## EDUCATIONAL POLICY COMMITTEE

Approved 6-9-03

Minutes of Meeting: June 2, 2003

Present: D. Connors, A. Gonzalez, N. Koch, S. Mason, S. Nickolaisen, P. Rosenthal, R. Salinas<br>Excused: P. Arvedson, M. Auwal, V. Kehm, L. Tunstad

1. Announcements
1.1 N. Koch reported that Graduate Studies Subcommittee supported the recommendation of EPC regarding the Praxis Examination for Communication Disorders.
1.2 A. Gonzalez reported that the MS for Computer Science has been received and all of EPC's recommended changes have been made. The proposal will go to the Chancellor's Office for final approval.
2. Intent to Raise Questions

None.
3. Liaison Reports

## Program Review Subcommittee

P. Rosenthal reported that PRS finalized reports for Political Science and Biology and they will complete Social Science this week.

## Executive Committee

N. Koch reported that Exec discussed the document forwarded by EPC on Critical Thinking. Also discussed was the Program Review procedure. Exec met with the Provost regarding the SETU's and the search for the Dean of HHS.
4. Approval of the Agenda

M/s/p to approve.
5. Approval of the Minutes

M/s/p to approve.
6. Curricular Items
6.1 Actions Reported by the Executive Secretary
$\mathrm{M} / \mathrm{s} / \mathrm{p}$ to reflect in minutes.
6.2 Proposal to Create a School of Criminal Justice and Criminalistics, EPC 02-25

Discussion continued on this request. The following action was taken: $\mathrm{M} / \mathrm{s} / \mathrm{p}$ to approve the request to create a School of Criminal Justice and Criminalistics.
7. Policy Modification: Admission of Foreign (VISA) Students, EPC 02-18
N. Koch discussed the background of this item along with her discussions with K. Beeler, Assistant Vice President for Student Affairs/Enrollment Management and C. Leiby-Smith, Admissions Officer. Before final approval is given, N. Koch will discuss with K. Beeler and Leiby-Smith some of the questions raised at today’s meeting.
8. Minimum Requirements for Probation and Disqualifications, EPC 02-23C

The Committee reviewed the document and the following action taken:
$\mathrm{M} / \mathrm{s} / \mathrm{p}$ to approve the policy statement and catalog revisions with the removal of the last bullet on page 2 of the revised catalog copy.

## ACTIONS REPORTED BY

## THE EXECUTIVE SECRETARY

## PROGRAM MODIFICATIONS

## BA Spanish

To reflect course description and title changes to SPAN 418.

## BA/BS Mathematics

Program changes; add Math 450 and Math 274 to all options.

## BS Electrical Engineering

Add EE 427 \& 428 to electives.

Credential Single Subject Mathematics
Add Math 395 to program.

## MA History

Program changes to thesis requirement.
MS Civil Engineering
Change in units in electives and specialization.

## NEW COURSES

CE 554 Advanced Topics in Civil Engineering (1-4)
Prerequisite: Department approval required. Advanced topics in Civil Engineering. May be repeated to a maximum of 8 units as subject matter changes.
Limit: 10
Abbr.: AdvncdTopicsInCivilEnginrng Offered: s
CS 512 Design and Analysis of Algorithms (4)
Prerequisite: Design of complex algorithms. Algorithms for solving frequently occurring problems in computer applications. Computationally intractable problems, heuristics and partial solutions. Optimization techniques. Analysis of algorithms for specific problems of interest.
Limit: 20
Abbr.:Design\&AnalysisOfAlgorithms
Offered: w,s
CS 520 Web Programming (4)
Prerequisite: CS 320. Current issues in web programming. Topics include: semantic networks; architectures for web-based applications; dynamic and evolutionary system deployment.
Limit: 20 Abbr.: WebProgramming Offered: f,s
CS 522 Advanced Database Systems (4)
Prerequisites: CS 390, CS 422. Current topics in database systems: distributed databases, transactions, and concurrency control; nested and long-running transactions; semantic and object-oriented data models; engineering design databases; temporal, multi-media, and real-time databases.
Limit: 20 Abbr.: AdnvdDatabaseSystems Offered: f,s
CS 537 Advanced Software Engineering (4)
Prerequisites: CS 390, CS 437. Managing software development projects; the capability maturity models and personal performance processes; software cost estimation; risk management; extreme programming. Engineering systems for survivability. Estimating system performance.
Limit: 20
Abbr.: AdvancedSoftwareEngineerng
Offered: f,s

## CS 540 Advanced Topics in Operating Systems (4)

Prerequisite: CS 440. Asynchronous concurrent processes; mutual exclusion and deadlocks; virtual storage organization and management; multiprocessing; auxiliary storage management; distributed operating systems; performance measurement; operating systems security.
Limit: 20
Abbr.: AdvncdTopicsInOperatingSystms
Offered: f,s

## CS 550 Advanced Computer Graphics (4)

Prerequisite: CS 450. Advanced topics in computer graphics. Surface, curves, and textures; illumination, shading, shadows and transparency effects; ray tracing and other rendering techniques; color models; animation; compression techniques; fractals; JPEG, and MPEG.
Limit: 20 Abbr.: AdvncdComputerGraphics Offered: w,x

## CS 560 Advanced Topics in Artificial Intelligence (4)

Prerequisite: CS 460. Examination of sub field within artificial intelligence such as natural language processing, expert systems, robotics, data mining, computer vision, speech recognition, intelligent agents or others.
Limit: 20
Abbr.: AdvncdTopicsInArtificialIntelligence
Offered: f

## CS 565 Reliable Computing (4)

Prerequisites: CS 312 and CS 386. Errors, faults and failures. Software and system safety. Reliability metrics; mean time between failures. Techniques for fault tolerance; redundancy and robustness. Fault detection, isolation, correction, and recovery.
Limit: 20
Abbr.: ReliableComputing
Offered: f,s

## CS 570 Networks and Distributed Processing (4)

Prerequisites: CS 370, CS 440, CS 447. Study of computer network architecture and protocols. Routing, congestion and flow control. Distributed algorithms, client-server models, remote procedure calls, load balancing, and security. Interprocess communication and protocols. Distributed transaction processing.

## Limit: 20 <br> Abbr.: Netwrks\&DistributedProcessing <br> Offerd: w,x

## CS 575 Human Issues in Computing (4)

Prerequisites: CS 386, CS 390. Methods and techniques for maximizing the usability of computer systems and practices User centered design, designing for diverse users, physiological, psychological, and sociological issues. Human factors in software development.
Limit: 20
Abbr.: HumanIssuesInComputing
Offered: f,s

## CS 580 Computer Systems Security (4)

Prerequisites: CS 422, CS 437 and CS 440. Security in computer systems and networks. Encryption algorithms.
Authentication and key exchange protocols. Virus detection, database security, and secure internet communication.
Security policies, trusted systems, and computer system certification.
Limit: 20
Abbr.: ComputerSystemsSecurity
Offered: w.x

## CS 586 Theory of Computing (4)

Prerequisite: CS 486. Mathematical models of computation. Recursive function theory and primitive recursion. Computability and logic. Church's Thesis. Wegner's interaction machines, and quantum computation.
Limit: 20
Abbr.: TheoryOfComputing
Offered: f,s

## CS 588 Languages and Translators (4)

Prerequisite: CS 488. Advanced programming language and translator concepts. Language runtime system such as the Java virtual machine. Term rewriting systems and XSL, Programming language semantics.
Limit: 20
Abbr.: LanguagesAndTranslators
Offered: w,x

## CS 590 Advanced Software Architecture (4)

Prerequisite: CS 390. Design and development of large-scale, typically distributed, often multi-language, software systems. Integration of existing (legacy) systems. Multiple architectural views and their representation and documentation. Integrative and connective platforms, standards, and technologies.
Limit: 20
Abbr.: AdvantangeSoftwareArchitecture
Offered: w,x

## CS 594 Graduate Seminar (4)

Prerequisite: instructor consent. Special course offering on topics of current interest in computer science. May be repeated to a maximum of 8 units on different topics.
Limit: 20
Abbr.: GraduateSeminar
Offered: f

## CS 598 Graduate Directed Study (1-4)

Prerequisite: instructor consent. Independent investigation and study of an advanced topic in computer science under direct supervision of an instructor. May be repeated to maximum of 4 units.
Limit: 1 Abbr.: GraduateDirectedStudy Offered: all

## CS 599A Thesis or Project (3)

Prerequisites: Completion of at least 20 units of 500 level CS courses and instructor consent to act as a sponsor, department approval of topic prior to registration. Research project conducted in a area of advanced topics in computer science under direct supervision of an instructor. This research project shall be continued in CS 599B. Graded CR/NC.
Limit: 1
Abbr.: ThesisOrProject
Offered: all
CS 599B Thesis or Project (2)
Prerequisites: CS 599A. Instructor consent to act as sponsor, completion of all other requirements for an MS degree in Computer Science. Continuation of research project conducted in CS 599A. Each student shall orally present his/her research result in a public forum. Graded CR/NC.
Limit: 1
Abbr.: ThesisOrProject
Offered: all

## EE 427 Speech Signal Processing (4)

Prerequisite: EE 242, EE 334, EE 422. Speech signal processing applied to real-world problems using digital and statistical signal processing techniques. Speech coding; Temporal and Statistical approaches; Speech recognition.
Limit: 25 Abbr.: SpeechSignalProcessing Offered: w

## EE 428 Digital Signal Processing Laboratory (1)

Prerequisite: EE 290, EE 332. Graphical computing and data acquisition technique via LabVIEW to solve Electrical Engineering problems. LabVIEW, graphical computing, data acquisition.
Limit: 16
Abbr.: DigitalSignalProcssingLab
Offered: f,w,s

MATH 395 Classroom Experiences in Teaching High School Mathematics (2)
Prerequisites: Math 209, 248, 255, 325. Recommended: Math 430. Lecture/discussion on effective techniques for teaching high school mathematics together with practical experience. Assisting in a high school mathematics classroom under the supervision of a Department faculty member. Service learning required.
Limit: 25
Abbr.: ClassrmExprienceInTeachngHSMth
Offered: f,w,s

## SW 582 Key Issues in DSM-IV: Focus on Forensic Mental Health (2)

Prerequisites: 520B and 530C. Issues of assessment, including mental status and diagnosis, for advanced social work practice. Emphasis on practice with forensic clients.
Limit: 25
Abbr.: KeyIssueDSMIVFcusFrnscMntlHlth
Offered: s

## SW 585 Policy and Practice in Public Child Welfare (2)

Prerequisites: 520B and 530C. Contemporary practices in California’s public child welfare systems in the context of current policy and administrative issues.
Limit: 25 Abbr.: Policy\&PracticeInPublcChldWelfr Offered: s
SW 589 Selected Topics in Social Work (1-6)
Current topics of special interest in social work, announced in the Schedule of Classes. May be repeated for credit up to a total of 4 units.
Limit: 25
Abbr.: SelectdTopcsInSocialWork
Offered:

## COURSE MODIFICATIONS

CE/ME 210 Matrix Algebra for Engineers
Change in prerequisites.
CE/ME 211 Statistics and Probability for Engineers
Change in prerequisites.
ENGR 207 Materials Science and Engineering
Change in prerequisites.

## HIST 599 Thesis

Change in units, catalog description and course content.

## MATH 274 Introduction to Statistics

Change in prerequisites, catalog description and course content.

## ME 319 Computer-Aided Problem solving in Mechanical Engineering

Change in prerequisites.
ME 410 Control of Mechanical Systems
Change in prerequisites.

## ME 422 Optimization of Mechanical Engineering Systems

Change in prerequisites.
SPAN 418 Golden Age Poetry and Prose
Change in course title, catalog description and course content.

