MEMORANDUM

April 16, 2009

- **TO:** Academic Deans Council
- **FROM:** Dr. Timothy N. Chamblee UCCC Chair
- **RE:** Change Notice 7

Listed below are curriculum change proposals which have been recommended by the University Committee on Courses and Curricula. Under current procedure, members of the Academic Deans Council may question the approval of these proposals at any time prior to *5:00 p.m.* on May 1, 2009 by contacting the Committee's office (5-0831), or the office of the Vice President for Academic Affairs (5-3742). If no questions have been raised, the proposals will be considered to have been approved automatically.

1. COURSE PROPOSALS

AGRICULTURE & LIFE SCIENCES

ADD	BCH 2013	Introduction to Forensic Science. (3). (Prerequisites:
		BIO 1134, BIO 1144, or consent of instructor). Three
		hours lecture. Introduction to the field of forensic science,
		including areas of trace evidence. DNA, drug analysis,
		and an overview of forensic science techniques and
		technologies.
		METHOD OF INSTRUCTION: C DELIVERY: F
		C.I.P. 26.0202 24-CHAR: Intro Forensic Science
	DCII /100	Effective: Fall 09 Dischamistry and Molecular Biology Interrights (1.6)
ADD	BCH 4100	Biochemistry and Molecular Biology Internship. (1-0).
		Internship. Credit nours to be arranged. Supervised work,
		career snadowing, or research experience in disciplines
		related to biochemistry and molecular biology in an
		appropriate setting approved by the faculty advisor.
		METHOD OF INSTRUCTION: E DELIVERY: E
		CIP 26 0202 24-CHAR: Biochem Mol Bio Intern
		Effective: Fall 09
ADD	BCH 4333/6333	Advanced Forensic Science. (3). (Prerequisites: BCH
		4013/6013 or BCH 4603/6603 and BCH 4613/6613; or
		consent of instructor). Three hours lecture. An advanced
		study of the central concepts in forensic science as they
		relate to physiology, biochemistry and statistics.
		METHOD OF INSTRUCTION: C DELIVERY: F
		C.I.P. 26.0202 24-CHAR: Adv Forensic Science
		Effective: Fall 00
ADD	FPP 4173/6173	Medical and Veterinary Entomology (3)
ADD	LII 4175/0175	(Prerequisites: FPP 4154 or consent of instructor) Two
		hours lecture. Two hours laboratory Essentials of the
		biology disease relationships surveillance and control of
		arthropode paragitic on humans and animals in the contact
		of clinical and preventive medicine
		or enfinear and preventive medicine.
		METHOD OF INSTRUCTION: B DELIVERY: F
		C.I.P. 26.0702 24-CHAR: Med & Vet Entomology
		Effective: Fall 09

ARCHITECTURE, ART, & DESIGN

ADD	ART 3233	Studio Lighting. (3). (Prere permission of instructor). Sin an introduction to the profest techniques.	quisites: AR x hours studi sional studio	T 2103 or o. The course is lighting
		METHOD OF INSTRUCTION C.I.P. 50.0702 Effective: Fall 09	ON: Q 24-CHAR:	DELIVERY: F Studio Lighting

BUSINESS

2001 (200		
MODIFY		
FR:	BIS 1012	Introduction to Business Information Systems. (3). One hour lecture. Two hours laboratory. Overview of business information systems. Integrating computer hardware, software, data, personnel and procedures is stressed. Instruction in personal productivity packages and the Internet is provided.
TO:	BIS 1012	Introduction to Business Information Systems. (3). One hour lecture. Two hours laboratory. Overview of business information systems. Application of computer hardware, software, data and procedures to business processes. Covers emerging technologies, personal productivity packages and the internet.
MODIEV		Effective: Fall 09
FR:	BIS 8213	Advanced Systems Analysis and Design. (3). (Prerequisites: Six hours of computer programming, or consent of instructor). Three hours lecture. Analysis and design of computer-based information systems using structured methodologies. Emphasis on problem definition, requirements analysis, system design, project management, vendor relations, and quality assurance.
TO:	BIS 8213	Advanced Systems Analysis and Design. (3). (Prerequisites: Three hours of computer programming, or consent of instructor). Three hours lecture. Analysis and design of computer-based information systems using structured methodologies. Emphasis on problem definition, requirements analysis, system design, project management, vendor relations, and quality assurance. Effective: Fall 09

MODIFY		
FR:	BIS 8313	Advanced Database Design Administration. (3). (Prerequisite: BIS 8213, BIS 8413 and BIS 8613). Three hours lecture. Design and management of local and distributed data resources, database design, definition, creation, maintenance, acquisition and use. Role of Database. Administrator.
TO:	BIS 8313	Advanced Database Design Administration. (3). (Prerequisite: BIS 8213 and BIS 8613, and either BIS 6533 or BIS 8413). Three hours lecture. Design and management of local and distributed data resources, database design, definition, creation, maintenance, acquisition and use. Role of Database. Administrator.
MODIEV		
FR:	BIS 8413	Decision Support and Expert Systems. (3). (Prerequisite: Six hours of programming and prerequisite or co-requisite: BIS 8112). Three hours lecture. Analysis of information support systems which serve the manger/user providing quantitative and qualitative based information derived from databases and model bases.
TO:	BIS 8413	Decision Support and Expert Systems. (3). (Prerequisite: Three hours of programming and prerequisite or co-requisite: BIS 8112). Three hours lecture. Analysis of information support systems which serve the manger/user providing quantitative and qualitative based information derived from databases and model bases. Effective: Fall 09

BIS 8513	Business Telecommunications. (3). (Prerequisite: BIS 8213, BIS 8413 and BIS 8613). Three hours lecture. The evaluation, analysis and design of information systems utilizing data communications and networking concepts and techniques. Emphasis is on business applications and related considerations.
BIS 8513	Business Telecommunications. (3). (Prerequisite: BIS 8213, BIS 8613, and either BIS 6533 or BIS 8413). Three hours lecture. The evaluation, analysis and design of information systems utilizing data communications and networking concepts and techniques. Emphasis is on business applications and related considerations. Effective: Fall 09
BIS 8613	MIS Administration. (3). (Prerequisite: Six hours of programming and prerequisite or co-requisite: BIS 8112). Three hours lecture. Administration of the MIS function in the business enterprise. Emphasis on activity of managing the IS function at all levels of the firm.
BIS 8613	MIS Administration. (3). (Prerequisite: Three hours of programming and prerequisite or co-requisite: BIS 8112). Three hours lecture. Administration of the MIS function in the business enterprise. Emphasis on activity of managing the IS function at all levels of the firm. Effective: Fall 09
BUS 1111	Freshman Business Plan. (1). One hours lecture. This
	 course is designed to help entering freshman business majors succeed in their degree program and begin preparation for their business career after graduation. METHOD OF INSTRUCTION: C DELIVERY: F C.I.P. 52.0201 24-CHAR: Freshman Business Plan Effective: Fall 09
	BIS 8513 BIS 8513 BIS 8613 BIS 8613 BIS 1111

ARTS & SCIENCES

MODIFY		
FR:	EN 4353/6353	Century Critical Theory. (3). (Prerequisite: Completion of English requirements in the student's major). A study of major twentieth-century strategies of interpretation, including psychoanalysis, Marxism, structuralism, feminism, deconstruction.
TO:	EN 4353/6353	Critical Theory Since 1900. (3). (Prerequisite: Completion of English requirements in the student's major). Three hours lecture. A study of major twentieth- century strategies of interpretation, including psychoanalysis, Marxism, structuralism, feminism, deconstruction.
MODIEN		Effective: Spring 2010
MODIFY		
FR:	EN 4663/6663	The Twentieth-Century British and Irish Novel. (3). (Prerequisite: Completion of English requirements in the student's major). A study of British and Irish novelists from Conrad and Woolf to Rushdie and Byatt, as well as literary movements including modernism, postmodernism, and postcolonialism.
TO:	EN 4663/6663	The British and Irish Novel Since 1900. (3). (Prerequisite: Completion of English requirements in the student's major). Three hours lecture. A study of British and Irish novelists from Conrad and Woolf to Rushdie and Byatt, as well as literary movements including modernism, postmodernism, and postcolonialism. Effective: Spring 2010
MODIEV		Effective. Spring 2010
FR:	EN 4803/6803	Types of Twentieth Century Drama. (3). (Prerequisite: Completion of English requirements in the student's major). The development of modern American, British, and Continental drama since Ibsen.
TO:	EN 4803/6803	Types of Drama Since 1900. (3). (Prerequisite: Completion of English requirements in the student's major). Three hours lecture. The development of modern American, British, and Continental drama since Ibsen. Effective: Spring 2010

MODIFY		
FR:	EN 4813/6813	The Twentieth-Century World Novel. (3). (Prerequisite: Completion of English requirements in the student's major). Major world novelists of the twentieth century, excluding British, Irish, and American.
TO:	EN 4813/6813	The World Novel Since 1900. (3). (Prerequisite: Completion of English requirements in the student's major). Three hours lecture. Major world novelists of the twentieth century, excluding British, Irish, and American.
		Effective: Spring 2010
MODIFY		
FR:	EN 4823/6823	Twentieth-Century Poetry. (3). (Prerequisite: Completion of English requirements in the student's major). Chief American and British poets; their verse technique and their contribution to poetic art.
TO:	EN 4823/6823	Poetry Since 1900. (3). (Prerequisite: Completion of English requirements in the student's major). Three hours lecture. Chief American and British poets; their verse technique and their contribution to poetic art.
		Effective: Spring 2010
MODIFY		
FR:	EN 4923/6923	Twentieth-Century American Novel. (3). (Prerequisite: Completion of English requirements in the student's major). A study of the American novel since Dreiser.
TO:	EN 4923/6923	American Novel Since 1900. (3). (Prerequisite: Completion of English requirements in the student's major). Three hours lecture. A study of the American novel since Dreiser.
		Effective: Spring 2010
MODIFY		
FR:	EN 8573	Studies in Twentieth-Century Literature. (3).
TO:	EN 8573	Studies in Literature Since 1900. (3).

ADD	PE 8103	Developing Coaching Expertise. (3). This course will provide graduate students with an in depth analysis and practical knowledge of the growth and development of coaches from povice to expertise.
		METHOD OF INSTRUCTION: C DELIVERY: F C.I.P. 13.1314 24-CHAR: Expertise
		Effective: Summer 09
MODIFY FR:	TKI 1223	Wood & Polymer Processing. (3). Two hours lecture. Two hours laboratory. The planning, operation, and control of the processing of natural and synthetic polymers and associated composites.
TO:	TKI 1223	Wood & Polymer Processing. (3). (Prerequisites: EG 1443 & TKI 1213). Two hours lecture. Two hours laboratory. The planning, operation, and control of the processing of natural and synthetic polymers and associated composites.
		Effective: Fall 09
MODIFY FR:	TKI 1813	Basic Electricity and Electronics I. (3). (Prerequisites: MA 1313). One hour lecture. Four hours laboratory. Study of fundamental direct current industrial electrical and electronic principles with experimentation and project construction.
TO:	TKI 1813	Basic Electricity and Electronics I. (3). (Prerequisites: TKI 1213 and MA 1313). One hour lecture. Four hours laboratory. Study of fundamental direct current industrial electrical and electronic principles with experimentation and project construction.
		Effective: Fall 09

MODIFY		
FR:	TKI 2113	Introduction to PLC/CNC Programming. (3). Three hours lecture. Study of fundamental methods in the programming of industrial PLC and CNC controllers, with regard to language and logic.
TO:	TKI 2113	Introduction to PLC Programming. (3). (Prerequisite: TKI 1813). Three hours lecture. Study of fundamental methods in the programming of industrial PLC and CNC controllers, with regard to language and logic Effective: Fall 09
ADD	TKI 2123	Introduction to CNC Programming. (3).(Prerequisites: EG 1443 and MA 1323). Two hourslecture. Two hours laboratory. Study of fundamentalconcepts and techniques in the construction andprogramming of computer numerical controlledmachines.METHOD OF INSTRUCTION: CDELIVERY: BC.I.P. 15.061224-CHAR: Intro CNC ProgEffective: Fall 09
MODIFY FR:	TKI 2323	Forging & Welding. (3). (Prerequisite: Concurrent or credit in TKI 14813). Six hours laboratory. Practice in hand forging: annealing, hardening and tempering of tool steel; casting, gas and electric welding; plasma arc cutting.
TO:	TKI 2323	Forging & Welding. (3). (Prerequisite: EG 1443 & Concurrent or credit in TKI 1813). Six hours laboratory. Practice in hand forging: annealing, hardening and tempering of tool steel; casting, gas and electric welding; plasma arc cutting. Effective: Fall 09

MODIFY		
FR:	TKI 2813	Basic Electricity & Electronics II . (3). (Prerequisites: Ma 1313 and TKI 1813). One hour lecture. Four hours laboratory. Study of fundamental alternating current industrial electrical and electronic principles with experimentation and project construction.
TO:	TKI 2813	Basic Electricity & Electronics II . (3). (Prerequisites: Ma 1313 and TKI 1813). One hour lecture. Four hours laboratory. Study of fundamental alternating current industrial electrical and electronic principles with experimentation and project construction.
		Effective: Fall 09
MODIFY		
FR:	TKI 3043	Industrial Safety. (3). Three hours lecture. Principles and procedures relating to appraisal, organization and administration of safety programs in industrial plants including implementation of occupational safety and health legislation.
TO:	TKI 3043	Industrial Safety. (3). (Prerequisite: 3043). Three hours lecture. Principles and procedures relating to appraisal, organization and administration of safety programs in industrial plants including implementation of occupational safety and health legislation.
		Effective: Fall 09
MODIFY		
FR:	TKI 3063	Industrial Human Relations. (3). Three hours lecture. The application of psychological principles to teacher- pupil relationships, employer-employee relationships, and other human relationships in business and industry.
TO:	TKI 3063	Industrial Human Relations. (3). (Prerequisite: Junior Standing). Three hours lecture. The application of psychological principles to teacher-pupil relationships, employer-employee relationships, and other human relationships in business and industry. Effective: Fall 09

MODIFY		
FR:	TKI 3103	Advanced Electricity & Electronics. (3). (Prerequisite: TKI 1813). One hour lecture. Four hours laboratory. Continuation of TKI 1813. Study of and experimentation with industrial electronic, transistor, and integrated circuitry.
TO:	TKI 3103	Advanced Electricity & Electronics. (3). (Prerequisite: TKI 2813). One hour lecture. Four hours laboratory. Continuation of TKI 1813. Study of and experimentation with industrial electronic, transistor, and integrated circuitry.
		Effective: Fall 09
MODIFY FR:	TKI 3183	Machine Metal Processing. (3). Six hours laboratory. Machine tool (drill, grinder, lathe, mill, and shaper) operations; bench metals, precision measurements, calculations, and chipless machine.
TO:	TKI 3183	Machine Metal Processing. (3). (Prerequisite: TKI 2123 & Junior Standing). Six hours laboratory. Machine tool (drill, grinder, lathe, mill, and shaper) operations; bench metals, precision measurements, calculations, and chipless machine.
		Effective: Fall 09
MODIFY FR:	TKI 3223	Industrial Materials. (3). (Prerequisite: CH 1043). Two hours lecture. Two hours laboratory. An investigation of the mechanical and characteristic properties of industrial materials. The influence of these properties on manufacturing and product service requirements.
TO:	TKI 3223	Industrial Materials. (3). (Prerequisite: CH 1043 and Junior Standing). Two hours lecture. Two hours laboratory. An investigation of the mechanical and characteristic properties of industrial materials. The influence of these properties on manufacturing and product service requirements. Effective: Fall 09

ADD	TKI 3243	Industrial Metrology. (3). (Prerequisites: TKI 2123, BQA 2113 & Junior Standing). Two hours lecture. Two hours laboratory. Study of fundamental and advanced methods employed for measurement in industry.METHOD OF INSTRUCTION: C C.I.P. 15.0612DELIVERY: B 24-CHAR: IND MET
		Effective: Fall 09
MODIFY FR:	TKI 3343	CAD/CAM. (3). Two hours lecture. Two hour laboratory. Basic to intermediate drafting and design techniques using CAD and CAM software, with special emphasis placed on tolerancing, dimensioning and manufacturing processing routes and selection.
TO:	TKI 3343	CAD/CAM. (3). (Perquisite: TKI 3183) Two hours lecture. Two hour laboratory. Basic to intermediate drafting and design techniques using CAD and CAM software, with special emphasis placed on tolerancing, dimensioning and manufacturing processing routes and selection.
MODIEV		Effective: Fall 09
FR:	TKI 3363	Motion and Time Study. (3). (Prerequisites: TKI 3083). Two hours lecture. Two hours laboratory. A study of the techniques for analysis of production systems, the design of work stations, and the development of time standards. (For non-I.E. students). (Same as IE 3113)
TO:	TKI 3363	Motion and Time Study. (3). (Prerequisites: BQA 2113 and Junior Standing). Two hours lecture. Two hours laboratory. A study of the techniques for analysis of production systems, the design of work stations, and the development of time standards. (For non-I.E. students). (Same as IE 3113) Effective: Fall 09

MODIFY		
FR:	TKI 3383	Forecasting and Cost Modeling. (3). (Prerequisite: MGT 3114). Two hours lecture. Two hours laboratory. Use of the higher functions of spreadsheet software to undertake costing of manufacturing process routes and to forecast changes in manufacturing scenarios.
TO:	TKI 3383	Forecasting and Cost Modeling. (3). (Prerequisite: BQA 2113, ACC 2013 and Junior Standing). Two hours lecture. Two hours laboratory. Use of the higher functions of spreadsheet software to undertake costing of manufacturing process routes and to forecast changes in manufacturing scenarios.
		Effective: Fall 09
MODIFY FR:	TKI 4113/6113	Industrial Fluid Power. (3). (Prerequisites: PHI 1113 and TKI 3103). One hour lecture. Four hours laboratory. A practical study of fluid power concepts, components, and systems as relates to modern industrial applications and to appropriate scientific principles. Hands-on laboratory activities.
TO:	TKI 4113/6113	Industrial Fluid Power. (3). (Prerequisites: PHI 1113 TKI 2813 and Junior Standing). One hour lecture. Four hours laboratory. A practical study of fluid power concepts, components, and systems as relates to modern industrial applications and to appropriate scientific principles. Hands-on laboratory activities. Effective: Fall 09
MODIEV		
FR:	TKI 4203/6203	Automated Systems. (3). (Prerequisite: TKI 4103). Two hours lecture. Two hours laboratory. An advanced study of automated systems and applications for the Industrial Technologist.
TO:	TKI 4203/6203	Automated Systems. (3). (Prerequisite: TKI 2113 and TKI 4103). Two hours lecture. Two hours laboratory. An advanced study of automated systems and applications for the Industrial Technologist.

MODIFY		
FR:	TKI 4213/6213	Survey of Energy Sources and Power Technology. (3). (Prerequisite: Three semester hours physical science or other physics). Three hours lecture. Scientific and applied approaches to energy conversion, transmission, utilization, and conservation. Internal-external combustion, nuclear, fluid, Hydroelectric, solar, etc. Current energy problems; lab demonstrations; activities.
TO:	TKI 4213/6213	Survey of Energy Sources and Power Technology. (3). (Prerequisite: Three semester hours physical science or other physics and Junior Standing). Three hours lecture. Scientific and applied approaches to energy conversion, transmission, utilization, and conservation. Internal- external combustion, nuclear, fluid, Hydroelectric, solar, etc. Current energy problems; lab demonstrations; activities.
		Effective: Fall 09
Modify FR:	TKI 4223/633	Quality Assurance. (3). (Prerequisites: BQA 2113 and ACC 1203). Three hours lecture. Concepts and procedures to design, plan, assure, and audit quality and quality systems.
TO:	TKI 4223/6223	Quality Assurance. (3). (Prerequisites: BQA 2113 and Junior Standing). Three hours lecture. Concepts and procedures to design, plan, assure, and audit quality and quality systems.
		Effective: Fall 09
ADD	TKI 4413/6413	 Evolution of Technology. (3). (Prerequisites: EN 3313 and Senior Standing). Three hours lecture. A discussion and appraisal of modern technology and how the technology we have today evolved from the past and how it now affects mankind in industry. METHOD OF INSTRUCTION: C DELIVERY: F C.I.P. 15.0612 24-CHAR: Evol Tech Effective: Fall 09

ENGINEERING

ADD	ABE 4723/6273	Tissue Engineering and Regeneration. (3).
		(Prerequisite: ABE 3813). Three hours lecture. A comprehensive course covering the fundamental concepts, multidisciplinary approaches, and clinical
		applications of tissue engineering/regeneration.
		METHOD OF INSTRUCTION: C DELIVERY: F C.I.P. 14.0501 24-CHAR: Tissue Engineering
		Effective: Fall 09

FOREST RESOURCES

ADD	FO 2443	Essentials of Biotechnology. (3). Three hours lecture.
		An introduction to principles and applications of
		biotechnology. (Same as CVM 2443).
		METHOD OF INSTRUCTION: C DELIVERY: F
		C.I.P. 26.1201 24-CHAR: Essentials Biotechnology
		Effective: Fall 09

VETERINARY MEDICINE

ADD	CVM 2443	Essentials of Biotechnology. (3). Three hours lecture.
		An introduction to principles and applications of
		biotechnology. (Same as FO 2443).
		METHOD OF INSTRUCTION: C DELIVERY: F
		C.I.P. 26.1201 24-CHAR: Essentials Biotechnology
		Effective: Fall 09
ADD	CVM 8041	Advanced Clinical Radiology Seminar. (1). (May be
		repeated for credit). (Prerequisite: Course leader
		approval). A Bi-weekly seminar to present, discuss, and
		interpret radiographic, ultrasound, CT scan, and other
		advanced diagnostic imaging findings of current and
		archived clinical cases.
		METHOD OF INSTRUCTION: H DELIVERY: F
		C.I.P. 60.0305 24-CHAR: Adv Clin Rad Seminar
		Effective: Fall 09
		Effective: Fall 09

ADD	CVM 8051	Advanced Clinical Pathology Seminar. (1). (May be
		repeated for credit). (Prerequisite: Course leader
		approval). Bi-weekly seminar to present, discuss, and
		interpret body fluid analysis, cytology, biopsy,
		toxicology, and/or necropsy findings and other findings
		of current and archived clinical cases.
		METHOD OF INSTRUCTION: H DELIVERY: F C.I.P. 60.0305 24-CHAR: Adv Clin Path Seminar
		Effective: Fall 09

2. DEGREE PROPOSALS

AGRICULTURE & LIFE SCIENCES

MODIFY	Change catalog description,
Degree: Bachelor of Science	and required courses.
Major: Human Sciences	
Concentration: Human Development & Family Studies	Effective: Fall 09

BUSINESS

MODIFY	Change in oral
Degree: Bachelor of Accountancy	communication requirement.
Major: Accountancy	
	Effective: Fall 09
MODIFY	Change in oral
Degree: Bachelor of Business Administration	communication requirements.
Major: Economics, Finance, Real Estate Finance, Risk	
Management, Insurance & Financial Planning,	
Business Administration, Management, Information	
Systems, Market, and BUSI	
Concentration: All	Effective: Fall 09

EDUCATION

MODIFY	Change in catalog description,
Degree: Bachelor of Science	and changes to required
Major: Industrial Technology	courses in the major and
Concentrations: Industrial Automation; Manufacturing	concentrations.
& Maintenance Management; and Industrial	
Distribution	Effective: Fall 09

3. AOCE COURSE AND DEGREE PROPOSALS

ARTS & SCIENCES

	PPA 8983 I	Integrative Capstone
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ENGINEERING

ECE 8463	Fundamentals of Speech Recognition
ECE 8483	Image and Video Coding

FOREST RESOURCES

FO 4423/6423 Professional Practices

4. TECHNICAL CHANGE

MODIEN		
MODIF Y		
FR:	CH 6363	Chemistry of the Environment. (3). (Prerequisite: Consent of instructor). Three hours video and online. Human impact on the environment including agricultural chemistry; water, air and soil pollution; ozone layer; global warming and waste management. (Intended for K- 12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	CHTC 6363	Chemistry of the Environment. (3). (Prerequisite: Consent of instructor). Three hours video and online. Human impact on the environment including agricultural chemistry; water, air and soil pollution; ozone layer; global warming and waste management. (Intended for K- 12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
		METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 40.0502 24-CHAR: Environmental Chemistry
		Effective: Fall 09

MODIFY		
FR:	CH 8073	Research Methods in Chemistry for Interdisciplinary Sciences. (3). (Prerequisites: Fifteen hours CH graduate work and consent of instructor). Three hours video and online. Defining research problems and using analytical techniques in Chemistry Exploring how research in Chemistry relates to other scientific fields. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	CHTC 8073	Research Methods in Chemistry for Interdisciplinary Sciences. (3). (Prerequisites: Fifteen hours CH graduate work and consent of instructor). Three hours video and online. Defining research problems and using analytical techniques in Chemistry Exploring how research in Chemistry relates to other scientific fields. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).METHOD OF INSTRUCTION: CDELIVERY: O C.I.P. 40.0502Effective: Fall 09
MODIFY		
FR:	CH 8083	Canstone in Interdisciplinary Sciences with an
		Emphasis on Chemistry. (3). (Prerequisites: Fifteen hours CH graduate work and consent of instructor). Two hours lecture. Three hours laboratory. Provides field experience in chemistry through planned and supervised projects and field trips. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	CHTC 8083	 Emphasis on Chemistry. (3). (Prerequisites: Fifteen hours CH graduate work and consent of instructor). Two hours lecture. Three hours laboratory. Provides field experience in chemistry through planned and supervised projects and field trips. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). Capstone in Interdisciplinary Sciences with an Emphasis on Chemistry. (3). (Prerequisites: Fifteen hours CH graduate work and consent of instructor). Two hours lecture. Three hours laboratory. Provides field experience in chemistry through planned and supervised projects and field trips. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	CHTC 8083	 Emphasis on Chemistry. (3). (Prerequisites: Fifteen hours CH graduate work and consent of instructor). Two hours lecture. Three hours laboratory. Provides field experience in chemistry through planned and supervised projects and field trips. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). Capstone in Interdisciplinary Sciences with an Emphasis on Chemistry. (3). (Prerequisites: Fifteen hours CH graduate work and consent of instructor). Two hours lecture. Three hours laboratory. Provides field experience in chemistry through planned and supervised projects and field trips. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 40.0502 24-CHAR: Capstone CH for MAIS

MODIFY		
FR:	CH 8363	Analytical Methods in Forensics. (3). (Prerequisite: Consent of instructor). Three hours video and online. A survey of analytical techniques used in forensic science. Both wet chemical and instrumental methods used to investigate criminal activity. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	CHTC 8363	 Analytical Methods in Forensics. (3). (Prerequisite: Consent of instructor). Three hours video and online. A survey of analytical techniques used in forensic science. Both wet chemical and instrumental methods used to investigate criminal activity. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 40.0502 24-CHAR: Analytical Forensics Effective: Fall 09
MODIFY		
FR:	CH 8463	Chemistry of Energy. (3). (Prerequisite: Consent of instructor). Three hours video and online. A survey of the chemistry associated with energy generation in modern society using thermochemical and kinetic principles. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	CHTC 8463	 Chemistry of Energy. (3). (Prerequisite: Consent of instructor). Three hours video and online. A survey of the chemistry associated with energy generation in modern society using thermochemical and kinetic principles. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 40.0502 24-CHAR: Chemistry of Energy
		Effective: Fall 09
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MODIFY		
FR: CI	H 8473	Chemical Structure and Bonding. (3). (Prerequisite: Consent of instructor). Three hours video and online. A survey of the structures that atoms and molecules assume and the theory of bonding in molecules. (Intended for K- 12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO: CHT	C 8473	Chemical Structure and Bonding. (3). (Prerequisite: Consent of instructor). Three hours video and online. A survey of the structures that atoms and molecules assume and the theory of bonding in molecules. (Intended for K- 12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
		METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 40.0502 24-CHAR: CH Structure & Bonding
		Effective: Fall 09
MODIFY FR: CI	H 8563	Organic Molecules & Polymeric Materials. (3). (Prerequisite: Consent of instructor). Three hours video and online. A broad coverage of organic chemistry, and its relationship to natural products, medicinal chemistry, pharmaceutical drugs, and polymers. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO: CHT	C 8563	Organic Molecules & Polymeric Materials. (3). (Prerequisite: Consent of instructor). Three hours video and online. A broad coverage of organic chemistry, and its relationship to natural products, medicinal chemistry, pharmaceutical drugs, and polymers. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C LP 40.0502 24-CHAB: Organics & Polymers
		Effective: Fall 09

MODIFY		
FR:	MA 6013	Applied Mathematics for Interdisciplinary Sciences. (Prerequisite: MA 1313 or equivalent). Three hours video and online. Mathematics necessary for applications in physical sciences. Topics include algebraic and transcendental functions and introductions to differentiation and integration. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	MATC 6013	Applied Mathematics for Interdisciplinary Sciences.(Prerequisite: MA 1313 or equivalent). Three hours videoand online. Mathematics necessary for applications inphysical sciences. Topics include algebraic andtranscendental functions and introductions todifferentiation and integration. (Intended for K-12 scienceteachers. Course cannot be used to satisfy degreerequirements in a non-distance degree).METHOD OF INSTRUCTION: CDELIVERY: OC.I.P. 27.010224-CHAR: Applied Math for MAISEffective: Fall 09
MODIFY FR:	MA 6023	Theory of Equations for Interdisciplinary Sciences. (Prerequisite: MA 1313 or equivalent). Three hours video and online. Topics include complex numbers; polynomials and their properties; roots of algebraic equations; systems of linear equations, determinants and matrices. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	MATC 6023	 Theory of Equations for Interdisciplinary Sciences. (Prerequisite: MA 1313 or equivalent). Three hours video and online. Topics include complex numbers; polynomials and their properties; roots of algebraic equations; systems of linear equations, determinants and matrices. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 27.0102 24-CHAR: Theory Equation for MAIS Effective: Fall 09

MODIFY		
FR:	MA 6033	Studies in Applied Probability and Statistics. (Prerequisite: MA 2113 (same as ST 2113) or equivalent). Three hours video and online. Topics include graphical methods of presenting data; analysis of data; probability, binomial distribution; normal distribution, random sampling; linear regression and correlation. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	MATC 6033	 Studies in Applied Probability and Statistics. (Prerequisite: MA 2113 (same as ST 2113) or equivalent). Three hours video and online. Topics include graphical methods of presenting data; analysis of data; probability, binomial distribution; normal distribution, random sampling; linear regression and correlation. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 27.0102 24-CHAR: Studies App Prob & Stats
		Effective: Fall 09
MODIFY FR:	MA 8033	Studies in Discrete Mathematics. (3). (Prerequisite: MA 6023 or equivalent). Three hours video and online. Selected topics from algebra, number theory, combinatorics, and graph theory. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	MATC 8033	 Studies in Discrete Mathematics. (3). (Prerequisite: MA 6023 or equivalent). Three hours video and online. Selected topics from algebra, number theory, combinatorics, and graph theory. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 27.0102 24-CHAR: Discrete Math for MAIS Effective: Fall 09

MODIFY		
FR:	MA 8053	Applied Linear Algebra for Interdisciplinary Studies. (3). (Prerequisite: MA 6013 or equivalent). Three hours video and online. Topics include applications to discrete dynamical systems, stochastic matrices and Markov chains, linear models and curve fitting. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	MATC 8053	Applied Linear Algebra for Interdisciplinary Studies. (3). (Prerequisite: MA 6013 or equivalent). Three hours video and online. Topics include applications to discrete dynamical systems, stochastic matrices and Markov chains, linear models and curve fitting. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
		METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 27.0102 24-CHAR: Applied Lin Alg for MAIS
		Effective: Fall 09
MODIFY FR:	MA 8063	Differential Equations with Mathematical Modeling. (Prerequisite: MA 6013 or equivalent). Three hours video and online. Topics include building mathematical models, elementary solution techniques, graphical approaches to analysis, and using software to approximate solutions. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	MATC 8063	Differential Equations with Mathematical Modeling. (Prerequisite: MA 6013 or equivalent). Three hours video and online. Topics include building mathematical models, elementary solution techniques, graphical approaches to analysis, and using software to approximate solutions. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
		C.I.P. 27.0102 24-CHAR: Diff Equa w/Math Model
		Effective: Fall 09

MODIFY		
FR:	MA 8073	Research Methods in Mathematics and Statistics for Interdisciplinary Sciences. (3). (Prerequisite: 15 hours MA graduate courses including MA 6033). Three hours video and online. Defining research problems and using analytical techniques in Mathematics and Statistics. Exploring how research in Mathematics relates to other scientific fields. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	MATC 8073	 Research Methods in Mathematics and Statistics for Interdisciplinary Sciences. (3). (Prerequisite: 15 hours MA graduate courses including MA 6033). Three hours video and online. Defining research problems and using analytical techniques in Mathematics and Statistics. Exploring how research in Mathematics relates to other scientific fields. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 27.0102 24-CHAR: MA/ST Research for MAIS Effective: Fall 09
		Effective: Fall 09

MODIFY		
FR:	MA 8083	Capstone in Interdisciplinary Sciences with an Emphasis on Mathematics and Statistics. (3). (Prerequisite: MA 8063 or equivalent). Three hours lecture. Intended to help the student integrate the material learned in previous course work and give them the skills to implement this material in their classrooms. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	MATC 8083	Capstone in Interdisciplinary Sciences with an Emphasis on Mathematics and Statistics. (3). (Prerequisite: MA 8063 or equivalent). Three hours lecture. Intended to help the student integrate the material learned in previous course work and give them the skills to implement this material in their classrooms. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 27.0102 24-CHAR: Capstone MA/ST for MAIS Effective: Fall 09
MODIFY		
FR:	РН 6033	Demonstrations and Concepts for Physics Teachers I. (3). Three hours lecture. Topics are those normally covered in first semester high school physics. Equal emphasis on theory, problems, demonstrations, and laboratory. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	PHTC 6033	 Demonstrations and Concepts for Physics Teachers I. (3). Three hours lecture. Topics are those normally covered in first semester high school physics. Equal emphasis on theory, problems, demonstrations, and laboratory. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 40.0899 24-CHAR: Demo/Concept PH Teach I Effective: Eall 09

MODIFY		
FR:	PH 6043	Demonstrations and Concepts for Physics Teachers II. (3). Three hours lecture. Topics are those normally covered in second semester high school physics. Equal emphasis on theory, problems, demonstrations, and laboratory. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	PHTC 6043	 Demonstrations and Concepts for Physics Teachers II. (3). Three hours lecture. Topics are those normally covered in second semester high school physics. Equal emphasis on theory, problems, demonstrations, and laboratory. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 40.0899 24-CHAR: Demo/Concept PH Teach II Effective: Fall 09
MODIEV		
FR:	PH 6043	Physical Science for Teachers. (2). (Prerequisite: Consent of Instructor). Three hours video and online. Topics are those normally covered in middle school physical science. Major emphasis on theory, demonstrations, laboratory and problem solving. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
TO:	PHTC 6043	 Physical Science for Teachers. (2). (Prerequisite: Consent of Instructor). Three hours video and online. Topics are those normally covered in middle school physical science. Major emphasis on theory, demonstrations, laboratory and problem solving. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 40.0899 24-CHAR Physical Sci for Teacher Effective: Fall 09

PH 8003	Topics for Physics Teachers. (3). (Prerequisite: Consent of instructor and MA 6023 or its equivalent). Three hours lecture. Topics are those required to enable students to effectively teach K-12 physics topics which include theory, demonstrations, laboratory and problem solving. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree).
PHTC 8003	 Topics for Physics Teachers. (3). (Prerequisite: Consent of instructor and MA 6023 or its equivalent). Three hours lecture. Topics are those required to enable students to effectively teach K-12 physics topics which include theory, demonstrations, laboratory and problem solving. (Intended for K-12 science teachers. Course cannot be used to satisfy degree requirements in a non-distance degree). METHOD OF INSTRUCTION: C DELIVERY: O C.I.P. 40.0899 24-CHAR: Topics for PH Teachers Effective: Fall 09
	PH 8003 PHTC 8003

All of the proposals were approved with the exception of the following:

Proposals**

Dr. Jerome A. Gilbert Associate Vice President for Academic Affairs Date