Report of the University Curriculum Committee  
December 7, 2001

The University Curriculum Committee recommends approval of the following:

1. New Courses

**BIMS 301. Biomedical Sciences Study Abroad. Credit 2 to 6.** For students in approved programs abroad. May be repeated for credit. Must be taken on a satisfactory/unsatisfactory basis. Prerequisites: Admission to approved program and approval of academic dean.

**BIMS 401. Professional Standards for Biomedical Science. (2-2). Credit 3.** Current status and projected trends in the overall economy as related to the health care industry and biomedical sciences; emphasis on professional and advanced degree program strategies for student development in the health and biomedical sciences; acquisition of life skills in the area of time management, information technology and technical writing skills. Must be taken on a satisfactory/unsatisfactory basis. Prerequisite: Junior or senior classification.

**BSEN 150. Introduction to Biological and Agricultural Engineering Design. (0-2). Credit 1.** Introduction to the engineering design process using design problems presented by biological and agricultural engineers from industry; problem definition, information search, idea generation and development of design concepts. Cross-listed with AGEN 150.

**GEOG 360. Natural Hazards. (3-0). Credit 3.** Introduction to the types and causes of natural events that pose risk to society; an examination of prevailing concepts and theories of human response and vulnerability; characteristics of natural events; natural hazard paradigms; case studies. Prerequisites: GEOG 302 or GEOL 101; junior or senior classification.

**GEOS 411. Vegetation Response to Climate Change. (3-0). Credit 3.** Changes of vegetation with historical and predicted climate change; Holocene changes and methods of predicting future change. Prerequisite: Junior or senior classification.

**HORT 309. Interior Plants. (2-2). Credit 3.** Identification, selection and maintenance of interior foliage plants; emphasis on design solutions for commercial and private facilities. Prerequisites: HORT 201; junior or senior classification.

**HORT 420. Concepts of Wine Production. (3-0). Credit 3.** Classic wine grapes of the world and where they are produced; evaluation of wine style and quality through formal laboratory tastings. Prerequisites: HORT 201, 319, 419 or 446 or FSTC 201; must be 21 years of age; junior or senior classification.

2. Course Withdrawals

**AGEN 270. Agricultural Power and Energy Systems.**
AGEN 281. Agricultural Engineering Sophomore Seminar.

AGEN 462. Design of Wood Structures.

AGEN 466. Advanced Techniques in Computer-Aided Design.

3. Changes in Courses

AGEN 150. Introduction to Agricultural Engineering Design.

Course title
From: Introduction to Agricultural Engineering Design.
To: Introduction to Biological and Agricultural Engineering Design.

Course description
From: Introduction to the engineering design process using design problems presented by agricultural engineers from industry; problem definition, information search, idea generation and development of design concepts.
To: Introduction to the engineering design process using design problems presented by biological and agricultural engineers from industry; problem definition, information search, idea generation and development of design concepts.

Cross-listing
From: none.
To: BSEN 150.

AGEN 370. Measurement and Control of Agricultural and Food Processes.

Course title
From: Measurement and Control of Agricultural and Food Processes.
To: Measurement and Control of Biological Systems and Agricultural Processes.

Course description
From: Theory and application of sensors and techniques in the design of systems for the automatic measurement and control of physical parameters of interest in food and agricultural production and processing; optical, electrical, electromagnetic, nuclear, ultrasonic and other methods are applied; signal processing techniques; control methods; and microcomputer I/O.
To: Theory and application of sensors and techniques in the design of systems for automatic control in biological systems and agricultural production and processing; sensor operation; signal processing; control techniques; automation and robotics.

AGEN 465. Engineering Design for Biological Wastes.

Course prefix
From: AGEN 465.
To: BSEN 465.
Course title
From: Engineering Design for Biological Wastes.
To: Design of Biological Waste Treatment Systems.

Course description
From: Management and treatment of wastes of biological origin, with emphasis on agricultural and food processing wastes; design of biological waste treatment processes; regulatory aspects affecting management of agricultural wastes.

To: Management and treatment of high organic content wastes, with emphasis on agricultural and food processing wastes; engineering design of biological waste treatment processes; regulatory aspects affecting management of agricultural wastes.

Prerequisites
From: BICH 107 or 303; ENGR 214.
To: AGEN 365 or BSEN 365; junior or senior classification.

BSEN 471. Introduction to Biochemical Engineering.

Course description
From: Microbial systems; enzyme kinetics; application of biochemical reaction kinetics, transport phenomena and chemical reactor design principles to design and analysis of enzyme reactors and fermentation systems; biochemical separations; biotechnical applications to production agriculture.

To: Fundamentals of microbial and enzyme processes; application of biochemical reaction kinetics, transport phenomena and chemical reactor design principles to design and analysis of enzyme reactors and fermentation systems.

Prerequisite
From: BICH 303; ENGR 214; MATH 308.
To: Senior classification in engineering or approval of instructor.

HORT 419. Grape and Small Fruit Culture.

Course title
From: Grape and Small Fruit Culture.
To: Viticulture and Small Fruit Culture.

Credit hours
From: (2-3). Credit 3.
To: (3-0). Credit 3.

Course description
From: History, taxonomy, propagation, site selection, planting, irrigation, soil management, insect and disease control, pruning, trellising, harvesting, post harvest physiology of grapes, blackberries, blueberries and strawberries, enology of wine grapes.
To: Classic winegrape culture in Europe and U.S. are taught; influence of climate, soil, cultivar, rootstock, canopy and management is presented; nutrition, water, spacing, trellis, pruning, IPM and harvest are integrated for quality yields; culture of muscadines, berries, figs and persimmons are taught.

Prerequisite
From: HORT 319.
To: HORT 319 or approval of instructor.

LAND 320. Landscape Design III.
Credit hours
From: (1-9). Credit 4.
To: (2-9). Credit 5.

LAND 321. Landscape Design IV.
Credit hours
From: (1-9). Credit 4.
To: (2-9). Credit 5.

LAND 420. Landscape Design V.
Credit hours
From: (1-12). Credit 5.
To: (3-9). Credit 6.

LAND 421. Landscape Design VI.
Credit hours
From: (1-9). Credit 4.
To: (2-9). Credit 5.

MEEN 401. Introduction to Mechanical Engineering Design.
Course title
From: Mechanical Engineering Design.
To: Introduction to Mechanical Engineering Design.
Credit hours
From: (3-3). Credit 4.
To: (2-3). Credit 3.