

CURRICULUM/GEN ED COMMITTEE
a standing committee of the Education Advisory Committee

Agenda
January 10, 2007 3 pm
Sylvania, CC- Conference Room B

Information Items from the Curriculum Office:
(These items do not require curriculum committee recommendation)

Experimental Course

CIS 199U – Introduction to Wireless Networking
CIS 199V- Wireless Security

Course Inactivation

CH 95 – Laboratory Techniques
PSY 220- Psychology: Applied
MCH 134 Introduction to the Machine Shop
MCH 136 Introduction to Automotive Machining
MCH 138 Automotive Machining – Lathe
MCH 137 Automotive Machining - Drill Press
MCH 139 Automotive Machining – Mill
MCH 140 Honing Machines & Operations
MCH 141 Brake Lathes & Operations
MCH 142 Valve Grinding Machines & Operations
MCH 224 Quality Analyst
MCH 226 CNC Grinder Programming
MCH 281 CNC Router Programming
MCH 250 Job Readiness
MCH 269 CNC Operator Program Award Level I
MCH 270 Vericut
MCH 286 Certified Enterprise Integrator Review
MCH 287 Certified Engineering Manager Review

Old Business

1. HUM 100 Introduction to Humanities

[New Course](#)

[- General Education](#)

[-Transfer list B](#)

[- Diversity Designation](#)

66. HST 111 - U.S. History: Skills and Issues

[New Course](#)

85. CMET 237 Computer Aided Design III

Course Revision - Title

97. BCT 280C – Cooperative Education Building Construction Technology
Course Revision – Title, Outcomes

98. NUR 208 – Nursing Care of Clients with Emergent Health Care Needs
Course Revision – Description

128. RET 101 – Introduction to Wind Turbine Technology I
[New Course](#)

129. RET 141 – Electrical Motor and Generator Control
[New Course](#)

New Business

136. PE 180K – Masters Swimming
[New Course](#)

137. PE 182J – Gentle Yoga
[New Course](#)

138. PE 182U – Pilates II
[New Course](#)

139. CIS 279L – Linux Network Administration
Course Revision – Requisites

140. CIS 284 – Network Security
Course Revision – Requisites

141. CIS 285 – Security Tools
Course Revision – Requisites

142. CIS 286 – Computer Forensics
Course Revision – Requisites

143. CJA 244 – Tactical Communication in Critical Incidents
New Course

144. BCT 244 – Kitchen & Bath Cabinet Installation
Contact/Credit Hour Change

145. WR 228 – Police Report Writing
Contact/Credit Hour Change

146. PST 101 – Professional Skills Training
Related Instruction

**Portland Community College
Course Outcome Guide (COG)**

Date: November 2006

Prepared by: James S. Harrison

Course Number: Hum 100

Course Title: Introduction to Humanities

Credit Hours: 4 **Lecture Hours Per Week:** 4 **Number of Weeks:** 10-11

COURSE DESCRIPTION:

This course is designed to introduce students to college-level study in the humanities; it is a survey course that promotes a sense of humanity through such topics as literature, theatre, language, history, art, music, philosophy, and religion by critical thinking about moral values, myths, aesthetics, and liberty. It is designed to reawaken our sense of wonder and curiosity about the meaning of life. It shows how the various arts and sciences intersect, influence and are influenced by cultural and historical circumstances. Prerequisite: None.

ADDENDUM TO DESCRIPTION

The humanities provide an opportunity to explore possible answers to enduring life questions. Compassion, tolerance and a greater understanding of what it means to be human are goals that make this course relevant to the "good life." Your ability to think critically and synthesize knowledge will be exercised regularly through readings, writings and class discussions. An essential question for this course is: What does it mean to be human? The course also provides practice in reading and writing skills. Finally, a key purpose of humanities is to increase students' ability to appreciate people's compassion for both the natural and created worlds

INTENDED LEARNING OUTCOMES FOR THE COURSE:

Students will emerge from the class with a greater understanding of and appreciation for the humanities. After successful completion of HUM 100 students will be able to:

- Articulate a more thoughtful and critical awareness of cultures in terms of their major expressions in several areas, such as art, architecture, literature, music, religion, philosophy, drama, folk traditions, and daily life.
- Demonstrate an increased ability to communicate by speaking and writing clearly about the impact, contributions and defining moments of cultures and civilizations.
- Participate in informed conversations about the aesthetic value of the arts and sciences.
- Understand that the study of humanities involves an analysis of what motivates humans to create and how their creations reflect their values and world views.
- Understand the interrelatedness of human history, great ideas, and the arts and sciences.
- Demonstrate an increased understanding of what moves humans to create and how their creations reflect their world views.

OUTCOME ASSESSMENT STRATEGIES:

The SAC expects that instructors will assess student learning throughout the term using a variety of methods. The SAC encourages instructors to consider the following in determining the achievement of course outcomes:

- Quizzes, exams or exercises.
- Examine and discuss musical, literary or visual art and support views in writing.
- Written descriptions of the value of a creative work from a cultural-historical perspective.
- Working collaboratively in large and small groups
- Capstone project on the influence of technology, for example on music or painting

- Research paper on the impact of the arts or sciences on various cultures
- Written assessment of how the humanities have benefited societies over time.
- Analyze primary and secondary sources of information

COURSE CONTENT:

Themes

- interaction of art, science and society
- The role of women
- Cultural continuity and change
- Political and economic developments
- Developments in literature, art and music
- Religions and philosophies
- Violence, conflict and cooperation

Concepts

- Tools
- Civilization
- The self and the other
- The deity
- Urban evolution
- The confluence of values and technology
- Labor
- The arts

Issues

- Technology's affect on societal values
- Impact of technology on human settlements
- Development and use of tools
- Creation and significance of art
- Relationship between societies and mechanical devices
- Religion's effect on society and inter-cultural relations

COMPETENCIES AND SKILLS

- Critical and creative thinking about the arts and sciences.
- Connect past and present events
- Written and oral analysis of cultural creations: objects, music, etc.
- Work collaboratively with others
- Conduct research using both primary and secondary sources.
- Write and communicate orally in a clear, organized, and effective manner.

Curriculum Request Form
GenEd Designation

Current course number: Hum 100

Current course title: Introduction to Humanities

Category: Course is in Arts and Humanities

Category: Course is in Social Science

Explain how this course fits in the above category: This course serves as an introduction to the study of humanities and involves the arts, history, economics, architecture, science and philosophy.

How does course incorporate breadth and scope of gen/ed philosophy statement: It focuses on cross cultural understanding across disciplines as well. I think that the Outcomes provide an insight into the course:
Critical thinking.
Communication.
Diversity.
Aesthetic Values

Course is transferrable to: PSU, OSU

Is course available to all pcc students: Course is available to all PCC Students

How does the course demonstrate rigor and require significant student preparation: As with any class it requires reading and in this case readings of some classic writers, examination of web site materials and/or library materials.

How does the course incorporate substantial student evaluation and demonstrate literacy: Student evaluation runs a gamut:
Midterm and /or final exam
In-class quizzes
Examine and discuss musical, literary or visual art and support views in writing.
Describe the value of a creative work from a cultural-historical perspective.
Working collaboratively in large and small groups
Capstone project on the influence of technology, for example on music or painting
Research paper on the impact of technology, for example on the role of women in various cultures
Assess how the humanities have benefited societies over time.
Analyze primary and secondary sources of information

Written summations exploring manifestations of humanness in specific areas of the Humanities.

How does course include a wide spectrum of concepts and theoretical models: The course will examine the roles of literature, politics and law, for example, in various societies. Some models might include the use of drama in the Book of Job, Shakespeare and the The Dutchman; in politics: political rebels vs gadflys vs conservative hermits; in law- Hammurabi's Code, Roman Law, Aztec social regulations and the Christian 'law' embodied in the Golden Rule.

How does course examine relation to other disciplines and reflect historical perspective: This is a course that takes students through a series of historical periods and each one is encountered on its own terms but also in comparison with previous time periods. It is by definition an interdisciplinary course that investigates arts, science, history, music and the roles these played in the lives of people and in shaping their cultures.

How does course develop ability to examine, evaluate and make comparisons of relevant concepts: In terms of critical thinking, students will be asked to analyze cultures in terms of their major expressions in several of the following fields: art, architecture, literature, music, religion, philosophy, drama, folk traditions, and daily life routines all revolving around the concepts of 'self' and 'other,' of 'dieties,' 'tradition,' 'continuity' and sense of 'civic engagement.'

Contact name: James S. Harrison
Contact email: jharriso@pcc.edu

Curriculum Request Form
Transfer List B

Current course number:	Hum 100
Current course title:	Introduction to Humanities
Request for:	List B
Does the course rely on primary text or texts which address, analyze or comment upon the question of what it means to be human? Does it use secondary or summation materials and to what degree?:	Yes. This course is formed around the idea of what makes us human and investigates that concept across history and cultures.
Does the course focus on questions of value, ethics, belief; and does the course attempt to place such questions in a historical context?:	Yes. The course investigates the building blocks of cultures and that necessarily means an engagement in values and beliefs. It does this across time and cultures with an understanding of each culture from its perspective and historical environment.
Does the course attempt an examination or analysis of the discipline to which it belongs; in other words, does the course provide students with a way of seeing the approach to the subject or subjects involved as one way among others of discussing text?:	The course is multi-disciplinary and introduces students to subjects such as history, music, art, science, etc, individually and then weaves them all into the context of various cultures; the focus is that there are a variety of ways of being human.
Does the course attend to the role that language plays in the discipline and in ways the subject is understood and has been understood?:	I am not sure how to respond to this question. The 'subject' of humanities is human beings and so the course does investigate how humans understand themselves.
Does the course provide students with access to the thinking and feelings of the disciplines respected and acknowledged contributors? :	Yes! Students will read and be exposed to the literature, art, etc of the well known as well as lesser known contributors to human knowledge.
Does the course provide students an opportunity to meaningfully interact with the texts of the discipline and with each other, through discussion and writing about the perspectives on the human condition that such texts provide?:	Yes! Key to the course is that students engage in materials and they engage with each other.

Does the course and the discipline to which it belongs value and seriously examine the subjective response to human experiences?:

Contact name:

Contact email:

Yes! The question that you asked defines the nature of this course.

James S. Harrison

jharriso@pcc.edu

Curriculum Request Form
Diversity Request

Current course number: Hum 100

Current course title: Introduction to Humanities

Explain how this course meets the diversity statement: This course surveys a variety of cultures from ancient Egypt to China to the Inca and Maya, Ghana, Mali, Songhai, the Renaissance. The focus is on cross cultural understanding of Humanities as the glue of all civilizations.

Contact name: James S. Harrison

Contact email: jharriso@pcc.edu

**Portland Community College
Course Outcome Guide (COG)**

Date: November 2006

Prepared By: James Jansen & James S. Harrison

Course Number: HST 111

Course Title: U.S. History Skills and Issues

Credit Hours: 1 **Lecture Hours Per Week:** 1.5 **Number of Weeks:** 10-11

COURSE DESCRIPTION:

This course helps students to increase academic skills and deepen their understanding of American history as a discipline while supporting work performed in HST 201, 202, or 203. Includes 1) a tutorial relating to course concepts and content, 2) academic skill building, and 3) a brief community-related learning project to allow for direct application of learning.

Pre-requisite: None.

Co-requisite: Enrollment in one of the following U.S. history courses: Hst 201, Hst 202, Hst 203.

INTENDED LEARNING OUTCOMES

After successful completion of HST 111 the student will be able to:

- Show development in understanding concepts and content in U.S. history courses.
- Increase performance on U.S. history course exams and assignments.
- Demonstrate study skills required to conduct historical research.
- Use critical thinking to evaluate historical events and their impact on American society or the world.
- Recognize and appreciate the contributions of diverse groups (national, ethnic, religious, gender) to U.S. history.
- Identify culturally grounded assumptions that have influenced the perceptions and behaviors of people in the past.
- Demonstrate effective communication through writing and speaking.

OUTCOME ASSESSMENT STRATEGIES

The SAC expects that instructors will assess student learning throughout the term using a variety of methods. The SAC encourages instructors to consider the following in determining the achievement of course outcomes:

- Community-related project.
- Formal written papers that present and analyze historical topics or issues.
- Participation in and contribution to large and small group discussions and activities.
- Exams and exercises.
- Evaluate different interpretations of the same event.
- Associate past events to contemporary times.

COURSE CONTENT

Themes, Concepts and Issues

These items are reflected in the joint history course: Hst 201, 202 or 203.

COMPETENCIES AND SKILLS

- Critical thinking
- Evaluate interpretations of historical events
- Effective communication orally and in writing
- Analyze the causal relationship between two or more historical events
- Identifying historical themes
- Working collaboratively with others
- Library and Internet use
- Research of primary and secondary sources

Curriculum Request Form
Course Revision

Change:	Course Title
Current course number:	CMET 237
Current course title:	Computer Aided Design III
Proposed course title:	MET Computer Aided Design Elective
Proposed transcript title:	MET CAD Elective
Reason for title change:	Better describes course content.
Will this impact other sacs?,is there an impact on other sacs?:	No
Will this impact other depts/campuses?,is there an impact on another dept or campus?:	No
Request term:	winter
Requested year:	2007
Contact name:	Jan Chambers
Contact e-mail:	jchamber@pcc.edu

Curriculum Request Form
Course Revision

Change: Course Title, Learning Outcomes

Current course number: BCT 280C

Current course title: Cooperative Education Building Construction Technology

Proposed course title: Cooperative Education BCT Design/Build Remodeling

Proposed transcript title: CE-BCT Design/Build Remodeling

Reason for title change: To provide a specific Co-op course for the Design/Build Remodeling AAS.

Current learning outcomes: Function safely and effectively on a building construction job site Demonstrate professional work ethics (habits) Apply classroom skills to a variety of construction situations Appraise learned skills by providing a weekly written report Become familiar with employer expectations Use critical thinking skills to evaluate prospective employers

Proposed learning outcomes: Function safely and effectively on a building construction job site Demonstrate professional work ethics (habits) Apply class work based on National Kitchen and Bath Association technical standards to a variety of construction and design situations Appraise learned skills by providing a written report Become familiar with employer expectations Use critical thinking skills to evaluate prospective employers

Reason for learning outcomes change: To provide a specific Co-op course for the Design/Build Remodeling AAS.

Will this impact other sacs?, is there an impact on other sacs?: No

Will this impact other depts/campuses?, is there an impact on another dept or campus?: No

Request term: winter

Requested year: 2007

Contact name:

Nancy Pitzer-Spencer Hinkle

Contact e-mail:

npitzer@pcc.edu shinkle@pcc.edu

Curriculum Request Form
Course Revision

Change: Course Description

Current course number: NUR 208

Current course title: Nursing Care of Clients with Emergent Health Care Needs

Current description: Focuses on the nursing management of clients experiencing physical and emotional crises. Role transition is facilitated from student to the professional graduate nurse with a focus on leadership, management and legal/ethical concepts. Prerequisites: NUR 106, 107, 108, 206, 207.

Proposed description: Focuses on the nursing management of clients experiencing physical and emotional crises. Role transition is facilitated from student to the professional graduate nurse with a focus on leadership, management and legal/ethical concepts. Prerequisites: NUR 104, NUR 106, 107, 108, 206, 207.

**Same as posted only to include a pre-requisite of Nursing 104 in addition to the other stated nursing courses.

Reason for description
change:

Will this impact other sacs?,is
there an impact on other
sacs?:

Will this impact other No
depts/campuses?,is there an
impact on another dept or
campus?:

Request term: fall

Requested year: 2006

Contact name: Peggy Sherer

Contact e-mail: msherer@pcc.edu

Curriculum Request Form
New Course

Course number: RET 101

Course title: Introduction to Wind Turbine Technology I

Transcript title: Intro to Wind Turbine Tech 1

Lecture hours: 1

Weekly contact hours: 1

Total credits: 1

Reason for new course: To fulfill requirements for the new one-year certificate for Wind Energy Technician and the two-year AAS degree in Renewable Energy Technology.

Course description: This course is an introduction to the basic concepts and terminology for how wind energy is captured and transformed into electrical power. Topics covered include non-math mechanical physics, electricity and magnetism, fluid dynamics, and aerodynamics. These physical principles underlie the engineering of wind towers, and electrical generators.

Prerequisite(s): None

Prereq/concurrent: None

Corequisite(s): None

Learning outcomes: Demonstrate a basic knowledge of the physics and engineering of wind turbine technology.

Use information sources to research wind power technology and it's use for generating electricity on both small and large scale operations, including home use.

Other format: Other Format Selected

Other format: At CGCC, and may later be developed as a hybrid course.

Are there similar courses existing: YES

Description of existing EET and CMET

courses:

Required or elective: Required

Is there impact on degrees or certificates: NO

Is there an impact on another dept or campus?: NO

Have other sacs been contacted?: YES

Description of contact: EET and CMET

Is there an increase in costs for library or av dept?: YES

Description of library/av impact: Will cost over \$4000 to develop desired resources for a new program.

Implementation term: Fall
Implementation year: 2007

Contact name: Tom Lieurance
Contact e-mail: tlieurance@cgcc.cc.or.us

Course Content and Outcome Guide

Prepared by: Roy Torley

Course Number: RET 101

Course Title: Introduction to Wind Turbine Technology I

Credits: 1

Lecture hrs/wk: 1

Number of weeks: 11/12

Course description:

This course is an introduction to the basic concepts and terminology for how wind energy is captured and transformed into electrical power. Topics covered include non-math mechanical physics, electricity and magnetism, fluid dynamics, and aerodynamics. These physical principles underlie the engineering of wind towers, and electrical generators.

Prerequisites:

None

Outcomes:

- Demonstrate a basic knowledge of the physics and engineering of wind turbine technology.
- Use information sources to research wind power technology and its use for generating electricity on both small and large scale operations, including home use.

Evaluation:

Class participation.

A custom textbook will be created consisting of selected chapters and articles from journal, manual, textbook, and Web resources, copied with publishers' permission.

Specific Topics the Students Will Learn:

- Components that make up a wind tower:
 - Towers (construction materials, height considerations, foundations).
 - Types of propellers
 - Electrical generators.
 - Shafts and bearings.
- Wind farm locations.
 - Areas conducive to “harvesting” energy from the wind.
 - America
 - Europe
 - Australia
 - Asia
 - ❖ China.
 - ❖ Studies in Russia.
 - Wind maps.
 - Topographical considerations.
- How energy is transferred from wind to a propeller blade.
 - Linear force, acceleration, velocity, momentum, and energy.
 - Wind pressure.
 - Angular velocity, momentum, acceleration, torque, and energy of rotation.
 - Energy loss through friction.
- Comparison of energy output to hydro-electric, wave, bio-electric, and nuclear generators.

Curriculum Request Form
New Course

Course number: RET 141

Course title: Electrical Motor and Generator Control

Transcript title: Electr Motor/Generator Control

Lecture hours: 2

Lab hours: 3

Weekly contact hours: 5

Total credits: 3

Reason for new course: To fulfill requirements for the new one-year certificate for Wind Energy Technician and the two-year AAS degree in Renewable Energy Technology.

Course description: This course teaches electrical circuits, electromagnetism, AC and DC electrical theory, industrial sensors, voltage and relays, motor controls, and power distribution systems.

Prerequisite(s): None

Prereq/concurrent: None

Corequisite(s): MTH 95, WR 115

Learning outcomes:

- ◆ Apply and demonstrate principles of logical thought and safety when working with electricity, electronics, and mechanical systems.
- ◆ Demonstrate appropriate use of motor and generator controls for the operation of wind turbines.
- ◆ Use electrical and mechanical theory when maintaining and repairing wind turbine generators and towers.
- ◆ Distinguish between single and three phase power, and how these apply to the power industry.
- ◆ Follow manufacturers' specifications when maintaining

and repairing wind turbines.

Other format: Other Format Selected
Other format: At CGCC, and may later be developed as a hybrid course.

Are there similar courses existing: YES

Description of existing courses: EET and CMET

Required or elective: Required

Is there impact on degrees or certificates: NO

Is there an impact on another dept or campus?: NO

Have other sacs been contacted?: YES

Description of contact: EET and CMET

Is there an increase in costs for library or av dept?: YES

Description of library/av impact: Will cost over \$4000 to develop desired resources for a new program.

Implementation term: Fall
Implementation year: 2007

Contact name: Tom Lieurance
Contact e-mail: tlieurance@cgcc.cc.or.us

Course Content and Outcome Guide

Wind Energy Technician

Date: 10/12/06

Prepared by: Tom Lieurance

Course Number: RET 141

Course Title: Electrical Motor and Generator Control

Number of Credits: 3

Lecture hours per week: 2

Lab hours per week: 3

Number of weeks: 11/12

Course Description:

This course teaches electrical circuits, electromagnetism, AC and DC electrical theory, industrial sensors, voltage and relays, motor controls, and power distribution systems.

Corequisites: MTH 95, WR 115.

Instructional Goals and Objectives:

Upon successful completion of this course the student will have satisfactorily accomplished the goals and objectives listed in this course content guide. Course content guides are developed by college-wide Subject Area Curriculum Committees and approved by management.

Outcomes:

- Apply and demonstrate principles of logical thought and safety when working with electricity, electronics, and mechanical systems.
- Demonstrate appropriate use of motor and generator controls for the operation of wind turbines.
- Use electrical and mechanical theory when maintaining and repairing wind turbine generators and towers.
- Distinguish between single and three phase power, and how these apply to the power industry.
- Follow manufacturers' specifications when maintaining and repairing wind turbines.

Outcome Assessment Strategies:

Assessment methods are to be determined by the instructor. Typically, in class exams and quizzes along with homework assignments are used. Lab work is typically assessed by informal and formal lab reports, oral presentation, and possibly a lab exam.

Addendum to course description:

1.0 ELECTRICAL DIAGRAMMING SKILLS

Instructional Goal:

To introduce the symbols and concepts used to describe electrical circuits.

Objectives:

- Learn to draw electrical circuits using standard symbols. These are known as schematic diagrams.
- Learn to draw electrical circuits using One-line, Line and Ladder diagrams.
- Learn and practice skills in creating several types of electrical diagram and electronic schematic drawings.
- Learn and practice skills in reading several types of electrical diagram and electronic schematic drawings.
- Learn rules of line diagrams; load, control, switch, numbering systems, signals, decisions, actions, logic functions, memory, common circuits and component symbols.

2.0 Magnetism and Motion, DC

Instructional Goal:

To introduce magnetic fields, solenoids, DC motors, and DC generators.

Objectives:

- Be able to describe the characteristics and causes of magnetic fields.
- Be able to describe the Hysteresis curve and how it applies to relays and motors.
- Be able to identify control mechanisms for relays and DC motors.
- Be able to draw a control circuit, and identify the proper components to use in the circuit.
- Describe the operation and construction of a DC generator and motors.
- Describe the various types and characteristics of DC generators and motors.
- Be able to identify types of DC motors and their characteristic torque curve.
- Describe the operation and construction of a DC motor.
- Be able to connect a DC motor to a source by understanding the standard motor connections.

3.0 AC generators, transformers, and motors.

Instructional Goal:

To introduce the concepts of AC solenoids, transformers, generators, and motors.

Objectives:

- Be able to describe the characteristics and causes of an AC magnetic field.
- Be able to describe the operation and construction of common types of AC generators and motors.

- Be able to describe what a shading coil is and what it is used for.
- Be able to identify control mechanisms for relays, AC generators, and AC motors.
- Be able to draw a control circuit, and identify the proper components to use in the circuit.
- Be able to identify types of AC motors and their characteristic torque curve.
- Be able to connect an AC motor to a source.
- Be able to analyze the operation and characteristics of circuit protection devices.
- Describe transformer operation and standard connections.
- Describe Delta and Wye operation and connections of an AC motor and generator.
- Determine the differences between single phase, three phase, and the different voltages transformers create.
- Troubleshoot motors and generators.

4.0 Contactors and Motor Starters

Instructional Goal:

To explore types of switching used to control motors and generators.

Objectives:

- Describe the problems associated with switching high current devices and describe solutions to the problems.
- Describe common types of contactors, their construction, protection ratings, operation, and use.
- Draw line diagrams for contactor circuits.
- Recognize common types of contactors and the connections on the contactors and implement them in a control circuit.
- Describe problems and solutions using AC and DC contacts.
- Describe common types of overload relays and their construction and use.
- Select for use, identify, and size control switches.
- Understand theory and use of common control switches and associated wiring diagrams.
- Troubleshoot control devices.

5.0 Control Devices, Reversing Motor Circuits

Instructional Goal:

To introduce concepts of motor reversing control circuits.

Objectives:

- Understand, identify, and create motor reversing circuits from common components.
- Understand operation and construction of motor reversing controls.
- Understand Control and motor connections.
- Identify and understand operation and construction of common types of reversing motor switches.

- Understand Start, Stop, forward and reverse jogging circuits.
- Understand motor control wiring methods, and wiring diagrams.
- Troubleshoot reversing motor control circuits.

6.0 Relays and Solid State Starters

Instructional Goal:

To introduce Relays and solid state starters.

Objectives:

- Describe and use common types of solid state relays, their construction, theory of operation and technical specifications.
- Describe and use common types of general purpose electromechanical relays, their construction, use, theory of operation, circuit diagrams, and troubleshooting.
- Understand troubleshooting problems associated with electromechanical and solid state relays.

7.0 SERIES – Power distribution systems

Instructional Goal:

To understand the power companies role in power generation and transmission, and determine the common voltage sources associated with power distribution systems.

Objectives:

- Describe the power generation and transmission system.
- Describe the components of a substation and read the electrical diagrams that describe it.
- Understand the differences between the different voltages common to industrial installations.
- Understand the voltages on high tension power lines, transformers, and power lines, and how they are created and used.
- Understand phase connections and Delta and Wye connections.
- Understand transformers connected for Delta and Wye distribution systems.
- Understand three phase and balancing loads.
- Understand the purpose of all the components of a power system.
- Understand switchboards, busways, feeders, and troubleshooting devices found inside a substation.
- Understand and describe the connection between an electric generation utility and the power grid.

8.0 High power solid state devices

Instructional Goal:

Introduce high power solid state devices, common sensors and control devices.

- Understand theory and use of diodes in power transmission and motor control.

- Understand theory and use of the silicon controlled rectifier in power transmission and motor control.
- Understand industrial timers and counters.
- Understand electrical diagrams of timers, counters, SCR's and diodes.
- Understand the use of common industrial sensors.
- Understand the conditions for mounting sensors in an industrial environment.

9.0 Reduced voltage starting

Instructional Goal:

Introduce methods of starting electric motors and solving related current surges.

Objectives:

- Determine load torque and starting requirements for single phase and 3 phase electric motors.
- Be able to read motor characteristic charts.
- Determine common methods of starting motors using reduced voltage methods such as primary resistor, autotransformer, part winding, wye and delta. Use solid state switches such as SCR, triacs, alternistors, soft starters.
- Read electrical motor diagrams.
- Determine which starting method is best for a given situation.
- Troubleshoot starting circuits.

9.0 Motor speed control, acceleration and deceleration methods

Instructional Goal:

Introduce methods of controlling motor speed and motor braking.

Objectives:

- Implement and describe common methods of motor braking: friction brake pads, plugging, DC injection braking, and dynamic braking.
- Calculate torque, locked rotor torque, pull up torque, breakdown torque, full load torque and braking torque of a motor.
- Determine the speed control scheme for common types of motors with respect to the kind of load it will drive.
- Calculate motor horsepower, and understand the relationship between speed, horsepower and torque.

Evaluation:

Evaluation is by unit exams, homework, and a comprehensive final exam.

Course Activities and Design:

Lecture and discussion are the instructional methods used. Weekly homework is assigned. Laboratory activity includes building circuits on solderless circuit boards, electrical boards, making circuit measurements using test equipment, and electrical trades equipment, analyzing test data, and comparing to predictions using theory.

Curriculum Request Form
New Course

Course number: PE 180K

Course title: Masters Swimming

Transcript title: Masters Swimming

Lab hours: 3

Load total: .138

Weekly contact hours: 3

Total credits: 1

Reason for new course: Provides students who are interested in a competitive swim class that includes all competitive strokes, rules and guidelines. Student will be prepared to participate in optional weekend Master Swim meets.

Course description: Enjoy a more competitive swimming class that incorporates all competition strokes, turns, strategies and training. Possibilities for optional weekend Masters swim meets. Advanced swimming skills highly recommended or instructor permission.

Prerequisite(s): None

Prereq/concurrent: None

Corequisite(s): None

Learning outcomes:

1. Develop/apply proper competitive swimming skills and strategies for maintaining lifelong enjoyment of competitive swimming
2. Improve swimming fitness levels for maintaining lifelong health and fitness
3. Learn competitive technical skills which improve cardiovascular endurance and speed.
4. Apply knowledge and respect for universal water safety rules in the pool

Course format: On Campus

Are there similar courses NO
existing:

Description of existing
courses:

Required or elective: Elective

Is there impact on NO
degrees or certificates:

Is there an impact on NO
another dept or
campus?:

Have other sacs been NO
contacted?:

Is there an increase in NO
costs for library or av
dept?:

Implementation term: Spring
Implementation year: 2007

Contact name: Levi Query
Contact e-mail: lquery@pcc.edu

Format for Course Content and Outcome Guide

COURSE NUMBER: PE 180K

COURSE TITLE: Masters Swimming

CREDIT HOURS: 1

LECTURE HOURS:

LECTURE/LAB HOURS:

LAB HOURS: 3

SPECIAL FEE: Fees are published each term in the PCC schedule of classes

COURSE DESCRIPTION and PREREQUISITES: Enjoy a more competitive swimming class that incorporates all competition strokes, turns, strategies, and training. Possibilities for optional weekend Masters swim meets. Students should possess the skills necessary to pass P.E. 180C, Advanced Swimming.

INTENDED OUTCOMES:

- 1) develop/apply proper competitive swimming skills, strategies, and rules for maintaining lifelong enjoyment of competitive swimming.
- 2) Improve swimming fitness levels for maintaining lifelong health and fitness.
- 3) Learn competitive technical skills which improve cardiovascular endurance and speed performance.
- 4) Apply knowledge and respect for universal water safety and rules around the pool environment.

COURSE ACTIVITIES AND DESIGN:

- 1) Perform various drill work to improve technical skill of the four competitive strokes.
- 2) Assess intensity using target heart rate and rating of perceived exertion.
- 3) Demonstrate competitive turns, entries, and finishes.
- 4) Perform various training methods to improve conditioning for competition and overall cardiovascular health.
- 5) Demonstrate competitive level competency in using the front crawl, back crawl, breaststroke, butterfly, and individual medley.
- 6) Apply knowledge of competitive swimming rules to competitive practice.
- 7) Demonstrate ability to pace oneself using the pace clock as well as a stop watch.
- 8) Program a personal workout using learned training and drill concepts.

OUTCOME ASSESSMENT:

- 1) Beginning, ongoing, and end of term skill and fitness assessments.
- 2) Video tape stroke analysis.
- 3) Written assignments.
- 4) Oral quizzes.
- 5) Class participation.

COURSE CONTENT (Themes, Concepts, Issues) and SKILLS:

- 1) Safety aspects of aquatics.
- 2) Competition rules.
- 3) Training methods (endurance based, intensity, and cross training).
- 4) Periodization.
- 5) Pacing and use of pace clock.
- 6) Nutrition for competitive swimming.
- 7) Intensity monitoring (target heart rate, RPE).
- 8) Technical training.
- 9) Opportunities for competitive swimming.
- 10) Skill/fitness development.

Curriculum Request Form
New Course

COURSE NUMBER: PE 182J
COURSE TITLE: Gentle Yoga
TRANSCRIPT TITLE: Gentle Yoga
LAB HOURS: 3
LOAD TOTAL: .138
WEEKLY CONTACT HOURS: 3
TOTAL CREDITS: 1

REASON FOR NEW COURSE: Gives students who are not ready for Yoga I a slower paced environment to practice Yoga asanas, proper breathing techniques, relaxation and stress reducing exercises. Instructor meets individually with each student to discuss, physical limitations, expectations and goal setting.

COURSE DESCRIPTION: Introduces techniques to better manage stress. Vinyasa yoga is a dynamic series of poses performed at a gentle pace and helps to reduce stress levels. Recommended for students with limited abilities and beginners who are not ready for Yoga I. Covers basic yoga philosophy, asanas, pranayama, meditation and relaxation for a holistic approach to better health and wellness.

PREREQUISITE(S): None

PREREQ/CONCURRENT: None

COREQUISITE(S): None

LEARNING OUTCOMES: Apply the principles, language and techniques of yogic conditioning
Improve physical conditioning for students with limited abilities.

Develop skills for maintaining life long health and fitness.

Experience the relationship of the mind, body and spirit

COURSE FORMAT: On Campus

OTHER FORMAT:
ARE THERE SIMILAR COURSES EXISTING: NO

REQUIRED OR ELECTIVE: Elective

IS THERE IMPACT ON DEGREES OR CERTIFICATES: NO

IS THERE AN IMPACT ON ANOTHER DEPT OR CAMPUS?: NO

HAVE OTHER SACS BEEN CONTACTED?: NO

IS THERE AN INCREASE IN COSTS FOR LIBRARY OR AV DEPT?: NO

IMPLEMENTATION TERM: Spring

IMPLEMENTATION YEAR: 2007

CONTACT NAME: Levi Query
CONTACT E-MAIL: lquery@pcc.edu

Format for Course Content and Outcome Guide

Use this template to prepare the CCOG for a new course. Please do not delete any sections Help is available for each section -- access it via the section link

COURSE NUMBER: PE 182J

COURSE TITLE: Gentle Yoga

CREDIT HOURS:1

LECTURE HOURS:

LECTURE/LAB HOURS:

LAB HOURS 1

SPECIAL FEE:

COURSE DESCRIPTION and PREREQUISITES:

Introduces techniques to better manage stress. Gentle yoga is a series of poses performed at a gentle pace and stress level. Recommended for students with limited abilities and beginners who are not yet ready for Yoga I. Covers basic yoga philosophy, asana (yogic exercises), pranayama, meditation and relaxation for a holistic approach to better health.

ADDENDUM TO COURSE DESCRIPTION:

All gentle yoga students are required to participate in a one on one meeting with the instructor to assess the student's physical and mental needs and goals. Based on the result of the one on one meeting, the class will be adjusted to the overall needs of the students. An average class includes asanas for the major muscle groups, breathing techniques, balance activities, and skills for stress management. This course utilizes the use of equipment to help tailor fit the class to each individual student.

INTENDED OUTCOMES:

Improve physical conditioning

Develop skills for maintaining lifelong health and fitness

Experience the relationship of the mind, body and spirit

Apply the principles, language and techniques of yogic conditioning

COURSE ACTIVITIES AND DESIGN:

Class is designed to include warm-up, asanas and pranayama

Utilizes props/equipment for balance, breathing techniques and stretching

Students keep records of personal experiences and goals in daily journal

OUTCOME ASSESSMENT:

Successful tracking of goals and yogic experience through the completion of personal journal
Performing asanas and pranayama in a safe and comfortable environment
Completion of a written final essay about the goals that were achieved and how the student plans to continue with skills that they have learned in their daily life

COURSE CONTENT (Themes, Concepts, Issues) and SKILLS:

Development and progression of:

Balance
Flexibility
Kinesthetic Awareness
Alignment
Breathe Control
Strength
Proper Posture
Introduction to relaxation techniques
Experience the relationship between mind, body and spirit
Introduction to yoga philosophy and language
Elements of an on going yoga practice
Concepts and basics of warm up and cool down
Safety principles in a yoga practice

RELATED INSTRUCTION:

Applies only to PTE courses used for Related Instruction in certificates of 45 credits or more.

Curriculum Request Form
New Course

Course number: PE 182U

Course title: Pilates II

Transcript title: Pilates II

Lab hours: 3

Load total: .138

Weekly contact hours: 3

Total credits: 1

Reason for new course: Gives students the opportunity to learn more advanced terminology, knowledge and fitness levels through the Pilates method of conditioning Builds on skills and techniques of Pilates I coursework.

Course description: Builds on concepts and skills in the Pilates method of conditioning. Designed to continue to increase core strength and stabilization challenging the body to further its range of motion. Recommended: Pilates I or permission of instructor.

Prerequisite(s): None

Prereq/concurrent: None

Corequisite(s): None

Learning outcomes: Increase the repertoire of Pilates Matwork Exercises

Continue to improve core strength, muscle balance and control of body awareness

Learn variations of Pilates concepts which apply a greater range of motion and leverage length to exercises

Maintain lifelong fitness and wellness concepts

Course format: On Campus

Are there similar courses existing: NO

Description of existing courses:

Required or elective: Elective

Is there impact on degrees or certificates: NO

Is there an impact on another dept or campus?: NO

Have other sacs been contacted?: NO

Is there an increase in costs for library or av dept?: NO

Implementation term: Spring

Implementation year: 2007

Contact name: Levi Query

Contact e-mail: lquery@pcc.edu

Format for Course Content and Outcome Guide

Use this template to prepare the CCOG for a new course. Please do not delete any sections Help is available for each section -- access it via the section link

COURSE NUMBER: PE 182U

COURSE TITLE: Pilates II

CREDIT HOURS: 1

LECTURE HOURS:

LECTURE/LAB HOURS:

LAB HOURS 1

SPECIAL FEE:

COURSE DESCRIPTION and PREREQUISITES:

Builds on concepts and skills in the Pilates Method of conditioning. Designed to continue to increase core strength and stabilization, by challenging one's body to further its range of motion. Recommended: Pilates I or instructor permission.

ADDENDUM TO COURSE DESCRIPTION:

This course provides knowledge and skills in non-impact whole body exercise which includes variations to further challenge the student. Benefits include core strength, stabilization, muscle tone, flexibility, improved posture and body/mind awareness

INTENDED OUTCOMES:

Increase the repertoire of Pilates Mat work exercise

Continue to improve core strength, muscle balance, control and body awareness

Learn exercise variations built upon Pilates' concepts which apply a greater range of motion

COURSE ACTIVITIES AND DESIGN:

Warm up

Core body work

Cool down

OUTCOME ASSESSMENT:

Attendance and participation records
Classroom demonstratons

COURSE CONTENT (Themes, Concepts, Issues) and SKILLS:

Breathing exercise
War-up exercise
Joint Release Exercises
Stabilization exercise
Principle Concepts of the Pilates Method
Control
Concentration
Centering
Breathing
Precision
Flowing Movement
Whole Body Integration
Balanced Body Awareness

Skills

Perform appropriate Pilate's intermediate exercise. Identify and demonstrate exercises that support spinal flexion, extension, rotation, lateral flexion, hop mobility and should mobility with attention to Pilate's principles

Level I Pilates Mat exercise with attention to advanced variations

Rollover
Single Leg Scissors
Coordination
Criss Cross
Open Leg Rocker
Corkscrew
The Saw
Swan Dive Rocker
Double Leg Kick
Shoulder Bridge Series
Teaser I, II and III
Swimming
The Seal

RELATED INSTRUCTION:

Applies only to PTE courses used for Related Instruction in certificates of 45 credits or more.

Curriculum Request Form
Course Revision

Change:	Requisites
Current course number:	CIS 279L
Current course title:	Linux Network Administration
Current prerequisites:	CIS 240L ; or instructor permission
Proposed prerequisites:	Recommended: CIS 240L; or instructor permission
Will this impact other sacs?,is there an impact on other sacs?:	No
Will this impact other depts/campuses?,is there an impact on another dept or campus?:	No
Request term:	fall
Requested year:	2006
Contact name:	Sandra Koester
Contact e-mail:	skoester@pcc.edu

Curriculum Request Form
Course Revision

Change:	Requisites
Current course number:	CIS 284
Current course title:	Network Security
Current prerequisites:	None
Proposed prerequisites:	Recommended: CIS 240M; or CIS 279L; or instructor permission
Will this impact other sacs?,is there an impact on other sacs?:	No
Will this impact other depts/campuses?,is there an impact on another dept or campus?:	No
Request term:	fall
Requested year:	2006
Contact name:	Sandra Koester
Contact e-mail:	skoester@pcc.edu

Curriculum Request Form
Course Revision

Change:	Requisites
Current course number:	CIS 285
Current course title:	Security Tools
Current prerequisites:	Prerequisite: CIS 284 or instructor permission
Proposed prerequisites:	Recommended: CIS 284 or instructor permission
Will this impact other sacs?,is there an impact on other sacs?:	No
Will this impact other depts/campuses?,is there an impact on another dept or campus?:	No
Request term:	fall
Requested year:	2006
Contact name:	Sandra Koester
Contact e-mail:	skoester@pcc.edu

Curriculum Request Form
Course Revision

Change:	Requisites
Current course number:	CIS 286
Current course title:	Computer Forensics
Current prerequisites:	Prerequisite: CIS 284 or instructor permission
Proposed prerequisites:	Recommended: CIS 284 or instructor permission
Will this impact other sacs?,is there an impact on other sacs?:	No
Will this impact other depts/campuses?,is there an impact on another dept or campus?:	No
Request term:	fall
Requested year:	2006
Contact name:	Sandra Koester
Contact e-mail:	skoester@pcc.edu

Curriculum Request Form
New Course

Course number: CJA 244

Course title: Tactical Communication in Critical Incidents

Transcript title: Tact. Comm. Critical Incidents

Lecture hours: 4

Lab hours:

Lec/lab hours:

Load total:

Weekly contact hours: 4

Total credits: 4

Reason for new course: Some recent events between the police and those having an emotional crisis stemming from mental health or drugs have led to tragic results. This course will train students on how to more effectively handle these stressful incidents thereby lessening the chances of injury or death to those present

Course description: This course is designed for emergency services students and professionals to learn and practice crisis intervention skills and techniques on how to approach potentially dangerous situations while in an official capacity. Specialists in Crisis Intervention such as hostage negotiators, mental health crisis intervention team members and mediators will participate in classroom presentations and exercises.

Prerequisite(s): None

Prereq/concurrent: None

Corequisite(s): None

Learning outcomes:

1. To identify the various police-relevant crisis intervention models.
2. To understand and identify the phases of police crisis intervention.
3. To practice and observe techniques in class for approaching and handling difficult person/persons who may be having mental health issues, emotionally distraught, suicidal or

barricaded.

4. Demonstrate and observe in class the various strategies and techniques for handling the difficult situations such as the 911 call, domestic disturbance calls, irate or uncooperative individuals or those having a dispute.

5. Successfully diagram a "disturbance call."

6. Understand the impacts of alcohol on the mental health system.

7. Recognize common mental health issues.

8. Demonstrate the ability to identify common barriers to positive communication.

9. Demonstrate the ability to apply proper communication strategies and techniques.

Course format: On Campus

Are there similar courses existing: YES

Description of existing courses: EMT 115 is a course on Crisis Intervention. This proposed course is related but different in that the focus is on how to intervene and help prevent the situation from becoming a critical incident.

Required or elective: Elective

Is there impact on degrees or certificates: YES

Description of impact on deg/cert: Would add another elective to the Associates of Applied Science in Criminal Justice.

Is there an impact on another dept or campus?: NO

Have other sacs been contacted?: YES

Description of contact: Sent copy of course proposal to Doris Werkman in Speech Department and Dennese Kelsay with the EMT program.

Is there an increase in costs for library or av dept?: NO

Implementation term: Fall
Implementation year: 2007

Contact name: Jim Parks
Contact e-mail: jparks@pcc.edu

Format for Course Content and Outcome Guide

Use this template to prepare the CCOG for a new course. Please do not delete any sections Help is available for each section -- access it via the section link

COURSE NUMBER: CJA 244

COURSE TITLE: Tactical Communication in Critical Incidents

CREDIT HOURS: 3

LECTURE HOURS: 3

LECTURE/LAB HOURS: 0

LAB HOURS: 0

SPECIAL FEE: None

COURSE DESCRIPTION and PREREQUISITES: This course focuses on police intervention in the lives of people in the midst of an emotional or physical crisis in a manner designed to minimize or prevent violence while gaining control of the situation. Emphasized are verbal and non-verbal communication techniques and skills utilized to calm the client and gain compliance helping to lead to a successful and safe resolution.

Prerequisites: CJA 100 and CJA 111 or instructor permission.

ADDENDUM TO COURSE DESCRIPTION: This training will present various communication and de-escalation models shown to be successful in the past when dealing with potentially dangerous situations involving emotionally distraught individuals. Students will formulate plans and strategies on safe approaches to hostile encounters and use effective communication skills to gain cooperation.

INTENDED OUTCOMES: Students who have successfully completed this course will be able to:

1. Using the latest communication techniques, approach and attempt to handle potentially dangerous situations while acting in an official capacity with persons experiencing emotional distress or a mental health crisis.
2. Successfully diagram a "disturbance call."
3. Apply appropriate police response in the most humane, compassionate, caring and safe manner for the person experiencing emotional distress or having a mental health crisis while at the same time not exposing first responders to excessive danger.
4. Communicate with the person experiencing emotional distress or having a mental health crisis using the latest strategies and techniques that help lead to a successful and non-fatal conclusion.

COURSE ACTIVITIES AND DESIGN:

- Classroom Lecture
- Guest specialists in crisis intervention and hostage negotiation
- Films and videos
- Role playing scenarios

- Group discussions

OUTCOME ASSESSMENT: Methods of assessment may include the following: examinations, quizzes, an interview assignment report, research papers, class participation, role playing feedback, diagramming of a crisis incident, oral presentations and group activities.

COURSE CONTENT (Themes, Concepts, Issues) and SKILLS:

This course will address topics that include, but are not limited to:

- Historical background in American policing
- Communication Theories
- Survey of Successful Intervention Models
- Tactical Communication Techniques
- Mediation Basics
- Definitions and examples of Excited Delirium
- Survey of Contemporary Dispute Settlement Strategies
- Foundation Principals for Intervening in Crisis Situations

Curriculum Request Form
Contact/Credit Hour Change

Current course number: BCT 244

Current course title: Kitchen & Bath Cabinet Installation

	Current	Proposed
lecture hours:		2
lec/lab hours:	2	
load:	.216	.136
contact hours:	4	2
credits:	2	2

Reason for change: It was mistakenly put in as lecture lab. The course was originally designed for Interior Design students pursuing a certificate in Kitchen and Bath Design. Elizabeth Metcalf and I discussed it being a Saturday class, running for 4 or five weeks. Consequently we were shooting for 20 hours of instruction. The course is primarily lecture format with a field trip and instructor demonstrations.

Are outcomes affected?: NO

Are degrees/certs affected?: No

Is there an impact on other dept/campus?: NO

Is there potential conflict with another sac?: YES

Impact on sacs: Elizabeth Metcalf - Architectural Design and Drafting/Interior Design.

Implem. Term: Select One

Implementation year, implem. Year: Select One

Contact name: Spencer Hinkle
Contact email: shinkle@pcc.edu

Curriculum Request Form
Contact/Credit Hour Change

Current course number: WR 228

Current course title: Police Report Writing

	Current	Proposed
lecture hours:	3	4
contact hours:	3	4
Credits:	3	4

Reason for change: Report writing is one of the most important aspects of criminal justice employment yet our staff is frequently reminded about the lack of report quality in the field. The Criminal Justice Department wants to stress to students the significance of proper police report writing. As such, WR 228 has become one of the most complex courses in our program. It incorporates knowledge previously learned in other courses and is usually taken within a few terms of graduation. The extra contact hour/credit would allow the instructor to spend more time teaching and helping students transition their thoughts, notes and knowledge to written form.

Are outcomes affected?: NO

Are degrees/certs affected?: No

Is there an impact on other dept/campus?: NO

Is there potential conflict with another sac?: NO

Implem. Term: Fall

Implementation year, implem. Year: 2007

Contact name: Jim Parks

Contact email: jparks@pcc.edu

Curriculum Request Form
Related Instruction

Current course number: PST 101

Current course title: Professional Skills Training

Computation hours: 30

Content (activities, skills, concepts, etc.): -Direct Instruction in industry-specific workplace math skills. - Practice and study of industry-specific workplace math skills. Example: Develop skill in conducting business transactions. Example: Develop skill in accounting for documents and monies received, maintaining established balance standards; balance receipts of the close of each business day. Example: Develop skill in maintaining inventory and supplies. Example: Demonstrate ability to apply mathematical calculations needed to perform laboratory tests.

Communication hours: 30

Content (activities, skills, concepts, etc.): -Direct instruction on writing and speech related to industry and workplace. -Instruction on proper record keeping and/or preparation of reports. -Documentation of activities. -Asks questions as needed. -Able to follow and understand questions and direction from instructor, colleagues and customers. -Develop skill in answering telephone, directing calls and taking messages. -Develop skill in reading and understanding industry specific manuals and resources.

Human relations hours: 30

Content (activities, skills, concepts, etc.): -Development of skill in working with colleagues and supervisors in the workplace. -Development of skill in relating to customers, clients, vendors, etc. in the workplace. -Accepts suggestions. -Is courteous and helpful with public/customers. -Demonstrates respect for diverse populations.

Contact name: Sandy Schramm
Contact email: sschramm@pcc.edu

