CURRICULUM COMMITTEE
October 7, 2011
Minutes

Present: Diane Brice, Craig Clifton, Tamara Clunis, Matt Craig, Bill Crawford, Shawn Fouts, Matthew Goodman, Judy Massie, Carol Moore, John Robertson, Mark Usnick, Kathy Wetzel, Henry Wyckoff

Absent: Bob Austin, Carol Buse, Kim Davis, Jerry Moller, Jason Norman

Guests: Judy Carter, Kristin Edford, Ron Mashburn, Gay Mills, Art Schneider

ACADEMIC SUCCESS

Honors

Judy Carter submitted a request to add the following courses to the course inventory:

- HONR 1011: Honors Seminar
  Prerequisites: EDUC 1100 and EDUC 1200; enrollment limited to Honors Program students
  Examination of the practices and skills of leadership from reading and group projects. (1 lec)
- HONR 1012: Honors Seminar
  Prerequisite: EDUC 1100 and EDUC 1200; enrollment limited to Honors Program students
  A continuation of HONR 1011 with practice in leadership and team building. (1 lec)

Crawford moved, seconded by Wyckoff to add HONR 1011 and HONR 1012 to the course inventory. The motion carried.

ARTS & SCIENCES

Art/Graphic Design

Vicky Taylor-Gore submitted a request to update the prerequisite for the following course:

IMED 1316: Web Page Design I
Prerequisite: ARTC 1325 or PHTC 1300 or instructor consent
Instruction in web page design and related graphic design issues including markup languages, web sites and browsers.
Hours (3 sem hrs; 2 lec, 4 lab)

Wyckoff moved, seconded by Clifton to update the prerequisite for IMED 1316. The motion carried.

Philosophy

Kristin Edford submitted a request to add the following course to the course inventory:

PHIL 2321: Philosophy of Religion
A critical investigation of major religious ideas and experiences.r
(3 sem hrs; 3 lec)

Clifton moved, seconded by Robertson to add the course to the course inventory. The motion carried. The Committee requested the course be considered for inclusion in the Humanities section of the General Education Course List.

And update the following course descriptions:

- PHIL 1301: Introduction to Philosophy
  Introduction to the study of ideas and their logical structure, including arguments and investigations about abstract and real phenomena. Includes introduction to the history, theories and methods of reasoning.
- PHIL 1304: Introduction to World Religions
  A comparative study of various world religions.
- PHIL 2303: Introduction to Logic
  Nature and methods of clear and critical thinking and methods of reasoning such as deduction, induction, scientific reasoning and fallacies.
- PHIL 2306: Introduction to Ethics
  Classical and contemporary theories concerning the good life, human conduct in society, and moral and ethical standards.

Robertson moved, seconded by Crawford to update the Philosophy course descriptions. The motion carried.

Chemistry/Engineering/Physics

Kathy Wetzel submitted a request to update the following course descriptions and learning outcomes based on course changes in the ACGM:

- CHEM 1311 - Principles of Chemistry I
  Fundamental principles of chemistry for majors in the sciences, health sciences and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry.
  Upon successful completion of this course, students will:
    1. Define the fundamental properties of matter.
    2. Classify matter, compounds and chemical reactions.
    3. Determine the basic nuclear and electronic structure of atoms.
    4. Identify trends in chemical and physical properties of the elements using the Periodic Table.
    5. Describe the bonding in and the shape of simple molecules and ions.
    6. Solve stoichiometric problems.
    7. Write chemical formulas.

8. Write and balance equations.
9. Use the rules of nomenclature to name chemical compounds.
10. Define the types and characteristics of chemical reactions.
11. Use the gas laws and basics of the Kinetic Molecular Theory to solve gas problems.
12. Determine the role of energy in physical changes and chemical reactions.
13. Convert units of measure and demonstrate dimensional analysis skills.

- CHEM 1111 - Principles of Chemistry I Laboratory
  Basic laboratory experiments supporting theoretical principles presented in CHEM 1311; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports.
  Upon successful completion of this course, students will:
  1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.
  2. Demonstrate safe and proper handling of laboratory equipment and chemicals.
  3. Conduct basic laboratory experiments with proper laboratory techniques.
  4. Make careful and accurate experimental observations.
  5. Relate physical observations and measurements to theoretical principles.
  6. Interpret laboratory results and experimental data, and reach logical conclusions.
  7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports.
  8. Design fundamental experiments involving principles of chemistry.
  9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.
- CHEM 1312 - Principles of Chemistry II
  Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry.
  Upon successful completion of this course, students will:
  1. State the characteristics of liquids and solids, including phase diagrams and spectrometry.
  2. Articulate the importance of intermolecular interactions and predict trends in physical properties.
  3. Identify the characteristics of acids, bases, and salts, and solve problems based on their quantitative relationships.
  4. Identify and balance oxidation-reduction equations, and solve redox titration problems.
  5. Determine the rate of a reaction and its dependence on concentration, time and temperature.
  6. Apply the principles of equilibrium to aqueous systems using LeChatelier’s Principle to predict the effects of concentration, pressure and temperature changes on equilibrium mixtures.

7. Analyze and perform calculations with the thermodynamic functions, enthalpy, entropy and free energy.
8. Discuss the construction and operation of galvanic and electrolytic electrochemical cells, and determine standard and non-standard cell potentials.
9. Define nuclear decay processes.
10. Describe basic principles of organic chemistry and descriptive inorganic chemistry

- CHEM 1112 - Principles of Chemistry II Laboratory
  Basic laboratory experiments supporting theoretical principles presented in CHEM 1312; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports.
  Upon successful completion of this course, students will:
  1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.
  2. Demonstrate safe and proper handling of laboratory equipment and chemicals.
  3. Conduct basic laboratory experiments with proper laboratory techniques.
  4. Make careful and accurate experimental observations.
  5. Relate physical observations and measurements to theoretical principles.
  6. Interpret laboratory results and experimental data, and reach logical conclusions.
  7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports.
  8. Design fundamental experiments involving principles of chemistry and chemical instrumentation.
  9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.
- ENGR 1304: Engineering Graphics
  Introduction to computer-aided drafting using CAD software and sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication; topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data and fundamentals of computer graphics.
  Upon successful completion of this course, students will:
  1. Discuss the basic steps in the design process.
  2. Demonstrate proficiency in freehand sketching.
  3. Demonstrated proficiency in geometric modeling and computer aided drafting and design (CADD).
  4. Communicate design solutions through sketching and computer graphics software using standard graphical representation methods.
  5. Solve problems using graphical geometry, projection theory, visualization methods, pictorial sketching and geometric (solid) modeling techniques.
  6. Demonstrate proper documentation and data reporting practices.
  7. Complete a project involving creation of 3D rapid prototype models.
  8. Function as part of a design team as a team leader and as a team member.

- ENGR 2301: Engineering Mechanics I

  Basic theory of engineering mechanics, using calculus, involving the description of forces, moments and couples acting on stationary engineering structures; equilibrium in two and three dimensions; free-body diagrams; friction; centroids; centers of gravity; and moments of inertia.

  Upon successful completion of this course, students will:

  1. State the fundamental principles used in the study of mechanics.
  2. Define magnitude and directions of forces and moments and identify associated scalar and vector products.
  3. Draw free body diagrams for two- and three-dimensional force systems.
  4. Solve problems using the equations of static equilibrium.
  5. Compute the moment of force about a specified point or line.
  6. Replace a system of forces by an equivalent simplified system.
  7. Analyze the forces and couples acting on a variety of objects.
  8. Determine unknown forces and couples acting on objects in equilibrium.
  9. Analyze simple trusses using the method of joints or the method of sections.
  10. Determine the location of the centroid and the center of mass for a system of discrete particles and for objects of arbitrary shape.
  11. Analyze structures with a distributed load.
  12. Calculate moments of inertia for lines, areas and volumes.
  13. Apply the parallel axis theorem to compute moments of inertia for composite regions.
  14. Solve problems involving equilibrium of rigid bodies subjected to a system of forces and moments that include friction.
  15. Solve problems involving dry sliding friction, including problems with wedges and belts.

- ENGR 2302: Engineering Mechanics II

  Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies and systems of particles; Newton’s Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems.

  Upon successful completion of this course, students will:

  1. Express dynamic quantities as vectors in terms of Cartesian components, polar coordinates and normal-tangential coordinates.
  2. Compute mass moments of inertia for systems of particles and rigid bodies.
  3. Solve kinematic problems involving rectilinear and curvilinear motion of particles.
  4. Solve kinetic problems involving a system of particles using Newton's Second Law.
  5. Apply the principles of work and energy, conservation of energy, impulse and momentum, and conservation of momentum to the solution of engineering problems involving particles and systems of particles.
  6. Solve kinematic problems involving the translation and rotation of a rigid body.
  7. Solve kinetic problems involving planar translation and rotation of rigid bodies.

8. Apply the principles of work and energy, conservation of energy, impulse and momentum, and conservation of momentum to the solution of engineering problems involving rigid bodies in planar motion.

- PHYS 2425: Principles of Physics I

  Fundamental principles of physics, using calculus, for science, computer science and engineering majors; the principles and applications of classical mechanics, including harmonic motion and physical systems; emphasis on problem solving.

  Upon successful completion of this course, students will:

  1. Determine the components of linear motion (displacement, velocity and acceleration), and especially motion under conditions of constant acceleration.
  2. Solve problems involving forces and work.
  3. Apply Newton's laws to physical problems.
  4. Identify the different types of energy.
  5. Solve problems using principles of conservation of energy.
  6. Define the principles of impulse, momentum and collisions.
  7. Use principles of impulse and momentum to solve problems.
  8. Determine the location of the center of mass and center of rotation for rigid bodies in motion.
  9. Discuss rotational kinematics and dynamics and the relationship between linear and rotational motion.
  10. Solve problems involving rotational and linear motion.
  11. Define equilibrium, including the different types of equilibrium.
  12. Discuss simple harmonic motion and its application to real-world problems.

  LAB

  Basic laboratory experiments supporting theoretical principles presented in lecture involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports.

  Upon successful completion of this course, students will:

  1. Prepare laboratory reports that clearly communicate experimental information in a logical and scientific manner.
  2. Conduct basic laboratory experiments involving classical mechanics.
  3. Relate physical observations and measurements involving classical mechanics to theoretical principles.
  4. Evaluate the accuracy of physical measurements and the potential sources of error in the measurements.
  5. Design fundamental experiments involving principles of classical mechanics.
  6. Identify appropriate sources of information for conducting laboratory experiments involving classical mechanics.

- PHYS 2426: Principles of Physics II

  Principles of physics for science, computer science and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light and optics.

  Upon successful completion of this course, students will:

1. Articulate the fundamental concepts of electricity and electromagnetism, including electrostatic potential energy, electrostatic potential, potential difference, magnetic field, induction and Maxwell's Laws.
2. State the general nature of electrical forces and electrical charges, and their relationship to electrical current.
3. Solve problems involving the inter-relationship of electrical charges, electrical forces and electrical fields.
4. Apply Kirchhoff's Laws to analysis of circuits with potential sources, capacitance and resistance, including parallel and series capacitance and resistance.
5. Calculate the force on a charged particle between the plates of a parallel-plate capacitor.
6. Apply Ohm's law to the solution of problems.
7. Describe the effects of static charge on nearby materials in terms of Coulomb's Law.
8. Use Faraday's and Lenz's laws to find the electromotive forces.
9. Describe the components of a wave and relate those components to mechanical vibrations, sound and decibel level.
10. Articulate the principles of reflection, refraction, diffraction, interference and superposition of waves.
11. Solve real-world problems involving optics, lenses and mirrors.

LAB

Laboratory experiments supporting theoretical principles presented in lecture involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light and optics; experimental design, data collection and analysis, and preparation of laboratory reports.

Upon successful completion of this course, students will:

1. Prepare laboratory reports that clearly communicate experimental information in a logical and scientific manner.
2. Conduct basic laboratory experiments involving electricity and magnetism.
3. Relate physical observations and measurements involving electricity and magnetism to theoretical principles.
4. Evaluate the accuracy of physical measurements and the potential sources of error in the measurements.
5. Design fundamental experiments involving principles of electricity and magnetism.
6. Identify appropriate sources of information for conducting laboratory experiments involving electricity and magnetism.

Usnick moved, seconded by Craig to update the course descriptions and learning outcomes for Chemistry, Engineering and Physics. Wetzel withdrew math courses and will submit at a later date. The motion carried.

CAREER & TECHNICAL EDUCATION
Office Administration

Gay Mills submitted a request to add the following marketable skills certificates to the program inventory:

- Office Computer Software Certificate (OFAD.MKT) 14 Semester Hours
    - POFI 1204: Computer Fundamentals
    - POFI 2301: Word Processing
    - ITSW 1304: Introduction to Spreadsheets
    - ITSC 1309: Integrated Software Applications I
    - POFI 2340: Advanced Word Processing

The Office Computer Software Certificate request was tabled by Fouts pending further discussion within the Business division.

- Office Administration Basic Skills Certificate (OFAD.MKT.BASIC) 12 Semester Hours
    - POFT 1313: Professional Development for Office Personnel
    - POFT 2301: Document Formatting & Skillbuilding
    - POFI 2301: Word Processing
    - POFT 1301: Business English

Wyckoff moved, seconded by Massie to approve the addition of the Office Administration Basic Skills marketable skills certificate. The motion carried.

Renewable Energy

Art Schneider submitted a request to add the following courses to the course inventory:

- ENER 1350: Overview of Energy Industry
  Introduction to the major sectors of the energy industry including fossil fuels, alternative energy systems, power generation facilities and electrical transmission. Includes a comparison of energy industry careers.
  (3 sem hrs; 3 lec)
- HART 1311: Solar Fundamentals
  Study of heat transference, motors, pumps and other mechanical devices; solid state switches; photovoltaic plates and energy conversion; thermal dynamics; and solar energy.
  (3 sem hrs; 2 lec, 2 lab)
- ELMT 1402: Solar Photovoltaic Systems
  Design and installation of solar photovoltaic systems and their applications.
  (4 sem hrs; 3 lec, 2 lab)
- HART 1393: Special Topics in Solar 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 hrs; 2 lec, 2 lab)

Craig moved, seconded by Clifton to approve the addition of ENER 1350, HART 1311, ELMT 1402 and HART 1393 to the course inventory. The motion carried.

Ron Mashburn submitted a request to make the following changes to the Renewable Energy AAS (RNEW.AAS) degree:

Delete the following courses from the curriculum:

- SPCH 1318: Interpersonal Communication
- MATH 1314: College Algebra
- ELMT 2380: Cooperative Education

And add the following courses to the curriculum:

- Any speech from the General Education Course List
- MATH 1332: Contemporary Mathematics I (or any college level mathematics course)
- EECT 2439: Communications Circuits
- LOTT 1301: Introduction to Fiber Optics

Increase the number of hours in the program from 63 to 64 semester hours

Craig moved, seconded by Wyckoff to approve updates to the Renewable Energy AAS degree. The motion carried.

HEALTH SCIENCES
Respiratory Care

Val Hansen submitted a request to update the Respiratory Care AAS (RSPT.AAS) curriculum to incorporate changes recommended by Career Clusters:

Add:

- HITT 1305: Medical Terminology

Delete:

- RSPT 1137: Basic Dysrhythmia Interpretation
- RSPT 1191: Special Topics in Respiratory Care
- RSPT 2147: Specialties in Respiratory Care

Crawford moved, seconded by Wyckoff to approve Respiratory Care program changes. The motion carried.

And update the following course descriptions due to updates in WECM and instruction methods:

- RSPT 1101: Introduction to Respiratory Care
  An introduction to the field of respiratory care.
- RSPT 1307: Cardiopulmonary Anatomy and Physiology
  Anatomy and physiology of the cardiovascular and pulmonary systems.
- RSPT 1410: Respiratory Care Procedures I

Essential knowledge of the equipment and techniques used in the treatment of cardiopulmonary disease.

- RSPT 1411: Respiratory Care Procedures II
  Develops essential knowledge and skills of airway care and mechanical ventilation.
- RSPT 2230: Respiratory Care Examination Preparation
  (2 sem hrs; 2 lec, 1 lab)
- RSPT 2305: Pulmonary Diagnostics
  The theories and techniques involved in pulmonary function testing, blood gas analysis and quality control.
- RSPT 2319: Mechanical Ventilation for the Neonatal/Pediatric Patient
  A study of mechanical ventilation for the neonatal and pediatric patient.
- RSPT 2353: Neonatal/Pediatric Cardiopulmonary Care
  A study of neonatal/pediatric cardiopulmonary care.

Craig moved, seconded by Wyckoff to approve WECM changes to the Respiratory Care course descriptions. The motion carried.

Curriculum Revision Request

Division: Academic Success

Department / Program: Presidential Scholar Honors Program

Prepared By: Judy H. Carter

Request

a. Add HONR 1011 and HONR 1012 HONR 1011 is an examination of the practices and skills of leadershilp from selected readings and group projects. HONR 1012 is a continuation of HONR 1011 with practice in leadership and team building. (1 sem hr; 1 lec)

b. EDUC 1100 PSH and EDUC 1200 PSH are required prerequisites.

c.

d.

Rationale / Justification: EDUC 1100 was added to the course inventory last year; however, it cannot be repeated multiple times to meet the needs of the Honors Program. Adding HONR 1011 and HONR 1012 will provide an avenue for students to complete the Presidential Scholar Program.

Effects of Revisions

A. Faculty & Staff Requirements:	N/A
B. Equipment/Facility Requirements:	N/A
C. Location:	All campuses as needed
D. Income prejections:	N/A

Effective Date: 08/15/2012

HONR 1011
Prerequisite: EDUC 1100 PSH and EDUC 1200 PSH
Enrollment limited to Honors Program students

Description of Course:
Examination of the practices and skills of leadership from readings and group projects.
(1 sem hr; 1 lec)

Objectives and Goals of the Course:
After studying the material presented in this course of study, the student will be able to do the following as evaluated by the instructor:

1. define and explain basic leadership and team building terms and principles
2. analyze various leadership contexts
3. apply leadership and team building principles and theory in practical projects
4. participate in class and group processes
5. demonstrate courtesy and respect for classmates

HONR 1012
Prerequisite: EDUC 1100 PSH, EDUC 1200 PSH
Enrollment limited to Honors Program students

Description of Course:
A continuation of HONR 1011 with practice in leadership and team building.
(1 sem hr; 1 lec)

Objectives and Goals of the Course:
After studying the material presented in this course of study, the student will be able to do the following as evaluated by the instructor:

1. define and explain basic leadership and team building terms and principles
2. analyze various leadership contexts
3. apply leadership and team building principles and theory in practical projects
4. participate in class and group processes
5. demonstrate courtesy and respect for classmates

Curriculum Revision Request

Division: Language, Communication & Fine Arts

Department / Program: Visual Arts, Design & Humanities

Prepared By: Donna Salter

Request

a. Change prerequisites/corequisites for IMED 1316 Web Page Design I from both ARTC 1325 and PHTC 1300 to ARTC 1325 OR PHTC 1300.

b.

c.

d.

Rationale / Justification: Skill taught in PHTC 1300 Photo Digital Imaging or ARTC Intro to Computer Graphices would be sufficient for students pursuing the CIS/WEB track in ARTC AAS degree plan.

Effects of Revisions

A. Faculty & Staff Requirements:	na
B. Equipment/Facility Requirements:	na
C. Location:	na
D. Income prejections:	na

Effective Date: 01/07/2012

IMED 1316 - Web Page Design I

Prerequisites / Corequisite
Prerequisite: ARTC 1325 and PHTC 1300 or instructor consent

Instruction in web page design and related graphic design issues including markup languages, web sites and browsers.

Hours (3 sem hrs; 2 lec, 4 lab)

IMED 1316 - Web Page Design I

Prerequisites / Corequisite
Prerequisite: ARTC 1325 ~~and~~ or PHTC 1300 or instructor consent

Instruction in web page design and related graphic design issues including markup languages, web sites and browsers.

Hours (3 sem hrs; 2 lec, 4 lab)

Curriculum Revision Request Form

1. Division: Arts and Sciences

2. Department/ Program: Humanities and Philosophy

3. Prepared by: Kristin Edford

4. Request:

a. Add PHIL 2321 Philosophy of Religion to the Amarillo College Inventory

PHIL 2321 Philosophy of Religion
Prerequisite: none
A critical investigation of major religious ideas and experiences. (3 semester hours, 3 credit hours)
Approval Number 38.0201.53.12
CIP Area.....Philosophy & Religion
maximum SCH per student 3
maximum SCH per course 3
maximum contact hours per course.....48

5. Rationale and Justification:

A study in the philosophy of religion will allow students to demonstrate an active understanding of people based on a cultural perspective. Students will benefit by using the knowledge on a daily basis to deal more effectively in their career choices when encountering people of different cultural and ethnic backgrounds. A study in the philosophy of religion will also allow students to critically analyze their own thoughts and behavior in the current world and environment in which they live.

The areas of study which will benefit most from a philosophy of religion course would include areas of medicine, education, law enforcement and energy programs where students encounter and participate daily with many ethnicities. The course would help students to examine their own reactions to cultural differences and allow them to evaluate a course of action for better understanding and working relationships.

6. Effects of Revisions:
a. Faculty & Staff Requirements: none
b. Equipment/ Facility Requirements: none
c . Location: none
d. Income Projections: The course will serve 25 – 50 students per year being offered one time per semester.

Effective Date: November 2011 for Spring Catalog 2012

Curriculum Revision Request Form

1. Division: Arts and Sciences

2. Department/ Program: Humanities and Philosophy

3. Prepared by: Kristin Edford

4. Request: Update AC Catalog course descriptions to match ACGM (Academic Course Guideline Manual 2010) course descriptions for the following courses:

a. PHIL 1301 Introduction to Philosophy
Current AC Catalog –
Various branches of philosophy – the nature of goodness, freedom – and certain basic problems within each branch. Designed to introduce the student to philosophical thinking.

Change to –
Introduction to the study of ideas and their logical structure, including arguments and investigations about abstract and real phenomena. Includes introduction to the history, theories, and methods of reasoning.

b. PHIL 1304 Introduction to World Religions
Current AC Catalog –
History, doctrine, literature and practices of major world religions such as Islam, Buddhism, Hinduism, Judaism and Christianity.

Change to –
A comparative study of various world religions.

c. PHIL 2303 Introduction to Logic
Current AC Catalog –
Introductory study of recognition, analysis, criticism and construction of the main types of argument and proof. Designed to help student discriminate between right and wrong thinking.

Change to –
Nature and methods of clear and critical thinking and methods of reasoning such as deduction, induction, scientific reasoning, and fallacies.

d. PHIL 2306 Introduction to Ethics
Current AC Catalog -
A study of traditional views of the good life and good society, with critical examination of theories of the nature of goodness, happiness, duty, freedom, etc.

Change to –
Classical and contemporary theories concerning the good life, human conduct in society, and moral and ethical standards.

5. Rationale and Justification: Changes to the current AC course descriptions are required to match the current course descriptions listed in the Academic Course Guideline Manual (ACGM, THEBC 2010).

6. Effects of Revisions
a. Faculty & Staff Requirements: none
b. Equipment/ Facility Requirements: none
c. Location: none
d. Income Projections: none

Effective Date: Spring Catalog, November 2011

Additional Information:
Faculty have included both the current AC Catalog and ACGM course descriptions for their specific courses. In accordance to preparations for SACCOCS the following Student Learning Outcomes have also been included in the Philosophy Syllabi –

Learning Outcomes for Philosophy: CCIC 1,2,3,4,5 CCP 1,2,5,7,8 EEOSB 1,2,4,5,9,10,12

1. To understand the appropriate methods, technologies, and data that social and behavioral scientists use to investigate the human condition.

2. To identify and demonstrate an understanding of the main categories of philosophy (such as metaphysics, epistemology, logic, ethics, axiology, and religion)

3. To identify and analyze the origins, historical, social, cultural emphasis of philosophical inquiry.

4. To demonstrate an understanding of the principle characteristics which define the areas of philosophy through a presentation of critical analysis.

5. To recognize and apply reasonable criteria for the acceptability of historical evidence and social research.

6. To analyze, critically assess, and develop creative solutions to philosophical problems.

7. To identify and understand differences and commonalities within diverse cultures.

Curriculum Revision Request

Division:

Department / Program: Mathematics, Sciences, and Engineering

Prepared By: Kathryn Wetzel

Request

a. CHEM 1111, CHEM 1112, CHEM 1311, CHEM 1312 , ENGR 1304, ENGR 2301, ENGR 2302, MATH 2413, MATH 2414, MATH 2415, MATH 2320, PHYS 2425, and PHYS 2426 change the course descriptions to match those in the ACGM. See attached pages.

b. MATH 2413, MATH 2414, MATH 2415, MATH 2320, PHYS 2425, and PHYS 2426. Change the outcomes given in the online syllabi to those provided in the ACGM. See attached pages. I would like to petition that they be incorporated into a limited access portion of the online syllabus template so that they can only be altered by the appropriate coordinator or department chair

c. CHEM 1111, CHEM 1112, CHEM 1311, CHEM 1312 , ENGR 1304, ENGR 2301, and ENGR 2302 already have outcomes in the online syllabi matching those in the ACGM. See attached pages. I would like to petition that they be incorporated into a limited access portion of the online syllabus template so that they can only be altered by the appropriate coordinator or department chair

d.

Rationale / Justification: The course description and outcomes need to reflect those given in the ACGM

Effects of Revisions

A. Faculty & Staff Requirements:	N/A
B. Equipment/Facility Requirements:	N/A
C. Location:	N/A
D. Income prejections:	N/A

Effective Date: 10/10/2011

Current	Proposed
CHEM 1311: Fundamental principles of chemistry including stoichiometry, atoms and molecules and their structures, state and properties of matter, gas laws, solutions, enthalpy, reactions and acid/base chemistry. For students who plan careers in the physical sciences or related science, medical or engineering fields.	CHEM 1311: Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry.
Upon successful completion of this course, students will: 1. Define the fundamental properties of matter 2. Classify matter, compounds, and chemical reactions. 3. Determine the basic nuclear and electronic structure of atoms. 4. Identify trends in the chemical and physical properties of the elements using the periodic table. 5. Describe the bonding in and the shape of simple molecules and ions. 6. Solve stoichiometric problems. 7. Write chemical formulas. 8. Write and balance equations. 9. Use the rules of nomenclature to name chemical compounds. 10. Define the types and characteristics of chemical reactions. 11. Use the gas laws and basics of the Kinetic Molecular Theory to solve gas problems. 12. Determine the role of energy in physical changes and chemical reactions. 13. Covert units of measure and demonstrate dimensional analysis skills.	Upon successful completion of this course, students will: 1. Define the fundamental properties of matter. 2. Classify matter, compounds, and chemical reactions. 3. Determine the basic nuclear and electronic structure of atoms. 4. Identify trends in chemical and physical properties of the elements using the Periodic Table. 5. Describe the bonding in and the shape of simple molecules and ions. 6. Solve stoichiometric problems. 7. Write chemical formulas. 8. Write and balance equations. 9. Use the rules of nomenclature to name chemical compounds. 10. Define the types and characteristics of chemical reactions. 11. Use the gas laws and basics of the Kinetic Molecular Theory to solve gas problems. 12. Determine the role of energy in physical changes and chemical reactions. 13. Convert units of measure and demonstrate dimensional analysis skills

Current	Proposed
CHEM 1111: Includes use of standard laboratory equipment and techniques, both qualitative and quantitative, such as gravimetric analysis, titrations, descriptive chemistry and investigation of gas laws.	CHEM 1111: Basic laboratory experiments supporting theoretical principles presented in CHEM 1311; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports
Upon successful completion of this course, students will: 1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory. 2. Demonstrate safe and proper handling of laboratory equipment and chemicals. 3. Conduct basic laboratory experiments with proper laboratory techniques. 4. Make careful and accurate experimental observations. 5. Relate physical observations and measurements to theoretical principles. 6. Interpret laboratory results and experimental data, and reach logical conclusions. 7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports. 8. Design fundamental experiments involving principles of chemistry. 9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.	Upon successful completion of this course, students will: 1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory. 2. Demonstrate safe and proper handling of laboratory equipment and chemicals. 3. Conduct basic laboratory experiments with proper laboratory techniques. 4. Make careful and accurate experimental observations. 5. Relate physical observations and measurements to theoretical principles. 6. Interpret laboratory results and experimental data, and reach logical conclusions. 7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports. 8. Design fundamental experiments involving principles of chemistry. 9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.

Current	Proposed
CHEM 1312: A continuation of CHEM 1311 including topics in oxidation-reduction, kinetics, equilibrium and solubility	CHEM 1312: Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry.
Upon successful completion of this course, students will: 1. State the characteristics of liquids and solids, including phase diagrams and spectrometry. 2. Articulate the importance of intermolecular interactions and predict trends in physical properties. 3. Identify the characteristics of acids, bases, and salts, and solve problems based on their quantitative relationships. 4. Identify and balance oxidation-reduction equations, and solve redox titration problems. 5. Determine the rate of a reaction and its dependence on concentration, time, and temperature. 6. Apply the principles of equilibrium to aqueous systems using LeChatelier's Principle to predict the effects of concentration, pressure, and temperature changes on equilibrium mixtures. 7. Analyze and perform calculations with the thermodynamic functions, enthalpy, entropy, and free energy. 8. Discuss the construction and operation of galvanic and electrolytic electrochemical cells, and determine standard and non-standard cell potentials. 9. Define nuclear decay processes. 10. Describe basic principles of organic chemistry and descriptive inorganic chemistry	Upon successful completion of this course, students will: 1. State the characteristics of liquids and solids, including phase diagrams and spectrometry. 2. Articulate the importance of intermolecular interactions and predict trends in physical properties. 3. Identify the characteristics of acids, bases, and salts, and solve problems based on their quantitative relationships. 4. Identify and balance oxidation-reduction equations, and solve redox titration problems. 5. Determine the rate of a reaction and its dependence on concentration, time, and temperature. 6. Apply the principles of equilibrium to aqueous systems using LeChatelier's Principle to predict the effects of concentration, pressure, and temperature changes on equilibrium mixtures. 7. Analyze and perform calculations with the thermodynamic functions, enthalpy, entropy, and free energy. 8. Discuss the construction and operation of galvanic and electrolytic electrochemical cells, and determine standard and non-standard cell potentials. 9. Define nuclear decay processes. 10. Describe basic principles of organic chemistry and descriptive inorganic chemistry

Current	Proposed
CHEM 1112: Applications of quantitative and qualitative laboratory techniques, spectrophotometric analysis, titration, kinetic studies and oxidation-reduction reactions.	CHEM 1112: Basic laboratory experiments supporting theoretical principles presented in CHEM 1312; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports..
Upon successful completion of this course, students will: 1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory. 2. Demonstrate safe and proper handling of laboratory equipment and chemicals. 3. Conduct basic laboratory experiments with proper laboratory techniques. 4. Make careful and accurate experimental observations. 5. Relate physical observations and measurements to theoretical principles. 6. Interpret laboratory results and experimental data, and reach logical conclusions. 7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports. 8. Design fundamental experiments involving principles of chemistry and chemical instrumentation. 9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry	Upon successful completion of this course, students will: 1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory. 2. Demonstrate safe and proper handling of laboratory equipment and chemicals. 3. Conduct basic laboratory experiments with proper laboratory techniques. 4. Make careful and accurate experimental observations. 5. Relate physical observations and measurements to theoretical principles. 6. Interpret laboratory results and experimental data, and reach logical conclusions. 7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports. 8. Design fundamental experiments involving principles of chemistry and chemical instrumentation. 9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry

Current	Proposed
ENGR 1304: Use of orthographic principles for engineering, drafting and architecture majors. Basic orthographic projection principles, auxiliary views, intersection of planes, parallelism, perpendicularity, mining and engineering problems, concurrent vectors, plane tangencies, intersection of surfaces, developments, shades, shadows and perspective projections. Introduction to computer graphics.	ENGR 1304: Introduction to computer-aided drafting using CAD ~~S~~ OK software and sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication; topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics.
Upon successful completion of this course, students will: 1. Discuss the basic steps in the design process. 2. Demonstrate proficiency in freehand sketching. 3. Demonstrated proficiency in geometric modeling and computer aided drafting and design (CADD). 4. Communicate design solutions through sketching and computer graphics software using standard graphical representation methods. 5. Solve problems using graphical geometry, projection theory, visualization methods, pictorial sketching, and geometric (solid) modeling techniques. 6. Demonstrate proper documentation and data reporting practices. 7. Complete a project involving creation of 3D rapid prototype models. 8. Function as part of a design team as a team leader and as a team member.	Upon successful completion of this course, students will: 1. Discuss the basic steps in the design process. 2. Demonstrate proficiency in freehand sketching. 3. Demonstrated proficiency in geometric modeling and computer aided drafting and design (CADD). 4. Communicate design solutions through sketching and computer graphics software using standard graphical representation methods. 5. Solve problems using graphical geometry, projection theory, visualization methods, pictorial sketching, and geometric (solid) modeling techniques. 6. Demonstrate proper documentation and data reporting practices. 7. Complete a project involving creation of 3D rapid prototype models. 8. Function as part of a design team as a team leader and as a team member.

Current	Proposed
ENGR 2301: Vectors, vector algebra, forces, force systems, equilibrium of rigid bodies, analysis of trusses, friction, particle kinematics, particle kinetics, particle work and energy.	ENGR 2301: Basic theory of engineering mechanics, using calculus, involving the description of forces, moments, and couples acting on stationary engineering structures; equilibrium in two and three dimensions; free-body diagrams; friction; centroids; centers of gravity; and moments of inertia.
Upon successful completion of this course, students will: 1. State the fundamental principles used in the study of mechanics. 2. Define magnitude and directions of forces and moments and identify associated scalar and vector products. 3. Draw free body diagrams for two- and three-dimensional force systems. 4. Solve problems using the equations of static equilibrium. 5. Compute the moment of force about a specified point or line. 6. Replace a system of forces by an equivalent simplified system. 7. Analyze the forces and couples acting on a variety of objects. 8. Determine unknown forces and couples acting on objects in equilibrium. 9. Analyze simple trusses using the method of joints or the method of sections. 10. Determine the location of the centroid and the center of mass for a system of discrete particles and for objects of arbitrary shape. 11. Analyze structures with a distributed load. 12. Calculate moments of inertia for lines, areas, and volumes. 13. Apply the parallel axis theorem to compute moments of inertia for composite regions. 14. Solve problems involving equilibrium of rigid bodies subjected to a system of forces and moments that include friction. 15. Solve problems involving dry sliding friction, including problems with wedges and belts.	Upon successful completion of this course, students will: 1. State the fundamental principles used in the study of mechanics. 2. Define magnitude and directions of forces and moments and identify associated scalar and vector products. 3. Draw free body diagrams for two- and three-dimensional force systems. 4. Solve problems using the equations of static equilibrium. 5. Compute the moment of force about a specified point or line. 6. Replace a system of forces by an equivalent simplified system. 7. Analyze the forces and couples acting on a variety of objects. 8. Determine unknown forces and couples acting on objects in equilibrium. 9. Analyze simple trusses using the method of joints or the method of sections. 10. Determine the location of the centroid and the center of mass for a system of discrete particles and for objects of arbitrary shape. 11. Analyze structures with a distributed load. 12. Calculate moments of inertia for lines, areas, and volumes. 13. Apply the parallel axis theorem to compute moments of inertia for composite regions. 14. Solve problems involving equilibrium of rigid bodies subjected to a system of forces and moments that include friction. 15. Solve problems involving dry sliding friction, including problems with wedges and belts.

Current	Proposed
ENGR 2302: Particle dynamics; particle impulse and momentum; area and mass moments; rigid body kinetics; rigid body dynamics including forces, work, energy, impulse and momentum. .	ENGR 2302: Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems..
Upon successful completion of this course, students will: 1. Express dynamic quantities as vectors in terms of Cartesian components, polar coordinates, and normal-tangential coordinates. 2. Compute mass moments of inertia for systems of particles and rigid bodies. 3. Solve kinematic problems involving rectilinear and curvilinear motion of particles. 4. Solve kinetic problems involving a system of particles using Newton's Second Law. 5. Apply the principles of work and energy, conservation of energy, impulse and momentum, and conservation of momentum to the solution of engineering problems involving particles and systems of particles. 6. Solve kinematic problems involving the translation and rotation of a rigid body. 7. Solve kinetic problems involving planar translation and rotation of rigid bodies. 8. Apply the principles of work and energy, conservation of energy, impulse and momentum, and conservation of momentum to the solution of engineering problems involving rigid bodies in planar motion.	Upon successful completion of this course, students will: 1. Express dynamic quantities as vectors in terms of Cartesian components, polar coordinates, and normal-tangential coordinates. 2. Compute mass moments of inertia for systems of particles and rigid bodies. 3. Solve kinematic problems involving rectilinear and curvilinear motion of particles. 4. Solve kinetic problems involving a system of particles using Newton's Second Law. 5. Apply the principles of work and energy, conservation of energy, impulse and momentum, and conservation of momentum to the solution of engineering problems involving particles and systems of particles. 6. Solve kinematic problems involving the translation and rotation of a rigid body. 7. Solve kinetic problems involving planar translation and rotation of rigid bodies. 8. Apply the principles of work and energy, conservation of energy, impulse and momentum, and conservation of momentum to the solution of engineering problems involving rigid bodies in planar motion.

Current	Proposed
PHYS 2425: Lecture: General survey of calculus based physics with both lecture and laboratory components. Topics include kinematics, dynamics, thermal physics and wave motion.This course is for science and engineering majors. Lab: .	PHYS 2425: Lecture: Fundamental principles of physics, using calculus, for science, computer science, and engineering majors; the principles and applications of classical mechanics, including harmonic motion and physical systems; emphasis on problem solving. Lab: Basic laboratory experiments supporting theoretical principles presented in ~~PHYS 2325~~ lecture involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports.
Upon successful completion of this course, students will: 1. Determine the components of linear motion (displacement, velocity, and acceleration), and especially motion under conditions of constant acceleration 2. Solve problems involving forces and work. 3. Apply Newton's laws to physical problems. 4. Identify the different types of energy. 5. Solve problems using principles of conservation of energy. 6. Define the principles of impulse, momentum, and collisions. 7. Use principles of impulse and momentum to solve problems. 8. Determine the location of the center of mass and center of rotation for rigid bodies in motion. 9. Discuss rotational kinematics and dynamics and the relationship between linear and rotational motion. 10. Solve problems involving rotational and linear motion 11. Define equilibrium, including the different types of equilibrium. 12. Discuss simple harmonic motion and its application to real-world problems. 13. Describe the components of a wave and relate those components to mechanical vibrations, sound, and decibel level. Lecture: 1. Prepare laboratory reports that clearly communicate experimental information in a logical and scientific manner. 2. Conduct basic laboratory experiments	Upon successful completion of this course, students will: Lecture: 1. Determine the components of linear motion (displacement, velocity, and acceleration), and especially motion under conditions of constant acceleration. 2. Solve problems involving forces and work. 3. Apply Newton's laws to physical problems. 4. Identify the different types of energy. 5. Solve problems using principles of conservation of energy. 6. Define the principles of impulse, momentum, and collisions. 7. Use principles of impulse and momentum to solve problems. 8. Determine the location of the center of mass and center of rotation for rigid bodies in motion. 9. Discuss rotational kinematics and dynamics and the relationship between linear and rotational motion. 10. Solve problems involving rotational and linear motion. 11. Define equilibrium, including the different types of equilibrium. 12. Discuss simple harmonic motion and its application to real-world problems. Lab: 1. Prepare laboratory reports that clearly communicate experimental information in a logical and scientific manner. 2. Conduct basic laboratory experiments involving classical mechanics.

involving classical mechanics. 3. Relate physical observations and measurements involving classical mechanics to theoretical principles. 4. Evaluate the accuracy of physical measurements and the potential source of error in the measurements. 5. Design fundamental experiments involving principles of classical mechanics. 6. Identify appropriate sources of information for conducting laboratory experiments involving classical mechanics.	3. Relate physical observations and measurements involving classical mechanics to theoretical principles. 4. Evaluate the accuracy of physical measurements and the potential sources of error in the measurements. 5. Design fundamental experiments involving principles of classical mechanics. 6. Identify appropriate sources of information for conducting laboratory experiments involving classical mechanics

Current	Proposed
PHYS 2426: Lecture: A continuation of PHYS 2425 with both lecture and laboratory components. Topics include electricity, magnetism and optics. Lab:	PHYS 2426: Lecture: Principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics. Lab: Laboratory experiments supporting theoretical principles presented in PHYS 2326 involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics; experimental design, data collection and analysis, and preparation of laboratory reports
Upon successful completion of this course, students will: (1) Articulate the fundamental concepts of electricity and electromagnetism, including electrostatic potential energy, electrostatic potential, potential difference, magnetic field, induction, and Maxwell's equations. (2) State the general nature of electrical forces and electrical charges, and their relationship to electrical current. (3) Solve problems involving the inter-relationship of electrical charges, electrical forces, and electrical field. (4) Apply Kirchhoff's laws to analysis of circuits with potential sources, capacitance, and resistance, including parallel and series capacitance and resistance. (5) Calculate the force on a charged particle between the plates of a parallel-plate capacitor. (6) Apply Ohm's law to the solution of problems. (7) Describe the effects of static charge on nearby materials in terms of Coulomb's law. (8) Use Faraday's and Lenz's laws to find the electromotive forces. (9) Articulate the principles of reflection, refraction, diffraction, interference and superposition of electromagnetic waves. (10) Solve real world problems involving optics, lenses, and mirrors. Lecture: (1) Prepare laboratory reports that clearly communicate experimental information in logical and scientific manner. (2) Conduct basic laboratory experiments involving electricity and magnetism. (3) Relate physical observations and	Upon successful completion of this course, students will: Lecture: 1. Determine the components of linear motion (displacement, velocity, and acceleration), and especially motion under conditions of constant acceleration. 2. Solve problems involving forces and work. 3. Apply Newton's laws to physical problems. 4. Identify the different types of energy. 5. Solve problems using principles of conservation of energy. 6. Define the principles of impulse, momentum, and collisions. 7. Use principles of impulse and momentum to solve problems. 8. Determine the location of the center of mass and center of rotation for rigid bodies in motion. 9. Discuss rotational kinematics and dynamics and the relationship between linear and rotational motion. 10. Solve problems involving rotational and linear motion. 11. Define equilibrium, including the different types of equilibrium. 12. Discuss simple harmonic motion and its application to real-world problems. Lab: 1. Prepare laboratory reports that clearly communicate experimental information in a logical and scientific manner. 2. Conduct basic laboratory experiments involving classical mechanics. 3. Relate physical observations and measurements involving classical mechanics to theoretical principles.

update outcomes

measurements involving electricity and magnetism to theoretical principles. (4) Evaluate the accuracy of physical measurements and the potential sources of error in the measurement. (5) Design fundamental experiments involving principles of electricity and magnetism. (6) Identify appropriate sources of information for conducting laboratory experiments involving electricity and magnetism.	4. Evaluate the accuracy of physical measurements and the potential sources of error in the measurements. 5. Design fundamental experiments involving principles of classical mechanics. 6. Identify appropriate sources of information for conducting laboratory experiments involving classical mechanics

Curriculum Revision Request

Division: Business Division

Department / Program: Office Administration

Prepared By: Gay Mills

Request

a. Add a marketable skills certificate program (Office Computer Software Certificate). The 14 credit-hour certificate program will include these courses: POFI 1204--Computer Fundamentals, POFI 2301--Word Processing, ITSW 1304--Introduction to Spreadsheets, ITSC 1309--Integrated Software Applications, and POFI 2340--Advanced Word Processing.

b. Add a marketable skills certificate program (Basic Skills Certificate). The 12 credit-hour certificate program will include these courses: POFT 1313--Professional Development for Office Personnel, POFT 2301--Document Formatting and Skillbuilding, POFI 2301--Word Processing, and POFT 1301--Business English.

c.

d.

Rationale / Justification: We will offer shorter, very basic certificate programs for students who are not able to take longer programs. These basic skills are part of the Office Administration Program core curriculum, so students are encouraged to continue their academic study to complete higher-level degree plans.

Effects of Revisions

A. Faculty & Staff Requirements:	Existing faculty teach the courses.
B. Equipment/Facility Requirements:	None.
C. Location:	Students will meet in regularly-scheduled classes.
D. Income prejections:	Not known.

Effective Date: 01/16/2012

Office Administration Department

Office Computer Software Certificate

First Semester

☐ POFI 1204 – Computer Fundamentals
☐POFI 2301 – Word Processing
☐ ITSW 1304 – Intro to Spreadsheets

Second Semester

☐ ITSC 1309 – Integrated Software Apps.
☐ POFI 2340 – Advanced Word Processing

Major Advisors: Gay Mills, Byrd 309, 371-5099
Debbie Bailey, Byrd 303, 345-5522

Status of online courses/ANGEL: Eventually, we will be changing from ANGEL to Blackboard. Brenda Waren said it would probably be some time in 2012. Gay asked her to keep us posted as to when this will happen.

Remodel/Update of Byrd Building: This summer all of BYRD Building will be moving to Dutton Hall. We will be there about a year.

Timed Writings: Debbie Bailey told the committee that we need to know how the business world evaluates applicants' timed writings with regard to speed and accuracy calculation. Donna Arney said their company doesn't test typing speeds. She said she had found if the applicant does not type at least 40 wpm and they are hired, they will struggle with their job. Jan Panger said they deduct for errors on their timed writings. Donna Pergrem said Pantex has a minimum of 40 wpm, and Panhandle Worksource has a 45 net wpm as their minimum. Brenda Waren said Amarillo College requires 45 wpm minimum for entry-level positions, and 55 wpm minimum for advanced clerical positions. Ashley Little, our student representative, was asked about not being able to use the backspace key when taking a timed writing. She said it was a big transition not to use the backspace key, but after practicing, she was able to do it.

The committee concluded that staying with our 40 wpm and not using the backspace key would graduate students that would be employable.

Add Marketable Skills Certificate: Gay Mills told the committee that we are looking at adding a couple of certificate programs. We believe these certificates will help students that may not be interested in getting a degree to acquire enough skills to make them employable. A question was asked if they could be completed in one semester, and Gay said it is possible, but not recommended. She told the committee that the Coordinating Board is looking at the number of graduates and completers for each program. We are hoping to have several levels. Gay asked the committee if an applicant had one or more of these certificates, would they be more likely to be hired than someone without these skills. The committee concluded that they would probably hire the person with the certificate over the one without those skills.

Brenda Waren made a motion to continue the process for getting these certificate programs started. Donna Arney seconded the motion. All were in favor.

Office Administration Department

Office Administration

Basic Skills Certificate

Ofad.mkt.basic

First Semester

☐ POFT 1313 – Prof. Dev. for Office Personnel
☐ POFT 2301 – Doc. Formatting & Skillbuilding

Second Semester

☐ POFI 2301 – Word Processing
☐ POFT 1301 – Business English

Major Advisors: Gay Mills, Byrd 309, 371-5099
Debbie Bailey, Byrd 303, 345-5522

OFFICE ADMINISTRATION ADVISORY COMMITTEE MEETING MINUTES

Wednesday, May 4, 2011
12:15 p.m., Library Room 113

Members Present: Donna Arney, Ashley Little, Chris Lyles, Jan Panger

AC Faculty/Staff Present: Debbie Bailey, Linda Butler, Gay Mills, Donna Pergrem, Brenda Waren

Members Absent: Shirley Blenden, Terri Boswell-Williams, Jim Everett, Richard Fry, Kay Harris, Krystal Holder, Sandra Horton, Linda Purvines, Mary Spruell, Patsy Wells

AC Faculty/Staff Absent: Dr. Shawn Fouts, Kelly Hixon, Dr. Russell Lowery-Hart, Dr. Paul Matney

Welcome: Chris Lyles, Chairman, Office Administration Advisory Committee, welcomed committee members and asked that members introduce themselves. Members were asked to review the minutes from the April 30, 2010, meeting. Jan Panger made a motion to approve the minutes; Brenda Waren seconded. All were in favor.

Timing for transition to Office 2010: Chris told the committee that the Office Administration instructors immediately started teaching Office 2007 as soon as it was released. Gay added they soon realized that they may have transitioned too soon because most of the employer's offices were still using Office 2003 or older. She asked the committee what version of Office they are currently using, and asked for their recommendation on when we should switch to Office 2010. Donna Arney recommended that we start teaching 2010 soon because any new computers that are being bought come with the 2010 version installed on them. Brenda Waren said she is also using 2010. The question was asked if we knew what version the high schools are teaching and Gay said they use 2007. Donna Pergrem asked if we knew what the English Writing Labs were using. Gay said she will find out.

Enrollment: Our enrollment has been steady and growing. We could see some changes due to the cuts in the WIA funding. It is our understanding that the students currently enrolled with WIA funding from Panhandle Worksource will have two years to finish, but there won't be any money available at this time for new students. This may change when Panhandle Worksource gets their new budget.

Career Clusters: Our next step for Career Clusters is to determine the Business Management & Administration core courses. Gay told the committee we will need their input on deciding the core courses. We will need core courses that every student will take, regardless of the specialized area they are majoring in.

Cell phone policies: Debbie Bailey asked the committee membersto share their companies' policy on cell phone usage. Donna Arney said originally they had a no-phone use policy, and the phones had to be turned off. She said that the younger generation can multitask well, and they were very unhappy with the no-phone usage policy, so they now allow them to have their phones on. They can't answer if they are with a customer. Everyone said that it is really dependent upon the person. It is really a performance issue. They thought that in a learning environment, it is not a good idea to allow phones to be on. Chris said that AISD does not allow phones on during the educational periods. They can only be used during breaks, lunch, etc. The main recommendation from the committee is that students learn to obey the company rules regardless of whether they agree with them or not.

Other Business: None

Evaluate Advanced Document Formatting, POFT 2333, Portfolios: Gay explained the evaluation process. She said our goal today is to evaluate the portfolios assuming these students would be starting at an entry-level position. The students should be at an employable level. The students being evaluated have completed at least 30 hours of Office Administration courses.

Adjournment: Chris thanked the committee members for attending and contributing their expertise. The meeting was adjourned at 1:30 p.m.

Respectfully submitted,

Linda Butler

Linda Butler
Sr. Staff Assistant
Office Administration Department

CURRICULUM REVISION REQUEST	
Division:	Career and Technical Education
Department/Program:	Instrument and Control Technology/Renewable Energy
Prepared by:	Arthur Schneider
Request:	Add the following course to the course inventory: • ENER 1350 – Overview of Energy Industry • HART 1311 – Solar Fundamentals • ELMT 1402 – Solar Photovoltaic Systems • HART 1393 – Special Topics in Solar Technology/Technician
Rationale/Justification:	The new courses will be utilized in the Solar Option of the existing Renewable Energy Certificates and Degree.
Effects of Revisions	No changes at this time.
Faculty & Staff Requirements:	No changes at this time.
Equipment/Facility Requirements:	No changes at this time.
Location:	No changes at this time.
Income Projections:	No changes at this time.
Effective Date:	01/01/2012 (Spring 2012)

Carol M. Moore

From: Arthur Schneider
Sent: Monday, October 24, 2011 9:50 AM
To: Carol M. Moore
Cc: Ronald G. Mashburn
Subject: Lab Fees for solar classes

Hi Carol: With regard to the new solar classes, I believe it appropriate to charge a lab fee @ $24.00 since we have to buy some basic supplies, and print lab activities/exercises. Regards, Art

Arthur Schneider, Director
Renewable Energy- NSF Solar Grant
Amarillo College
Office: 806-371-5089
P.O. Box 447
Amarillo, Tx. 79178
aschneider@actx.edu

ENER 1350 – Overview of Energy Industry
Introduction to the major sectors of the energy industry including fossil fuels, alternative energy systems, power generation facilities, and electrical transmission. Includes a comparison of energy industry careers.
Hours (3 sem hrs: 3 lec)

HART 1311 – Solar Fundamentals
Study of heat transference, motors, pumps and other mechanical devices; solid state switches; photovoltaic plates and energy conversion; thermal dynamics; and solar energy.
Hours (3 sem hrs: 2 lec, 2 lab) $24 lab fee

ELMT 1402 – Solar Photovoltaic Systems
Design and installation of solar photovoltaic systems and their applications.
Hours (4 sem hrs: 3 lec, 2 lab) $24 lab fee

HART 1393 - Special Topics in Solar 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.
Hours (3 sem hrs: 2 lec, 2 lab) $24 lab fee

WORKFORCE EDUCATION COURSE MANUAL, 2011-2012

WECM Course

Overview of Energy Industry

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
15.0503	ENER	1350	Overview of Energy Industry	Active	3	48	80

Course Level: Introductory

Course Description: Introduction to the major sectors of the energy industry including fossil fuels, alternative energy systems, power generation facilities, and electrical transmission. Includes a comparison of energy industry careers.

End-of-Course Outcomes: Describe exploration, extraction, refining, marketing and transportation of fossil fuels; describe installation, operation and maintenance of various alternative energy systems; describe the design, operation and maintenance of various power generation facilities; explain electrical transmission and the development of regional and national energy grids; and compare and contrast fossil fuel, alternative energy, and power generation careers.

Cross Reference(s): ENER 1050/1450: Overview of Energy Industry

CIP Code Description: 15.0503 (Energy Management and Systems Technology/Technician)

Year: 2011

Search WECM | WECM Comments | WECM (Old System)

WORKFORCE EDUCATION COURSE MANUAL, 2011-2012

WECM Course

Solar Fundamentals

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
15.0505	HART	1311	Solar Fundamentals	Active	3	48	144
15.0505	HART	1411	Solar Fundamentals	Active	4	64	160

Course Level: Introductory

Course Description: Study of heat transference, motors, pumps and other mechanical devices; solid state switches; photovoltaic plates and energy conversion; thermal dynamics; and solar energy.

End-of-Course Outcomes: Demonstrate safe and proper work habits; categorize heat capacitance and specific heat values of various materials; categorize heat movement through reflection, absorption, radiation and magnification; categorize the collection control, dissipation, storage and distribution of heat energy; and maintain and repair mechanical equipment.

Lab Recommended

Cross Reference(s): CEU Course Section: Active Solar Fundamentals

CIP Code Description: 15.0505 (Solar Energy Technology/Technician)

Year: 2006

Search WECM | WECM Comments | WECM (Old System)

WORKFORCE EDUCATION COURSE MANUAL, 2011-2012

WECM Course

Solar Photovoltaic Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
15.0403	ELMT	1402	Solar Photovoltaic Systems	Active	4	96	112

Course Level: Introductory

Course Description: Design and installation of solar photovoltaic systems and their applications.

End-of-Course Outcomes: Design solar photovoltaic array; define industry terms; investigate certification requirements; and install and troubleshoot systems.

Lab Recommended

Cross Reference(s): ELMT 1002: Solar Photovoltaic Systems

CIP Code Description: 15.0403 (Electromechanical Technology/Electromechanical Engineering Technology)

Year: 2009

Search WECM | WECM Comments | WECM (Old System)

WORKFORCE EDUCATION COURSE MANUAL, 2011-2012

WECM Course

Special Topics in Solar Technology/Technician

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
15.0505	HART	1193	Special Topics in Solar Technology/Technician	Active	1	16	64
15.0505	HART	1293	Special Topics in Solar Technology/Technician	Active	2	32	96
15.0505	HART	1393	Special Topics in Solar Technology/Technician	Active	3	48	96

Course Level: Introductory, Intermediate, or Advanced

Course Description: 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.

End-of-Course Outcomes: Learning outcomes/objectives are determined by local occupational need and business and industry trends.

Lab Recommended

CIP Code Description: 15.0505 (Solar Energy Technology/Technician)

Year: 1998

Search WECM | WECM Comments | WECM (Old System)

CURRICULUM REVISION REQUEST

Division:	Career and Technical Education
Department/Program:	Instrument and Control Technology/Renewable Energy
Prepared by:	Ronald Mashburn
Request:	Delete the following courses from the RNEW.AAS Degree: • SPCH 1318 - Interpersonal Communication. • MATH 1314 - College Algebra • ELMT 2380 – Cooperative Education Electromechanical Technology/Technician Add the following courses to the RNEW.AAS Degree: • Speech • MATH 1332 - Contemporary Mathematics I (or any college level math) • EECT 2439 – Communications Circuits • LOTT 1301 – Introduction to Fiber Optics Update the Total Semester hour to 64.
Rationale/Justification:	Speech will replace SPCH 1318 - Interpersonal Communications, allowing students to take any college level speech class. MATH 1332 - Contemporary Mathematics I (or any college level math) will replace MATH 1314 - College Algebra EECT 2439 – Communications Circuits will replace INMT 2345 – Industrial Troubleshooting. (This course was removed from the course inventory by Industrial Maintenance and was not replaced.) LOTT 1301 – Introduction to Fiber Optics will replace ELMT 2380 – Cooperative Education Electromechanical Technology/Technician. Adding EECT 2439 to replace the deleted course (INMT 2345) increased the total semester hours to 64.

Effects of Revisions	Will update the curriculum to the needs of industry.
Faculty & Staff Requirements:	No changes at this time.
Equipment/Facility Requirements:	No changes at this time.
Location:	No changes at this time.
Income Projections:	No changes at this time.
Effective Date:	01/01/2011 (Spring 2011)

RNEW.AAS

Renewable Energy (A.A.S.)

Program Advisor: Ronald Mashburn, 335-4223 (rgmashburn@actx.edu) or contact Judy Jackman, 371-5444 (jajackman@actx.edu)

Associate in Applied Science
Major Code - RNEW.AAS
actx.edu/wind

Prepares students for careers in the renewable energy and wind industry in the operation, maintenance and manufacture of wind turbines and related parts. Graduates will have a strong background in the appropriate core sub-disciplines of electronics, control systems and electro-mechanical equipment. They will also have appropriate safety training, problem-solving skills, effective oral and written communication skills, and proper record-keeping techniques.

Program Requirements
General Education Requirements (15 Semester Hours)

Communication - 6 Hours

- ENGL 1301 - Freshman Composition I
- ~~SPCH 1318 - Interpersonal Communication~~ Speech

Social and Behavioral Sciences - 3 Hours

- Social and Behavioral Sciences

Mathematics/Natural Sciences - 3 Hours

- ~~MATH 1314 - College Algebra~~ MATH 1332 – Contemporary Mathematics I, or any college level math

Humanities/Fine Arts - 3 Hours

- Humanities or Fine Arts

STEM Core Requirements (11 Semester Hours)

- CETT 1409 - DC-AC Circuits
- CETT 1425 - Digital Fundamentals
- INTC 2336 - Distributed Control and Programmable Logic

Major Requirements (~~37~~ 38 Semester Hours)

- BCIS 1305 - Business Computer Applications
- ELMT 2341 - Electromechanical Systems
- ~~ELMT 2380 - Cooperative Education - Electromechanical Technology/Technician~~ EECT 2439 – Communications Circuits
  LOTT 1301 – Introduction to Fiber Optics
- IEIR 1310 - Motor Controls
- IEIR 1312 - Distribution Systems
- WIND 1300 - Introduction to Wind Energy
- WIND 1302 - Wind Safety
- WIND 2310 - Wind Turbine Materials/Electro-Mechanical Equipment
- WIND 2315 - Wind Business
- WIND 2355 - Wind Turbine Troubleshooting and Repair
- WIND 2459 - Wind Power Delivery System

Total (~~63~~ 64 Semester Hours)

CURRICULUM REVISION REQUEST FORM

1. **Division:** Health Sciences

2. **Department/Program:** Respiratory Care

3. **Prepared by:** Valerie Hansen

4. **Request:**

   a. Add HITT 1305: Medical Terminology I
   Prerequisite: RDNG 0331-minimum grade of C or a score on a state-approved test indicating college-level reading skills

   Study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties and diagnostic procedures. To include definitions, spelling and pronunciation of medical terms.

   Hours (3 sem hrs; 3 lec)

   b. Delete:

   RSPT 1137 Basic Dysrhythmia Interpretation
   RSPT 1191 Special Topics
   RSPT 2147 Specialties in Respiratory Care

5. **Rationale/Justification:** The addition of Medical Terminology is a change adopted by the Health Sciences Career Cluster of the institution. The listed deletions are needed to provide 3 credit hours in order to add Medical Terminology.

6. **Effects of Revisions:**

   A. **Faculty and Staff Requirements:** No changes in program faculty required
   B. **Equipment/Facility Requirements:** No changes required
   C. **Location:** No changes required
   D. **Income projection:** None for program

7. **Effective Date:** Fall 2012

Respiratory Care
Proposed Curriculum Changes

The addition of Medical Terminology outlined below is a change adopted by the Health Sciences Career Cluster of the institution. The rest of the changes reflect WECM course description changes.

Current Curriculum

GENERAL EDUCATION REQUIREMENTS.....~~23~~

Communication
ENGL 1301: Freshman Composition 1
SPCH*
Humanities or Fine Arts*
Mathematics/Natural Sciences
BIOL 2421: Microbiology
BIOL 2401: Human Anatomy & Physiology
MATH 1332: Contemporary Mathematics 1
(or any college level MATH*)
Social/Behavioral Science
PSYC*

MAJOR COURSE REQUIREMENTS.....~~49~~

RSPT 1101: Introduction of Respiratory Care
~~RSPT 1137: Basic Dysrhythmia Interpretation~~
RSPT 1166: Practicum 1 Respiratory Care Therapy/Therapist
RSPT 1167: Practicum 2 Respiratory Care Therapy/Therapist
~~RSPT 1191: Special Topics in Respiratory Care~~
RSPT 1307: Cardiopulmonary Anatomy & Physiology
RSPT 1340: Advanced Cardiopulmonary Anatomy & Physiology
RSPT 1410: Respiratory Care Procedures 1
RSPT 1411: Respiratory Care Procedures 2
RSPT 2131: Simulations in Respiratory Care
RSPT 2133: Respiratory Care Case Management
RSPT 2139: Advanced Cardiac Life Support
~~RSPT 2147: Specialties In Respiratory Care~~
RSPT 2166: Practicum 5 Respiratory Care Therapy/Therapist
RSPT 2217: Respiratory Care Pharmacology
RSPT 2230: Examination Preparation
RSPT 2266: Practicum 3 Respiratory Care Therapy/Therapist
RSPT 2267: Practicum 4 Respiratory Care Therapy/Therapist
RSPT 2305: Pulmonary Diagnostics
RSPT 2310: Cardiopulmonary Disease
RSPT 2319: Neonatal/Pediatric Mechanical Ventilation
RSPT 2353: Neonatal/Pediatric Cardiopulmonary Care
RSPT 2355: Critical Care Monitoring
RSPT 2258: Respiratory Care Patient Assessment

TOTAL.....72

*Please see pages 7-8 for General Education Course List

Proposed Curriculum

GENERAL EDUCATION REQUIREMENTS.....**26**

Communication
ENGL 1301: Freshman Composition 1
SPCH*
Humanities or Fine Arts*
Mathematics/Natural Sciences
BIOL 2421: Microbiology
BIOL 2401: Human Anatomy & Physiology
MATH 1332: Contemporary Mathematics 1
(or any college level MATH*)
Medical Terminology I
HITT 1305: Medical Terminology I
Social/Behavioral Science
PSYC*

MAJOR COURSE REQUIREMENTS.....**46**

RSPT 1101: Introduction of Respiratory Care
RSPT 1166: Practicum 1 Respiratory Care Therapy/Therapist
RSPT 1167: Practicum 2 Respiratory Care Therapy/Therapist
RSPT 1307: Cardiopulmonary Anatomy & Physiology
RSPT 1340: Advanced Cardiopulmonary Anatomy & Physiology
RSPT 1410: Respiratory Care Procedures 1
RSPT 1411: Respiratory Care Procedures 2
RSPT 2131: Simulations in Respiratory Care
RSPT 2133: Respiratory Care Case Management
RSPT 2139: Advanced Cardiac Life Support
RSPT 2166: Practicum 5 Respiratory Care Therapy/Therapist
RSPT 2217: Respiratory Care Pharmacology
RSPT 2230: Examination Preparation
RSPT 2266: Practicum 3 Respiratory Care Therapy/Therapist
RSPT 2267: Practicum 4 Respiratory Care Therapy/Therapist
RSPT 2305: Pulmonary Diagnostics
RSPT 2310: Cardiopulmonary Disease
RSPT 2319: Neonatal/Pediatric Mechanical Ventilation
RSPT 2353: Neonatal/Pediatric Cardiopulmonary Care
RSPT 2355: Critical Care Monitoring
RSPT 2258: Respiratory Care Patient Assessment

TOTAL.....72

*Please see pages 7-8 for General Education Course List

CURRICULUM REVISION REQUEST FORM

1. **Division:** Health Sciences

2. **Department/Program:** Respiratory Care

3. **Prepared by:** Valerie Hansen

4. **Request:** Update course descriptions and laboratory hours for the following courses:
    a. RSPT 1101: Introduction of Respiratory Care
    b. RSPT 1307: Cardiopulmonary Anatomy and Physiology
    c. RSPT 1410: Procedures I
    d. RSPT 1411: Procedures II
    e. RSPT 2230: Respiratory Care Examination Preparation
    f. RSPT 2305: Pulmonary Dignostics
    g. RSPT 2319: Mechanical Ventilation for the Neonatal/Pediatric Patient
    h. RSPT 2353: Neonatal/Pediatric Cardiopulmonary Care

5. **Rationale/Justification:** Changes to the course descriptions are due to changes that occurred during Summer 2011 WECM workshops.

6. **Effects of Revisions:**

    A. **Faculty and Staff Requirements:** No changes required
    B. **Equipment/Facility Requirements:** No changes required
    C. **Location:** No changes required
    D. **Income projection:** None

7. **Effective Date:** Fall 2012

CURRENT COURSE DESCRIPTION	*PROPOSED COURSE DESCRIPTION*
RSPT 1101: Introduction of Respiratory Care An introduction to the field of respiratory care. ~~Topics include the history of respiratory care, hospital organization, medical malpractice, ethics, vital signs, body mechanics, basic cardiopulmonary assessment, infection control and cardio-pulmonary resuscitation (CPR).~~ Hours (1 sem hr; 1 lec, 1 lab)	RSPT 1101: Introduction of Respiratory Care An introduction to the field of respiratory care. Hours (1 sem hr; 1 lec, 1 lab)
RSPT 1307: Cardiopulmonary Anatomy and Physiology ~~An introduction to the anatomy and physiology of the cardiovascular and pulmonary systems.~~ Hours (3 sem hrs; 3 lec)	RSPT 1307: Cardiopulmonary Anatomy and Physiology Anatomy and physiology of the cardiovascular and pulmonary systems. Hours (3 sem hrs; 3 lec)
RSPT 1410: Respiratory Care Procedures I ~~Essential knowledge of the equipment and techniques used in the treatment of cardiopulmonary disease. Content areas include: oxygen therapy, humidity and aerosol therapy, lung expansion therapy, bronchial hygiene therapy, pulse oximetry, arterial blood gas sampling and interpretation.~~ Hours (4 sem hrs; 3 lec, 4 lab)	RSPT 1410: Respiratory Care Procedures I Essential knowledge of the equipment and techniques used in the treatment of cardiopulmonary disease. Hours (4 sem hrs; 3 lec, 4 lab)
RSPT 1411: Respiratory Care Procedures 2 Prerequisite: RSPT 1410 ~~Provides essential knowledge of airway care and mechanical ventilation. Airway care includes indications, techniques, equipment, and hazards and complications. Mechanical ventilation includes indications, initiation, modes, clinical application, management, complications, and weaning.~~ Hours (4 sem hrs; 3 lec, 4 lab)	RSPT 1411: Respiratory Care Procedures 2 Prerequisite: RSPT 1410 Develops essential knowledge and skills of airway care and mechanical ventilation. Hours (4 sem hrs; 3 lec, 4 lab)
RSPT 2230: Respiratory Care Examination Preparation Comprehensive review to optimize respiratory care credentialing exam success. Hours (2 sem hrs; 2 lec)	RSPT 2230: Respiratory Care Examination Preparation Comprehensive review to optimize respiratory care credentialing exam success. Hours (2 sem hrs; 2 lec, <u>1 lab</u>)
RSPT 2305: Pulmonary Diagnostics ~~The theories and techniques involved in pulmonary function testing, blood gas analysis, quality control, and noninvasive monitors.~~	RSPT 2305: Pulmonary Diagnostics The theories and techniques involved in pulmonary function testing, blood gas analysis, and quality control.

RSPT 2319: Mechanical Ventilation for the Neonatal/Pediatric Patient *Prerequisite: RSPT 2353* ~~A study of therapeutic procedures to achieve adequate spontaneous and artificial ventilation of the neonatal and pediatric patient. Includes indications, complications, and physiological effects of ventilatory support.~~ Hours (3 sem hrs; 3 lec)	RSPT 2319: Mechanical Ventilation for the Neonatal/Pediatric Patient *Prerequisite: RSPT 2353* A study of mechanical ventilation for the neonatal and pediatric patient. Hours (3 sem hrs; 3 lec)
RSPT 2353: Neonatal/Pediatric Cardiopulmonary Care ~~A study of acute care, monitoring, and management of the neonatal/pediatric patient.~~ Hours (3 sem hrs; 3 lec)	RSPT 2353: Neonatal/Pediatric Cardiopulmonary Care A study of neonatal/pediatric cardiopulmonary care. Hours (3 sem hrs; 3 lec)