ACADEMIC AFFAIRS COMMITTEE
March 30, 2009
Minutes

Present: Jerry Moller, Bob Austin, LaVon Barrett, Toni Gray, David Hernandez, Judy Jackman, Duane Lintner, Shawna Lopez, Danita McAnally, Courtney Milleson, Carol Moore, Terry Moore, Ed Nolte, Jason Norman, Jack Stanley,

Absent: Diane Brice, Jim Powell, Carol Summers

ALLIED HEALTH
Nuclear Medicine

Mark Rowh submitted a request to make the following course changes due to WECM updates:

- NMTT 1301: Introduction to Nuclear Medicine
  Introduction to the field of nuclear medicine with emphasis on the principles of radiation safety, health physics, ethics and the various studies performed in a nuclear medicine area.

- NMTT 1313: Nuclear Medicine Physics
  A comprehensive study of the physical principles associated with nuclear medicine.

- NMTT 2301: Radiochemistry & Radiopharmacy
  Includes radioactive decay and production of radionuclides. Emphasis on radiopharmaceuticals and their ideal characteristics, biodistribution and clinical applications. Incorporates quality control tests and mathematical equations.

- NMTT 1309: Nuclear Medicine Instrumentation
  Application of instrumentation used in the measurement and analysis of ionizing radiation with emphasis on gamma spectrometry and quality assurance.

- NMTT 2309: Nuclear Medicine Methodology II
  Principles and practices involved in nuclear medicine regarding cardiovascular, genitourinary, respiratory systems and miscellaneous procedures. Emphasizes patient care, anatomy, physiology, pathology, radiopharmaceuticals, instrumentation, data processing and analysis and diagnostic value.

- NMTT 2313: Nuclear Medicine Methodology III
  Principles and practices involved in nuclear medicine regarding gastrointestinal, central nervous system, skeletal system, tumor and inflammation processes and miscellaneous procedures. Emphasizes patient care, anatomy, physiology, pathology, radiopharmaceuticals, instrumentation, data processing and analysis and diagnostic values.

A request to add the following course to the AC course inventory:

- NMTT 2333: Advanced Positron Emission Tomography (PET) and Fusion Technology
  Prerequisite: RADR 2340-minimum grade of C or program director consent
  Advanced study in the field of positron emission tomography and fusion technology. (3 sem hrs; 3 lec)

Based on recommendations by the Joint Review Committee on Education in Nuclear Medicine the following changes were submitted for the Nuclear Medicine curriculum:

- Replace MATH 1332:Contemporary Mathematics I with MATH 1314: College Algebra
- Remove NMTT 1303: Patient Care in Radiology and NMTT 1305: Nuclear Medicine Data Processing
- Add NMTT 2333: Advanced Positron Emission Tomography (PET) and Fusion Technology and RADR 2340: Sectional Anatomy for Medical Imaging

Stanley motioned, seconded by Barrett to approve the changes in the Nuclear Medicine program. The motion carried.

CRIMINAL JUSTICE
Forensics

Toni Gray submitted a request to delete the prerequisite for FORS 2440: Forensic Science I and add PSYC 2301: General Psychology as a prerequisite to FORS 2450: Forensic Science II.

She also submitted a request to replace the BIOL 1406 and BIOL 1407 science requirements in the Forensic Science curriculum with 8 hours of any Natural Sciences on the General Education Course List.

Nolte motioned, seconded by Stanley to approve changes in the . The motion carried.

ITT
Aerospace Manufacturing

Ed Nolte submitted a request to the Academic Affairs Committee in October to pursue the addition of a new AAS degree in Aerospace Manufacturing with the Texas Higher Education Coordinating Board. The AAS degree was approved by the THECB in December 2008. A request has now been submitted to add the following Aerospace Manufacturing curriculum to the Amarillo College catalog:

Austin moved, seconded by Milleson to approve. The motion carried.

Safety & Environmental Technology

Sandra Jefferson submitted a request to update the Safety and Environmental Technology AAS degree and certificate in order to align the program with industry requirements. The

program will focus on areas of Occupational Safety and Environmental Technology. The updates will also align more closely with the career clusters. The changes include the deletion of the following courses:

- AGCR 2319: Fertilizer and Soil Fertility
- AGCR 2301: Agricultural Chemicals
- AGME 1308: Agricultural Parts and Products
- EPCT 1191: Special Topics in Environmental and Pollution Control Technology
- EPCT 1266: Practicum
- EPCT 1311: Introduction to Environmental Science
- EPCT 1313: Contingency Planning
- OSHT 1191: Special Topics – Occupational Safety
- OSHT 1405: OSHA Regulations – Construction Industry
- OSHT 2372: Health Physics I
- OSHT 2373: Health Physics II
- OSHT 2376: Management of Radioactive materials and Radiation Generating Devices
- SCIT 1372: Subsurface Hydrology I

The addition of the following courses to the course inventory:

- EPCT 1391: Special Topics in Environmental and Pollution Control Technology/Technician
  Topics address recently identified current events, skills, knowledge and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.
  (3 sem hr; 3 lec)

- EPCT 1301: Hazardous Waster Operations and Emergency Response (HAZWOPER) Training and Related Topics
  Prerequisites: EPCT 1307 and EPCT 1344
  Minimum certification requirements in the Cdoe of Federal Regulations (CFR) for a hazardous waste site worker as found in 29CFR-1910.120 and 40CFR-264.16.
  (3 sem hrs; 2 lec, 2 lab)

- OSHT 1391: Special Topics – Occupational Safety
  Topics address recently identified current events, skills, knowledge and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.
  (3 sem hrs; 3 lec)

- OSHT 2209: Safety Program Management
  Examine the major safety management issues that effect the workplace including safety awareness, loss control, regulatory issues and human behavior modification.
  (2 sem hrs; 2 lec)

The update of the following courses based on lecture/lab instruction changes:

- EPCT 1305: Environmental Regulations Overview
  An introduction to the history of the environmental movement, including basic requirements for compliance with the environmental regulations.
  (3 sem hrs; 3 lec)

- EPCT 1340: Industrial Chemical Process
  An overview of chemical processes used in the chemical industry.
  (3 sem hrs; 3 lec)

- EPCT 1343: Treatment, Remediation and Disposal Techniques
  A study of the skills required in treatment, remediation and disposal processes of solid waste, hazardous materials and hazardous waste. Emphasizes the technologies applicable in the field.
  (3 sem hrs; 3 lec)

- EPCT 2333: Environmental Toxicology
  Prerequisite: BIOL 2401
  A review of the research determining the systematic health effects of exposure to chemicals. Discussion of risk factors, routes of entry, control measures and acute and chronic effects.
  (3 sem hrs; 3 lec)

- OSHT 2401: OSHA Regulations – General Industry
  A study of Occupational Safety and Health Administration (OSHA) regulations pertinent to general industry.
  (4 sem hrs; 4 lec)

The changes to the AAS curriculum are as follows:

SAFETY & ENVIRONMENTAL TECHNOLOGY

Program Advisor: Sandy Jefferson, 335-4230 smjefferson@actx.edu
or contact the Debby Carey, 345-5543 dacarey@actx.edu

ASSOCIATE IN APPLIED SCIENCE
Major Code – EPCT.AAS

SEMESTER HOURS

GENERAL EDUCATION REQUIREMENTS* 19
Communications
ENGL 1301: Freshman Composition I
SPCH*
Humanities/Fine Arts
Mathematics/Natural Sciences
CHEM 1311: Principles of Chemistry 1
CHEM 1111: Principles of Chemistry Lab 1
MATH 1314: College Algebra
Social/Behavioral Science*

ITT CORE REQUIREMENTS 9
DFTG 1325 Blueprint Reading and Sketching
EPCT 1307: Intro to Environmental Safety & Health
QCTC 1341: Statistical Process Control

MAJOR COURSE REQUIREMENTS 9

EPCT 1301: Hazardous Waste Operations and Emergency Response (HAZWOPER) Training & Related Topics (Students completing this coursework will receive An OSHA required Certificate of Completion for HAZWOPER)
EPCT 1340: Industrial Chemical Processing
OSHT 2374: Instruments & Measures
(Note: Internship course EPCT 2388 and EPCT 2398 may replace other Hazardous Material Technology courses upon approval of Program Advisor.)

RELATED REQUIREMENTS 6
BCIS 1305: Business Computer Applications
ENGL 2311: Technical Writing

ELECTIVES 6
(Approved by Program Advisor)

MAJOR OPTIONS
The student must choose one of the following specialties.

OCCUPATIONAL SAFETY 13

This curriculum provides a specialized program of study to prepare individuals with the skills necessary to write and evaluate safety plans, provide consultation on accident investigations and inspect workplaces for safety issues to reduce job-related injuries and illness. College coursework will lay the foundation to successfully complete the additional training hours and exams required to become a CSP (Certified Safety Professional).

EPCT 1341: Principles of Industrial Hygiene
EPCT 2331: Industrial Hygiene Applications
EPCT 2333: Environmental Toxicology
OSHT 2401: OSHA Regulations – General Industry

ENVIRONMENTAL TECHNOLOGY..... 13
This curriculum provides a specialized program of study to prepare an individual with the skills necessary to perform environmental assessments, environmental sample collection and perform regulatory compliance audits.

BIOL 2306: Environmental Science
BIOL 2106: Environmental Science Lab
EPCT 1305: Environmental Regulations Overview
EPCT 1343: Treatment, Remediation, and Disposal Techniques
EPCT 1344: Environmental Sampling & Analysis
(Note: Internship course EPCT 2388 and EPCT 2398 may replace other Safety & Environmental Technology courses upon approval of Program Advisor.)

TOTAL 62

The changes to the certificate curriculum are as follows:

SAFETY & ENVIRONMENTAL TECHNOLOGY
Program Advisor: Sandy Jefferson, 335-4230 smjefferson@actx.edu or contact the Debby Carey, 345-5543 dacarey@actx.edu

Contact the Testing Center or the Program Advisor for testing requirements.
Testing requirements are based on the unique needs of the certificate program.

CERTIFICATES OF COMPLETION
MAJOR CODE – EPCT.CERT

SEMESTER HOURS
ITT CORE REQUIREMENTS 9
EPCT 1307: Intro to Environmental Safety & Health
QCTC 1341: Statistical Process Control
TECM 1343: Technical Algebra & Trigonometry

MAJOR COURSE REQUIREMENTS..... 9

EPCT 1301:	Hazardous Waste Operations and Emergency Response (HAZWOPER) Training & Related Topics (Students completing this coursework will receive An OSHA required Certificate of Completion for HAZWOPER)
EPCT 1340:	Industrial Chemical Processing
OSHT 2374:	Instruments & Measures

RELATED REQUIREMENTS 3
ENGL 1301: Freshman Composition

ELECTIVES 3
(Approved by Program Advisor)

MAJOR OPTIONS
The student must choose one of the following specialties.

OCCUPATIONAL SAFETY
This curriculum provides a specialized program of study to prepare an individual for entry level positions with the skills necessary to write safety plans and provide consultation on accident investigations and inspect workplaces for safety issues to reduce job-related injuries and illness. College coursework will lay the foundation to successfully complete the additional training hours and exams required to become a CSP (Certified Safety Professional).

MAJOR COURSE REQUIREMENTS 13

EPCT 1341:	Principles of Industrial Hygiene
EPCT 2331:	Industrial Hygiene Applications
EPCT 2333:	Environmental Toxicology
OSHT 2401:	OSHA Regulations – General Industry

(Note: Internship course EPCT 2388 and EPCT 2398 may replace other Hazardous Material Technology courses upon approval of Program Advisor.)

TOTAL 37

ENVIRONMENTAL TECHNOLOGY
This curriculum provides a specialized program of study to prepare individuals for entry level positions with the skills necessary to perform environmental assessments, environmental sample collection and perform regulatory compliance audits.

SEMESTER HOURS

MAJOR COURSE REQUIREMENTS 13

BIOL 2306:	Environmental Science
BIOL 2106:	Environmental Science Lab
EPCT 1305:	Environmental Regulations Overview
EPCT 1343:	Treatment, Remediation, and Disposal Techniques
EPCT 1344:	Environmental Sampling & Analysis

(Note: Internship course EPCT 2388 and EPCT 2398 may replace other Hazardous Material Technology courses upon approval of Program Advisor.)

TOTAL 37

Austin moved, seconded by Stanley to approve all recommended changes to the Safety & Environmental Technology curriculum. The motion carried.

SCIENCES & ENGINEERING
Biology

The biology course inventory currently contains BIOL 2279: Special Topics in Biology, which is a unique needs course. There is now a BIOL 2289: Academic Cooperative in Biology

available in the ACGM. Michael Kopenits submitted a request to replace BIOL 2279 with BIOL 2289.

Milleson moved, seconded by Lintner to replace BIOL 2279 with BIOL 2289. The motion carried.

Electronics

The following courses are scheduled to expire August 31, 2009 in the WECM inventory:

- ITCC 1302: CCNA1: Networking Basics
- ITCC 1306: CCNA2: Router and Routing Basics
- ITCC 1342: CCNA3: Switching Basics and Intermediate Routing
- ITCC 1346: CCNA4:Wide Area Network (WAN)Technologies

The following courses will replace the expired courses:

- ITCC 1401: Exploration – Network Fundamentals
  A course introducing the architecture, structure, functions, components and models of the internet. Describes the use of OSI and TCP layered models to examine the nature and roles of protocols and services at the applications, network, data link and physical layers. Covers the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media and operations. Build simple LAN topologies by applying basic principles of cabling; perform basic configurations of network devices, including routers and switches; and implementing IP addressing schemes.
  (4 sem hrs; 3 lec, 2 lab)

- ITCC 1404: Cisco Exploration 2 – Routing Protocols and Concepts
  This course describes the architecture, components and operation of routers, and explains the principles of routing and routing protocols. Students analyze, configure, verify and troubleshoot the primary routing protocols RIPv1, RIPv2, EIGRP and OSPF. Recognize and correct common routing issues and problems. Model and analyze routing processes.
  (4 sem hrs; 3 lec, 2 lab)

- ITCC 2408: Cisco Exploration 3 – LAN Switching and Wireless
  This course helps students develop an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks. Detailed explanations of LAN switch operations, VLAN implementation, Rapid Spanning Tree Protocol (RSTP), VLAN Trunking Protocol (VTP), Inter-VLAN routing and wireless network operations. Analyze, configure, verify and troubleshoot VLANs, RSTP, VTP and wireless networks. Campus network design and Layer 3 switching concepts are introduced.
  (4 sem hrs; 3 lec, 2 lab)

- ITCC 2410: Cisco Exploration 4 – Accessing the WAN
  This course explains the principles of traffic control and access control lists (ACLs)

and provides an overview of the services and protocols at the data link layer for wide-area access. Describes user access technologies and devices and discovers how to implement and configure Point-to-Point Protocol (PPP), Point-to-Point Protocol over Ethernet (PPPoE), DSL and Frame Relay. WAN security concepts, tunneling and VPN basics are introduced. Discuss the special network services required by converged applications and an introduction to quality of service (QoS).
(4 sem hrs; 3 lec, 2 lab)

CETT 1409: DC-AC Circuits was approved by the Committee in the Fall 2008. The combined course will replace the CETT 1403: DC circuits and CETT 1405: AC Circuits in the curriculum of the EST and Instrument and Control departments.

Nolte noted that the course changes will cause the Networking Technology Certificate (CETT.CERT.NET) to increase to 42-45 semester hours and will move it to a Level 2 certificate.

The courses will be replaced in the following programs:

- Computer Information Systems AAS
- Electronic Systems Technology AAS
- EST – General Electronics Systems Assistant Certificate
- EST – Microcomputer Service Specialist Certificate
- EST – Electronics Application Specialist Certificate
- EST – Networking Technology AAS and Certificate
- Electronics Engineering Technology AAS
- Electronics Engineering Semiconductor Manufacturing Tech AAS
- Instrument & Control AAS
- Instrument & Control – Cathodic Protection Certificate
- Electronic Instrument & Control Technician
- Process Technology Specialist Certificate
- Telecommunication Specialist
- Robotics Technology AAS and Certificate

Austin moved, seconded by Barrett to approve the update of the ITCC courses and the update of the corresponding programs. The motion carried.

Jack Stanley also submitted a request to update the following course due to WECM contact hour changes:

- QCTC 1303: Quality Control
  (3 sem hrs; 3 lec, 1 lab)

Barrett moved, seconded by Milleson to approve the. The motion carried.

Engineering/Mathematics

Kathy Wetzel submitted a request to change the prerequisites for the following courses:

- ENGR 1304: Engineering Graphics
  Prerequisite: MATH 1316 – minimum grade of C

- ENGR 2405: Electrical Circuits – Spring Only
  Prerequisites: Math 2414 and PHYS 2425 – minimum grade of C

Also submitted was a request to:

- Remove the "Fall Only" notation from ENGR 2301 :Engineering Mechanics I
- Remove the "Spring Only" notation from ENGR 2302: Engineering Mechanics II

Milleson moved, seconded by Jackman to approve. The motion carried.

In October 2006, the Academic Affairs committee reduced the minimum number of hours required to complete an associate degree from 62 to 60. However, no programs were updated at the time. Kathy Wetzel submitted a request to delete 6 semester hours of recommended coursework from the Engineering Technology (ENGR.AS.TECH) degree reducing the number of hours required for graduation from 66 to 60 and a request to delete 6 semester hours of recommended coursework from the Mathematics (MATH.AS) degree reducing the number of hours required for graduation from 66 to 60.

Austin moved, seconded by Gray to approve all submitted changes to the Engineering courses, the Engineering Technology degree and the Mathematics degree. The motion carried.

Renewable Energy

Jack Stanley received approval in Fall 2008 from the Academic Affairs Committee to submit a new program application to the THECB for a Renewable Energy-Wind program which includes an AAS degree, a basic Level 1 certificate and an advanced Level 1 certificate. The program received approval from the THECB in December 2008. The new program requires the addition of the following WECM courses to the AC course inventory:

- WIND 2310: Wind Turbine Materials
- WIND 2315: Wind Business
- WIND 2355: Wind Turbine Troubleshooting and Repair
- WIND 2459: Wind Power Delivery System

The new program includes the curricula for the following AAS degree and two certificates:

- Basic Wind Technician Certificate
- Advanced Wind Technician Certificate
- Renewable Energy – Wind Technology AAS degree

Gray moved, seconded by Milleson to approve the addition of the Renewable Energy-Wind

program. The motion carried.

Catalog Publication

In Fall 2008, the Academic Affairs Committee approved a formal requirement to publish the academic catalog by April 1 each year. Because the Academic Affairs meeting dates had already been determined, the last meeting did not allow enough time to complete all approved changes prior to the April 1 deadline. A recommendation was made to extend the deadline for publication of the 2009-10 catalog to April 13, 2009.

Austin moved, seconded by Stanley to extend the deadline for publication of the 2009-10 academic catalog. The motion carried.