Intelligence
Fall. 3(3-0)
P: CPS 440. R: Open only to Computer Science or Electrical Engineering majors.
Types of intelligence, knowledge representation, cognitive models. Goal-based systems, heuristic search and games, expert systems. Language understanding, robotics and computer vision, theorem proving and deductive systems, and learning.
QP: CPS 441 QA: CPS 841

845.   Knowledge-Based Systems (MTC)
Spring. 2(2-0) A student may earn a maximum of 6 credits in all enrollments for this course.
P: CPS 841. R: Open only to Computer Science or Electrical Engineering majors.
Research literature examining model-based reasoning, design, or diagnosis. Effectiveness and potential for future developments.
QP: CPS 841 QA: CPS 890

846.   Laboratory in Knowledge-Based Systems (MTC)
Summer. 2(1-1) A student may earn a maximum of 6 credits in all enrollments for this course.
P: CPS 845. R: Open only to Computer Science or Electrical Engineering majors.
Development of a working model-based reasoning, design, diagnostic system. Design, implementation, and testing.
QA: CPS 890

860.   Foundations of Computing
Fall. 3(3-0)
P: CPS 360. R: Open only to Computer Science or Electrical Engineering majors.
Models of computation: partial recursive functions, Turing machines, alternative models of computing. Basic theory and limitations of computability. Undecidability. Resource-bounded computational complexity, non-determinism, NP-completeness.
QP: CPS 322 QA: CPS 831, CPS 832

862.   Computational Complexity
Spring of odd-numbered years. 3(3-0)
P: CPS 860. R: Open only to Computer Science or Electrical Engineering majors.
Theory of computational complexity. Uniform, nonuniform and probabilistic complexity classes. The polynomial time hierarchy. Structure of complexity classes.
QP: CPS 831 QA: CPS 832, CPS 911

880.   Advanced Database Systems
Fall. 3(3-0)
P: CPS 480. R: Open only to Computer Science or Electrical Engineering majors.
Distributed and object-oriented databases and knowledgebase systems. Design theory, query optimization, and transaction processing.
QP: CPS 484 QA: CPS 884

890.   Independent Study
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
R: Open only to Computer Science or Electrical Engineering majors. Approval of department.
Independent study of some topic, system, or language not covered in a regular course.
QA: CPS 801

891.   Selected Topics
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course.
R: Open only to Computer Science or Electrical Engineering majors.
Selected topics in computer science of current interest and importance but not covered in a regular course.
QA: CPS 890

898.   Master's Project
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
R: Open only to Computer Science majors.
Master's Degree Plan B individual student project: original research, system design and development, system conversion or installation, research replication, or survey and reporting on some topic area.
QA: CPS 801

899.   Master's Thesis Research
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 24 credits in all enrollments for this course.
R: Open only to Computer Science majors.

QA: CPS 899

902.   Selected Topics in Recognition by Machine
Fall. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.
P: CPS 802, CPS 803. R: Open only to Computer Science or Electrical Engineering majors.
Advanced topics in pattern recognition and computer vision such as Markov random fields, modeling and recognition of three dimensional objects, and integration of visual modules.
QP: CPS 805, CPS 806, CPS 822 QA: CPS 906

910.   Selected Topics in Computer Networks and Distributed Systems
Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.
P: CPS 421, CPS 812. R: Open only to Computer Science or Electrical Engineering majors.
Advanced topics and developments in high-bandwidth computer networks, protocol engineering, and distributed computer systems.
QP: CPS 412, CPS 812, CPS 881 QA: CPS 890

914.   Selected Topics in Formal Methods in Software Development
Fall of even-numbered years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.
P: CPS 814. R: Open only to Computer Science majors.
Approaches for the incorporation of formal methods in software development. Current projects using formal methods in software engineering. Object-oriented analysis and development techniques.

920.   Selected Topics in High Performance Computer Systems
Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. Interdepartmental with Electrical Engineering.
P: CPS 822. R: Open only to Computer Science or Electrical Engineering majors.
Design of high performance computer systems. Seminar format.
QP: CPS 921, EE 813 QA: CPS 922

941. Selected Topics in Artificial Intelligence
Fall. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.
P: CPS 841. R: Open only to Computer Science or Electrical Engineering majors.
Topic such as second generation expert systems, human factors, natural language processing, speech understanding, neural networks, genetic algorithms and opportunistic planning.
QP: CPS 841 QA: CPS 842

960. Selected Topics in Algorithms and Complexity
Fall of odd-numbered years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.
P: CPS 860, CPS 830. R: Open only to Computer Science majors. Approval of department.
Current research in the general theory of algorithms and computational complexity.
QP: CPS 831 QA: CPS 911

980. Selected Topics in Database Systems
Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.
P: CPS 880. R: Open only to Computer Science or Electrical Engineering majors.
Recent developments in areas such as distributed and parallel database systems, object oriented database systems, knowledgebase and expert database systems.
QP: CPS 884

999. Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 72 credits in all enrollments for this course.
R: Open only to Computer Science majors.

QA: CPS 999

COUNSELING, EDUCATIONAL PSYCHOLOGY AND SPECIAL EDUCATION   CEP

Department of Counseling, Educational Psychology and Special Education
College of Education

240. Diverse Learners in Multicultural Perspective
Fall, Spring, Summer. 3(2-2) Interdepartmental with Teacher Education.
R: Not open to students with credit in TE 250.
Communicative, linguistic, physical, sensory, behavioral, affective, and cognitive differences in learning in multicultural classrooms. Factors that mediate access to knowledge.
QA: CEP 460

260. Dynamics of Personal Adjustment
Fall, Spring, Summer. 3(3-0)
Psychological theories of human adjustment. Implications for effective learning, self-development, and adaptation.

261. Substance Abuse
Summer. 3(3-0)
Effects of mood-altering chemicals. Treatment approaches and resources. Special emphasis on adolescent users.

341. American Sign Language and the Deaf Community
Fall, Spring, Summer. 2(2-0)
Orientation to deaf culture. Essential signing for those expecting to have intermittent contact with deaf adults.

416. Teaching and Learning With Technology
Fall, Spring, Summer. 3(3-0)
R: Open only to juniors, seniors, or graduate students in the College of Education.
Uses of technology in teaching and learning. Major emphasis on developing plans for implementing and evaluating uses of technology in the classroom setting.
QA: CEP 434, CEP 836

428B. Elementary Curriculum and Instruction for the Mentally Impaired
Fall, Spring. 2(2-0)
P: CEP 460. C: CEP 428C, CEP 460C, CEP 467K R: Open only to majors in Special Education.
Issues of curriculum for mentally impaired elementary students including theory, programs, and assessment.
Temporary approval effective from Fall Semester 1992 through Spring Semester 1994.
QP: CEP 460 QA: CEP 428B

428C. Secondary Curriculum and Instruction for the Mentally Impaired
Fall, Spring. 2(2-0)
P: CEP 460. C: CEP 428B, CEP 460C, CEP 467K R: Open only to majors in Special Education.
Issues of curriculum for mentally impaired secondary students, including theory, programs, and assessment.
Temporary approval effective from Fall Semester 1992 through Spring Semester 1994.
QP: CEP 460 QA: CEP 428C

441A. American Sign Language I
Fall, Spring, Summer. 3(3-0)
P: CEP 341. R: Not open to freshmen.
Production, conversation, and grammatical analysis of American Sign Language.
QA: CEP 465D, CEP 465E

441B. American Sign Language II
Fall, Spring, Summer. 3(3-0)
P: CEP 441A.
More advanced lexical and syntactic structures of American Sign Language. Sentence types, verb inflections, aspect marking, and storytelling. Translations between American Sign Language and English.
QP: CEP 465D QA: CEP 465E, CEP 465F, CEP 465G

442A. American Sign Language III
Fall, Spring, Summer. 4(3-2)
P: CEP 441B.
Use of space for multiple-person discourse. Formal register. Colloquial and idiomatic language. Applications to teaching in American Sign Language.
QP: CEP465F, CEP465G

442B. American Sign Language IV
Fall, Spring, Summer. 4(3-2)
P: CEP 442A.
Use of space for creative interpretation of literature, science, mathematics, socio-historical concepts. Formal register. Colloquial and idiomatic language.

443A. Tactile Communication Systems I
Fall. 3(1-4)
R: Not open to freshmen and sophomores.
Reading and writing standard English Braille notations. Familiarity with textbook formats. History and development of Braille. Perkins Braillewriter and slate and stylus.
QA: CEP 472A

443B. Tactile Communication Systems II
Spring. 3(1-4)
P: CEP 443A
Reading and writing Grade III Braille. Braille shorthand. Music, foreign language, mathematics and scientific notations in combination with abacus usage. Textbook formats.
QP: CEP 472A QA: CEP 472C

444. Education of Students with Severe and Multiple Disabilities
Spring. 3(3-0)
P: CEP 260 or TE 150. R: Not open to freshmen and sophomores.
Definition of severe and multiple disability. Special education services for students with severe and multiple disabilities.
QP: CEP 460 QA: CEP 428D, CEP 460B

460. Communication Skill Training for the Helping Professional
Fall, Spring, Summer. 3(3-0)
R: Not open to freshmen or sophomores.
Interpersonal communication focusing on dynamics of listening process, interpersonal style, and barriers to communication. Self-study. Interpersonal process recall.
QA: CEP 450

460C. Psychoeducational Characteristics of the Mildly Impaired
Fall, Spring. 2(2-0)
P: CEP 460. C: CEP 428B, CEP 428C, CEP 467K concurrently; or CEP 466B or CEP 466C, CEP R: Open only to majors in Special Education.
Cognitive, affective, and social characteristics. Instructional practices that affect school learning and personal adjustment.
Temporary approval effective from Fall Semester 1992 through Spring Semester 1994.
QP: CEP 460 QA: CEP 460C

460I. Academic Assessment of the Mildly Impaired
Fall, Spring. 3(3-0)
P: CEP 460, TE 310, TE 312, TE 315. C: CEP 460J, CEP 460K R: Open only to majors in Special Education.
Screening and placement procedures. Terminology and interpretation of tests used for the assessment of intelligence, aptitude, achievement, personality, and interests of the mildly impaired.
Temporary approval effective from Fall Semester 1992 through Spring Semester 1994.
QP: CEP 460, TE 310, TE 312, TE 315 QA: CEP 460I

460J. Academic Instruction of Mildly Impaired
Fall, Spring. 3(3-0)
P: CEP 460, TE 310, TE 312, TE 315. C: CEP 460I, CEP 460K R: Open only to majors in Special Education.
Education practices and remedial strategies for teaching academic skills to mildly impaired students.
Temporary approval effective from Fall Semester 1992 through Spring Semester 1994.
QP: CEP 460, TE 310, TE 312, TE 315 QA: CEP 460J

460K. Practicum: Special Education Core
Fall, Spring. 4(0-2)
P: CEP 460, CEP 310, TE 312, TE 315. C: CEP 460I, CEP 460J R: Open only to majors in Special Education.
Supervised practicum in an educational program for mildly impaired learners.
Temporary approval effective from Fall Semester 1992 through Spring Semester 1994.
QP: CEP 460, TE 310, TE 312, TE 315 QA: CEP 460K

466B. Elementary Curriculum and Instruction for the Emotionally Impaired
Fall, Spring. 2(2-0)
P: CEP 460. C: CEP 460C, CEP 466K R: Open only to majors in Special Education.
Issues of curriculum for emotionally impaired elementary students, including effective classroom management and theory.
Temporary approval effective from Fall Semester 1992 through Spring Semester 1994.
QP: CEP 460 QA: CEP 466B

466C. Secondary Curriculum and Instruction for the Emotionally Impaired
Fall, Spring. 2(2-0)
P: CEP 460. C: CEP 460C, CEP 466K R: Open only to majors in Special Education.
Issues of curriculum for emotionally impaired secondary students, including effective classroom management and theory.
Temporary approval effective from Fall Semester 1992 through Spring Semester 1994.
QP: CEP 460 QA: CEP 466C

466K. Practicum: Emotionally Impaired Children and Youth
Fall, Spring. 2(0-8)
P: CEP 460. C: CEP 460C, CEP 466B or CEP 466C R: Open only to majors in Special Education.
Practicum in elementary and secondary school programs for the emotionally impaired.
Temporary approval effective from Fall Semester 1992 through Spring Semester 1994.
QP: CEP 460 QA: CEP 466K