# University Curriculum Committee September 16, 2010

The University Curriculum Committee met Thursday, September 16 at 3:00 p.m. in the Dean's Conference Room, Derryberry Hall.

# Members present:

Dr. Jack Armistead
Dr. Marketta Laurila
Dr. Curtis Armstrong
Dr. Roy Loutzeheiser
Dr. Sue Bailey
Ms. Beth Mannle
Dr. J.P. Barfield
Dr. Francis Otuonye
Dr. Rita Barnes
Dr. P.K. Rajan

Dr. Dan Combs Dr. James Raymondo Dr. Jeff Roberts **MAJ Brett Martin** Ms. Edith Duvier Dr. Stephen Robinson Dr. Kurt Eisen Dr. Paul Semmes Dr. Ahmed Elsawy Dr. Matt Smith Ms. Julie Galloway Dr. Barry Stein Dr. Billye Foster Dr. Doug Talbert Dr. Mike Harrison Ms. Janet Whiteaker

Dr. David Huddleston

Dr. Sharon Huo

Dr. Steve Isbell

Dr. Homer Kemp

Ms. Jerri Winningham

Ms. Chloe Jeffries

Ms. Jenna Crunk

Ms. Megan Carter

#### Members Absent:

Dr. Pedro Arce Mr. Ted LaBar
Dr. Pat Bagley Dr. Mark Stephens
Dr. Jeff Boles Ms. Deanna Nipp-Kientz
Mr. Ward Doubet Ms. Beth Rogers
Dr. Susan Elkins Mr. Isaac Keehler

Dr. Susan Elkins Mr. Isaac Keebler
Dr. Dan Fesler Ms. Jessica Bryant
Dr. Bobby Hodum Mr. Kyle Koser

Dr. Darrell Hoy

#### Official Representatives:

Dr. Ramachandran Natarajan for Dr. Jordan-Wagner

Dr. Richard Savage for Dr. Mills Dr. Pat Jordan for Dr. Peach

#### Guests:

Dr. James Baier Dr. John Harris
Ms. Tammy Boles Ms. Denise Hensley
Dr. Bill Eberle Ms. Denette Way

#### **SUMMARY OF PROCEEDINGS**

- I. Approval of agenda as revised
- II. Approval of March 25 minutes
- III. Approval of RODP BPS Concentrations-Health Adm. & International Org. Leadership
- IV. Approval of curriculum changes from the Department of Physics
- V. Approval of course changes from the School of Agriculture
- VI. Approval of course addition, deletion, changes and curriculum changes from the Department of Manufacturing and Industrial Technology
- VII. Approval of course deletions, changes and curriculum changes from the Department of Computer Science
- VIII. Approval of course changes from the College of Education
- IX. Approval of course change from the Department of Accounting
- X. Other such matters

## I. Approval of Agenda as Revised

Dr. Raymondo requested the following revisions to the agenda: 1) Delete item #10, 2) Announcement from ADP, 3) APES Demonstration.

<u>Motion.</u> Dr. Talbert moved to approve the revisions. The motion was seconded by Dr. Foster and carried.

# II. Approval of March 25, 2010 minutes

Dr. Kemp moved to approve the minutes as submitted. The motion was seconded by Dr. Stein and carried.

# III. Approval of RODP BPS Concentrations - Health Adm. & International Organization Leadership

Dr. Harris, representing the TBR RODP Committee, presented two new concentrations. Dr. Harris stated that the degree designation at Tech is a Bachelor of Science with a major in Professional Studies. The current implementation date is targeted for Spring 2011.

On Form PS – Program Structure, a correction was requested to change "SPAN 355" to "SPAN 3550". A concern was voiced that the concentrations do not include a foreign language requirement.

The required TBR proposals are on file in the Associate Vice President's Office for Academic Affairs.

<u>Motion.</u> Dr. Loutzenhesier moved to approve the two concentrations. The motion was seconded by Dr. Talbert and carried.

# IV. Approval of Curriculum Changes from the Department of Physics

In a memorandum dated August 27, 2010, approval was requested for the following:

# **Curriculum Changes:**

- 1. Add CSC 2101 as a requirement for physics majors
- 2. Reduce the number of elective hours in the physics requirements by 1

<u>Motion.</u> Dr. Robinson moved to approve the changes effective Fall 2011. The motion was seconded by Dr. Talbert and carried.

#### V. Approval of Course Changes from the School of Agriculture

In a memorandum dated September 1, 2010, approval was requested for the following:

#### **Course Changes:**

From:

AGET 2110. Engineering Technology in Agriculture. Fall. (E). Lec. 2. Lab 2. Credit 3. Application of engineering principles to agricultural structures, electrification and food and fiber processing.

AGET 3110. Engineering Technology in Agriculture II. Spring. Lec. 2. Lab. 2. Credit 3. Application of engineering principles to agricultural power and machinery, soil and water conservation and animal waste management.

AGET 3320. Small Power Equipment. Spring. (O). Lec. 2. Lab. 2. Credit 3.

Principles of operation, adjustment and maintenance of small internal combustion engines and associated equipment.

AGET 3510. Agricultural Surveying. Spring. (E). Lec. 2. Lab. 3. Credit 3.

Elementary surveying including use of the steel tape, level and transit with practice in traversing, leveling and area computations.

AGET 3560. Turf Systems Irrigation Design. Lec. 2. Lab 2. Credit 3.

Irrigation system design for turf-based systems including residential lawns, commercial properties, athletic fields and golf courses. Irrigation scheduling and water demand are presented to provide management capabilities.

AGET 3620. Computer Aided Design in Agriculture. Fall and Spring. Lec. 1. Lab. 4. Credit 3. Prerequisite: AGET 2110 or consent of instructor. An introduction to the principles of computer aided drafting and design with emphasis on agricultural building, machinery, irrigation and landscaping.

AGET 4220 (5220). Agricultural Machinery and Tractors. Spring. (E). Lec. 2. Lab. 2. Credit 3. Principles of operation, selection and economic utilization of agricultural power units and equipment.

AGET 4610 (5610). Greenhouse Structures and Landscaping Equipment. Fall. (O). Lec. 3. Credit 3. Prerequisite: AGET 2110 or consent of instructor. Selection, design, construction and operation of greenhouse structures and related nursery and landscaping equipment.

AGET 4620 (5620). Agricultural Structures. Fall. (E). Lec. 2. Lab. 2. Credit 3. Prerequisite: AGET 2110 or consent of instructor. Planning; drawing; materials; principles of construction with respect to arrangement, location and environmental control; plan reading.

AGET 4720 (5720). Agricultural Systems Technology. Lec. 3. Credit 3. Application of engineering principles to fluid flow, electrical controls, refrigeration, heat transfer, drying, irrigation, drainage and hydraulic systems as applied to agriculture.

AGET 4940, 4950, 4960, 4970, 4980 (5940-5950). Agricultural Engineering Technology Topics. Credit 1-4.

Prerequisite: Consent of instructor. Special study in an approved area of agricultural engineering technology under the supervision of a member of the School of Agriculture faculty.

#### To:

AGET 2110. Agricultural Engineering Technology. Fall. Lec. 2. Lab 2. Credit 3. Application of engineering principles to agriculture through a selection of independent but related topics while also advancing the students problem solving skills.

AGET 3110. Natural Resource Systems. Spring. Lec. 2. Lab. 2. Credit 3. Application of engineering principles to surveying, soil and water conservation and animal waste management.

AGET 3320. Small Power Equipment. Spring. (O). Lec. 2. Lab. 2. Credit 3. Principles of operation, adjustment and maintenance of small internal combustion engines and associated equipment.

AGET 3510. Agricultural Surveying. Lec. 2. Lab. 3. Credit 3.

Elementary surveying including use of the steel tape, level and transit with practice in traversing, leveling and area computations.

AGET 3560. Turf Systems Irrigation Design. Summer and Fall (E). Lec. 2. Lab 2. Credit 3. Irrigation system design for turf-based systems including residential lawns, commercial properties, athletic fields and golf courses. Irrigation scheduling and water demand are presented to provide management capabilities.

AGET 3620. Computer Aided Design in Agriculture. **Summer and Fall (O)**. Lec. 1. Lab. 4. Credit 3. **The principles of computer aided drafting and design with emphasis on agricultural operations**.

AGET 4220 (5220). Agricultural Machinery and Tractors. Spring (E). Lec. 2. Lab. 2. Credit 3. Principles of operation, selection and economic utilization of agricultural power units and equipment.

AGET 4610 (5610). Greenhouse Structures and Landscaping Equipment. Fall. Lec. 3. Credit 3. Selection, design, construction and operation of greenhouse structures and related nursery and landscaping equipment.

AGET 4620 (5620). Agricultural Structures. **Spring (E)**. Lec. 2. Lab. 2. Credit 3. Planning; drawing; materials; principles of construction with respect to arrangement, location and environmental control; plan reading.

AGET 4720 (5720). Agricultural Processing. Spring (O). Lec. 3. Credit 3. Managing value-added agricultural products through the application of engineering principles to fluid flow, electrical controls, refrigeration, heat transfer, drying, and hydraulic systems.

AGET 4940, 4950, 4960, 4970, 4980 (5940-5950). Agricultural Engineering Technology Topics. Credit 1-4.

Prerequisite: Consent of instructor. Special study in an approved area of agricultural engineering technology under the supervision of a member of the School of Agriculture faculty.

<u>Motion.</u> Dr. Foster moved to approve the changes effective Spring 2011. The motion was seconded by Dr. Elsawy and carried.

# VI. <u>Approval of Course Addition, Deletion, Changes and Curriculum Changes from the Department of Manufacturing and Industrial Technology</u>

In a memorandum dated September 02, 2010, approval was requested for the following:

#### Course Addition:

MIT 3000 Principles of Metal Casting Lec. 1. Lab. 2. Credit 2.

Prerequisites: ENGR 1110, MIT 1110 and ME 3110. Principles of molding and casting aluminum, brass and gray iron. Use of cores, patterns and machine molding included.

### Course Deletion:

MIT 2010 Metal Casting Lec. 1, lab. 2, Cr. 2

#### **Course Changes:**

#### From:

**MIT 2063. Metal Manufacturing Technology.** Lec. 2. Lab. 2. Credit 3. Prerequisites: ENGR 1110 and MATH 1730. Machine tool functions and use of hand tools and machines used to forming metals.

#### To:

MIT 2063. Metal Manufacturing Technology. Lec. 2. Lab. 2. Credit 3. Prerequisites: ENGR 1110, MIT1110 and MATH 1730. Machine tool functions, use of hand tools, precision measurement, welding and fabrication of metals.

#### From:

**MIT 2400.** Statics and Strength of Materials. Lec. 2. Lab. 2. Credit 3. Prerequisite: MATH 1910 and PHYS 2010. This course is an introduction to concurrent force analyses, stresses, strains and combined stresses in structures and machines components.

#### To:

**MIT 2400. Statics and Strength of Materials.** Lec. 2. Lab. 2. Credit 3. Prerequisite: MATH 1730 and PHYS 2010. This course is an introduction to concurrent force analyses, stresses, strains and combined stresses in structures and machines components.

#### From:

**MIT 3130. Maintenance Technology I.** Lec. 3. Credit 3. Prerequisite: Junior Standing. Principles of organizing and controlling maintenance operations in industrial plants.

#### To:

**MIT 3130. Maintenance Technology I.** Lec. 3. Credit 3. Prerequisite: Junior Standing, MIT 1110. Principles of organizing and controlling maintenance operations in industrial plants.

#### From:

**MIT 3200.** Applied Electricity and Electronics. Lec. 2. Lab. 2. Credit 3. Prerequisites: PHYS 2020. Fundamentals of electricity and electronics, basic circuits, motors, generators and power distribution, advanced electronic circuits, semiconductors and power supplies, electronic communication and data systems.

#### To:

MIT 3200. Applied Electricity and Electronics. Lec. 2. Lab. 2. Credit 3. Prerequisites: PHYS 2020, MATH1730 and MATH 1910 or 1830. Fundamentals of electricity and electronics, basic circuits, motors, generators and power distribution, advanced electronic circuits, semiconductors and power supplies, electronic communication and data systems.

#### From:

MIT 3403. Machine Elements for Technologists. Lec. 2. Lab. 2. Credit 3. Prerequisite: MIT 3301, ME 3110, PHYS 2010. Static and dynamic properties of materials. Principles of machine elements calculations, components selection, assembly and lubrication.

#### To:

**MIT 3403.** Applied Machine Elements. Lec. 2. Lab. 2. Credit 3. Prerequisite: MIT 3301, ME 3110, PHYS 2010. Static and dynamic properties of materials. Principles of machine elements calculations, components selection, assembly and lubrication.

#### From:

**MIT 3700. Manufacturing Cost Estimating.** Lec. 2. Credit 2. Prerequisite: Junior Standing. This is an experiential learning course where the students participate in solving an industrial problem. This course requires the application of computer-aided design, bill of materials, manufacturing processes, process design, writing a report and presentation of the results.

#### To:

**MIT 3700. Manufacturing Cost Estimating. Lec. 2. Credit 2.** Prerequisite: Junior Standing, MIT 1110. This is an experiential learning course where the students participate in solving an industrial problem. This course requires the application of computer-aided design, bill of materials, manufacturing processes, process design, writing a report and presentation of the results.

#### From:

**MIT 3710. Methods Design.** Lec. 2. Credit 2. Prerequisite: Junior Standing. Introduction to concepts and the practice of methods improvement and work measurement.

#### To:

MIT 3710. Methods Design and Work Measurement. Lec. 2. Credit 2. Prerequisite: Junior Standing, MIT 1110. Introduction to concepts and the practice of methods improvement and work measurement.

#### From:

**MIT 3730. Quality Assurance. Lec. 2. Credit 2.** Prerequisite: Junior Standing. Methods for controlling the quality of materials and products in production systems.

To:

**MIT 3730. Quality Assurance.** Lec. 2. Credit 2. Prerequisite: Junior Standing, MIT 1110. Methods for controlling the quality of materials and products in production systems.

From:

MIT 4310. Plant Layout and Materials Handling. Lec. 2. Lab. 2. Credit 3. An analysis of materials movement within industrial organizations.

To:

MIT 4310. Plant Layout and Materials Handling. Lec. 2. Lab. 2. Credit 3. Prerequisite: MIT 3301, MIT 3710. An analysis of materials movement within industrial organizations.

From:

**MIT 4610. Industrial Technology Seminar. Lec. 1. Credit 1.** Prerequisite: Senior standing. Discussion and preparations of problems and topics pertinent to industrial technology.

To:

**MIT 4610.** Engineering Technology Seminar. Lec. 1. Credit 1. Prerequisite: Senior standing. Discussion and preparations of problems and topics pertinent to engineering technology.

**Rational:** 1) The above requested changes are required to improve the courses rigor and outcomes and 2) improve the whole **BSIT** program outcomes to meet the challenging job market for our graduates.

II. Curriculum Changes (see the attached curriculum sheet)
Change the required MATH 1910 to MATH 1910 or 1830

Change the required PHYS 2010 to PHYS 2010 or 2110+2111

Change the required PHYS 2020 to PHYS 2020 or 2220+2121

Change the required CHEM 1010 to CHEM 1010 or 1110

**Motion.** Dr. Elsawy moved to approve the changes effective Spring 2011. The motion was seconded by Dr. Foster.

A correction was made to the Curriculum Changes as follows:

From: PHYS 2220 To: PHYS 2120 +2121

A vote was taken and the motion carried.

# VII. <u>Approval of Course Deletions, Changes and Curriculum Changes from the Department of Computer Science</u>

In a memorandum dated August 25, 2010, approval was requested for the following:

Course Deletions:

CSC 2010 Introduction to Computer Science

CSC 2011 Introduction to Computer Science Laboratory

CSC 2020 Data Structures & Programming Techniques

CSC 2021 Data Structures & Programming Techniques Laboratory

CSC 2300 C/C++ in Unix

# **Course Changes:**

## 1. Current description:

#### CSC (MATH, PHYS) 1020. First-Year Connections. Rec. 2. Credit 1.

This course is intended as a bridge course for students entering TTU from high school. The course is designed to strengthen the student's connection to TTU, the College of Arts and Sciences, and the appropriate department (CSC, MATH, or PHYS) by focusing on the enhancement of skills needed for academic success. This course engages the student in meaningful academic and non-academic out-of-the-classroom activities, as learning occurs both in and out of the classroom. It emphasizes critical thinking, the formation of academic and social goals and support groups, and time-management and study skills.

#### Proposed description:

# CSC (MATH, PHYS) 1020. First-Year Connections. Rec. 2. Credit 1.

This course is intended as a bridge course for students entering TTU from high school. The course is designed to strengthen the student's connection to TTU, the College of Arts and Sciences, and the appropriate department (CSC, MATH, or PHYS)-by focusing on the enhancement of skills needed for academic success. This course engages the student in meaningful academic and non-academic out-of-the-classroom activities, as learning occurs both in and out of the classroom. It emphasizes critical thinking, the formation of academic and social goals and support groups, and time-management and study skills.

Effective date: Fall 2011

#### 2. Current description:

#### CSC 1100. Introduction to Computing. Lec. 3. Credit 3.

Credit cannot be obtained for CSC 1100 in addition to credit for either DS 2810 or FOED 3240. Use of software for word processing, spreadsheets, database, etc., on a personal computer; organization of computer hardware. (For CSIT option and non-computer science majors only.)

#### Proposed description:

#### CSC 1100. Introduction to Computing. Lec. 3. Credit 3.

Credit cannot be obtained for CSC 1100 in addition to credit for either DS 2810 or FOED 3240. Use of software for word processing, spreadsheets, database, etc., on a personal computer; organization of computer hardware. (For CSIT option and non-computer science majors only.)

Effective date: Fall 2011

#### 3. Current description:

#### CSC 4300 (5300). Database Management Systems. Lec. 3. Credit 3.

Prerequisites: CSC 2400 and CSC 2710. Organization and management of large data files; data definition; database models; query languages; crash recovery; concurrency control; case studies.

#### Proposed description:

# CSC 4300 (5300). Database Management Systems. Lec. 3. Credit 3.

Prerequisites: CSC 2400 and CSC 2710 Junior standing and CSC 2110, 2111. Organization and management of large data files; data definition; database models; query languages; crash recovery; concurrency control; case studies.

Effective date: Spring 2011

## 4. Current description:

# CSC 4950. Capstone Project. Lec. 3. Credit 3.

Prerequisites: CSC 3700 and CSC 3400. All graduating seniors are required to complete a capstone project during their senior year. This is a significant project that a student works on individually (under the guidance of a faculty member) which culminates in a portfolio review, scholarly paper (or technical report) and an oral presentation.

# Proposed description:

#### CSC 4950. Capstone Project. Lec. 3. Credit 3.

Prerequisites: CSC 3700 and CSC 3400 or WEBD 4975. All graduating seniors are required to complete a capstone project during their senior year. This is a significant project that a student works on individually (under the guidance of a faculty member) which culminates in a portfolio review, scholarly paper (or technical report) and an oral presentation.

Effective date: Spring 2011

# 5. Current description:

#### CSC 4990. Computer Science Internship. Credit 3 or 6.

Prerequisite: CSC 3030. See instructor prior to enrolling. Part-time employment in a professional or institutional situation related to the student's area of concentration in computer science. This course may be taken as two 3-hour courses or one 6-hour course.

#### Proposed description:

## CSC 4990. Computer Science Internship. Credit 3 or 6.

Prerequisite: Department approval, CSC 3030, and CSC 3550. See instructor prior to enrolling. Part-time employment in a professional or institutional situation related to the student's area of concentration in computer science. This course may be taken as two 3-hour courses or one 6-hour course. The 6-hour option will be approved in only very limited circumstances.

Effective date: Spring 2011

6. Curriculum clean-up – either Banner or introductory sequence clean up

## A. Current description:

## CSC 2400. Design of Algorithms. Lec. 3. Credit 3.

Prerequisites: CSC 1610 and either CSC 2110 and CSC 2111 or CSC 2020 and 2021. Prerequisite or concurrent enrollment: MATH 1920. Advanced data structures and applications, problem solving strategies, heuristics, complexity of algorithms.

## Proposed description:

# CSC 2400. Design of Algorithms. Lec. 3. Credit 3.

Prerequisites: CSC 1610, and either CSC 2110, 2111 or CSC 2020 and 2021 and MATH 1920. Prerequisite or concurrent enrollment: MATH 1920. Advanced data structures and applications, problem solving strategies, heuristics, complexity of algorithms. MATH 1920 may be taken concurrently.

#### B. Current description:

#### CSC 2710. Foundations of Computer Science. Lec. 3. Credit 3.

Prerequisites: CSC 1610, CSC 2110, 2111 or CSC 2020, 2021 or concurrent enrollment in CSC 2110, 2111 or CSC 2020, 2021. Application of discrete structures to model computational processes; techniques for analysis of algorithms; automata and concepts of language theory.

## Proposed description:

#### CSC 2710. Foundations of Computer Science. Lec. 3. Credit 3.

Prerequisites: CSC 1610, CSC 2110, 2111 or CSC 2020, 2021 or concurrent enrollment in CSC 2110, 2111 or CSC 2020, 2021. Application of discrete structures to model computational processes; techniques for analysis of algorithms; automata and concepts of language theory. CSC 2110 and 2111 may be taken concurrently.

#### C. Current description:

#### CSC 3020. Numerical Methods. Lec. 3. Credit 3.

Prerequisites: MATH 1920 and CSC 2020, 2011 or CSC 2100 or ENGR 1120. Linear and non-linear equations; convergence and error analysis; quadrature; interpolation; numerical differentiation and integration; first order differential equations; boundary value problems; approximation of functions.

## Proposed description:

## CSC 3020. Numerical Methods. Lec. 3. Credit 3.

Prerequisites: MATH 1920 and CSC 2020, 2011 or CSC 2100 or ENGR 1120. Linear and non-linear equations; convergence and error analysis; quadrature; interpolation; numerical differentiation and integration; first order differential equations; boundary value problems; approximation of functions.

#### D. Current description:

#### CSC 3030. Practical and Professional Issues in Computer Science. Lec. 1. Lab. 1. Credit 1.

Prerequisite: Junior standing and CSC 2110, 2111 or CSC 2020, 2021. Required for all computer science majors, including transfer students. Written, oral, and audio-visual communication in computer science; presentation techniques, report preparation, and technical correspondence. Social, ethical, and career aspects of computing.

#### Proposed description:

## CSC 3030. Practical and Professional Issues in Computer Science. Lec. 1. Lab. 1. Credit 1.

Prerequisite: Junior standing and CSC 2110, 2111 or CSC 2020, 2021. Required for all computer science majors, including transfer students. Written, oral, and audio-visual communication in computer science; presentation techniques, report preparation, and technical correspondence. Social, ethical, and career aspects of computing.

#### E. Current description:

# CSC 3310. Computer Logic and Sequential Design. Lec. 3. Credit 3.

Prerequisites: CSC 1610 and CSC 2010, 2011 or CSC 2100. Number systems and codes; Boolean algebra and logic gates; combinational logic MSI and LSI circuits; ROM; flip-flops; clocked sequential circuits; logic design for counters, registers and RAM.

## Proposed description:

#### CSC 3310. Computer Logic and Sequential Design. Lec. 3. Credit 3.

Prerequisites: CSC 1610 and CSC 2010, 2011 or CSC 2100. Number systems and codes; Boolean algebra and logic gates; combinational logic MSI and LSI circuits; ROM; flip-flops; clocked sequential circuits; logic design for counters, registers and RAM.

#### F. Current description:

## CSC 3340. Deterministic Computer Models. Lec. 3. Credit 3.

Prerequisites: CSC 2020, CSC 2021, and MATH 2010. Formulation and application of the models of linear, non-linear, integer and dynamic programming including computer solutions of the algorithms.

# Proposed description:

#### CSC 3340. Deterministic Computer Models. Lec. 3. Credit 3.

Prerequisites: CSC 2020, CSC 2021, CSC 2110, 2111 and MATH 2010. Formulation and application of the models of linear, non-linear, integer and dynamic programming including computer solutions of the algorithms.

#### G. Current description:

## CSC 3400. Distributed and Net-Centric Programming. Lec. 3. Credit 3.

Prerequisites: CSC 2400 and CSC 2120, 2121 or CSC 2300. Concepts in networking, operating systems, distributed computing and programming languages. Application of these issues to web application design.

#### Proposed description:

#### CSC 3400. Distributed and Net-Centric Programming. Lec. 3. Credit 3.

Prerequisites: CSC 2400 and CSC 2120, 2121 or CSC 2300. Concepts in networking, operating systems, distributed computing and programming languages. Application of these issues to web application design.

#### H. Current description:

#### CSC 3402. Distributed and Net-Centric Programming for Engineers. Lec. 2. Credit 2.

Prerequisites: CSC 2400 and CSC 2120, 2121 or CSC 2300. Concepts in networking, operating systems, distributed computing and programming languages. Credit cannot be earned for CSC 3402 in addition to credit for CSC 3400.

#### Proposed description:

## CSC 3402. Distributed and Net-Centric Programming for Engineers. Lec. 2. Credit 2.

Prerequisites: CSC 2400 and CSC 2120, 2121 or CSC 2300. Concepts in networking, operating systems, distributed computing and programming languages. Credit cannot be earned for CSC 3402 in addition to credit for CSC 3400.

#### I. Current description:

# CSC 3410. Computer Organization and Assembly Language Programming. Lec. 3. Credit 3.

Prerequisites: CSC 2020, CSC 2021 or consent of instructor. Computer organization and architecture; machine language; assembly language programming techniques.

## Proposed description:

# CSC 3410. Computer Organization and Assembly Language Programming. Lec. 3. Credit 3.

Prerequisites: CSC 2020, CSC 2021 or consent of instructor CSC 2110, 2111. Computer organization and architecture; machine language; assembly language programming techniques.

#### J. Current description:

## CSC 3700. Software Analysis and Design. Lec. 3. Credit. 3.

Prerequisites: CSC 2400 and CSC 2120, 2121 or CSC 2300. Introduction to life cycle/process models, software requriements analysis, software design, software testing and configuration management.

# Proposed description:

#### CSC 3700. Software Analysis and Design. Lec. 3. Credit. 3.

Prerequisites: CSC 2400 and CSC 2120, 2121 or CSC 2300. Introduction to life cycle/process models, software requirements analysis, software design, software testing and configuration management.

#### K. Current description:

#### CSC 4100 (5100). Operating Systems. Lec. 3. Credit 3.

Prerequisites: CSC 2110, 2111 or CSC 2300 and CSC 3410 or ECE 3120. A historical perspective of operating systems; overview of modern systems; processor, storage and process management; virtual memory; deadlocks; concurrent processing and programming; protection; case studies.

#### Proposed description:

# CSC 4100 (5100). Operating Systems. Lec. 3. Credit 3.

Prerequisites: CSC 2110, 2111 or CSC 2300 and either CSC 3410 or ECE 3120. A historical perspective of operating systems; overview of modern systems; processor, storage and process management; virtual memory; deadlocks; concurrent processing and programming; protection; case studies.

#### L. Current description:

#### CSC 4200 (5200). Computer Networks. Lec. 3. Credit 3.

Prerequisites: CSC 2400, CSC 2710, and CSC 2110, CSC 2111 or CSC 2300. Data communications and computer networks; network models and protocols; local area networks; data security.

#### Proposed description:

# CSC 4200 (5200). Computer Networks. Lec. 3. Credit 3.

Prerequisites: CSC 2400, CSC 2710, and CSC 2110, CSC 2111 or CSC 2300. Data communications and computer networks; network models and protocols; local area networks; data security.

#### M. Current description:

#### CSC 4575 (5575). Information Assurance and Security. Lec. 3. Credit 3.

Prerequisites: Junior standing and CSC 2110, 2111 or CSC 2020, 2021. IAS fundamentals, IAS policies and models, access control, malicious codes, vulnerability analysis, network security, database security, program security, and basic cryptography.

#### Proposed description:

# CSC 4575 (5575). Information Assurance and Security. Lec. 3. Credit 3.

Prerequisites: Junior standing and CSC 2110, 2111 or CSC 2020, 2021. IAS fundamentals, IAS policies and models, access control, malicious codes, vulnerability analysis, network security, database security, program security, and basic cryptography.

# N. Current description:

#### CSC 6750. Parallel Programming. Lec. 3. Cr. 3.

Prerequisites: CSC 2300/CSC 2100, CSC 2400. Hands-on experience in implementing various parallel programming techniques on available resources. Introduction to parallel computing architectures and programming paradigms, theoretical and practical aspects of parallel programming and problem solving, functional and data decompositions. Design of parallel algoriths and parallel programming techniques, including POSIX threads. Message passing Interface (MPI, PVM).

## Proposed description:

# CSC 6750. Parallel Programming. Lec. 3. Cr. 3.

Prerequisites: CSC 2300/CSC 2100 and CSC 2400. Hands-on experience in implementing various parallel programming techniques on available resources. Introduction to parallel computing architectures and programming paradigms, theoretical and practical aspects of parallel programming and problem solving, functional and data decompositions. Design of parallel algorithms and parallel programming techniques, including POSIX threads. Message passing Interface (MPI, PVM).

#### Effective date: Spring 2011

## **Curriculum Changes:**

## 1. Current description of CSC minor:

A Computer Science minor should have completed CSC 2020/2021, plus 6 hours of upper division computer science courses for a total of at least 15 hours in Computer Science (not to include CSC 1100 or CSC 1070).

#### Proposed description:

A Computer Science minor should have completed CSC 2020/2021 CSC 2110/2111, plus 6 hours of upper division computer science courses for a total of at least 15 hours in Computer Science (not to include CSC 1100 or CSC 1070).

**Motion.** Dr. Talbert moved to approve the deletions and changes. The motion was seconded by Dr. Robinson and carried.

# VIII. Approval of Curriculum Changes from the College of Education

In a memorandum dated September 9, 2010, approval was requested for the following:

#### Curriculum Changes:

#### A. Additions:

Prerequisite Admission to the teacher Education Program

## • Early Childhood Special Education

o ECSP 3001 Curriculum for Infant/Toddler/Preschool

ECSP 4300 Assessment/Young Children

#### English as Second Language

o ESLP 4100 ESL M & M for PreK-12

#### • Exercise Science, Physical Education and Wellness

EXPW 4710 Sec. Sch. Curr/Pedagogy/Practicum

#### • Elementary Education

- o ELED 3140 Teaching of Social Studies
- o ELED 3150 Teaching of Mathematics
- o ELED 4140 Science for Elementary Teachers

## Secondary Education

- o SEED 4122 M&M Tchg. Mathematics
- o SEED 4123 M&M Tchg. Science
- o SEED 4124 M&M Tchg. Social Studies
- o SEED 4125 M&M Tchg. Foreign Language

#### Special Education

SPED 4130 Methods Tchg. Pers. w/M&M Dis.

<u>Motion.</u> Ms. Mannle moved to approve the changes effective Spring 2011. The motion was seconded by Ms. Galloway and carried.

## IX. Approval of Course Change from the Department of Accounting

In a memorandum dated August 31, 2010, approval was requested for the following:

#### Course Change:

From: Law 3720 Business Law To: Law 4720 Business Law

**Motion.** Ms. Galloway moved to approve the change effective Spring 2011. The motion was seconded by Ms. Mannle and carried.

#### **Other Such Matters**

Ms. Whiteaker announced that the ADP program is now named "Learning Support Program" and has a new location at Matthews Hall, Room 153.

APES Demonstration – Dr. Eberle conducted a demonstration of the APES program. The need to create an avenue for verbal discussion of course changes was suggested. For course changes where committee discussion would be valuable, a suggestion was made to have some mechanism which would flag it for this purpose.

The meeting adjourned at 4:10.