Approved 05/22/08

A. NAME OF AGENDA ITEM

Consideration and approval of new or revised courses and programs.

B. STATEMENT OF ISSUE/PURPOSE

1. Background and Purpose

Sections 55002, 55130 and 55150 of Title 5 requires the local district governing board approve degree-applicable credit courses, nondegree-applicable credit courses, noncredit courses, community services offerings, and credit and noncredit programs.

The following curriculum changes are proposed for the San Diego Community College District for City College, Mesa College, Miramar College or Continuing Education:

Air Conditioning, Refrigeration, and Environmental Control Technology
Adoption of four new courses at City College (**Attachment A1-A2**)

Child Development
Adoption of a new course at City, Mesa, and Miramar College. (**Attachment B**)

Child Development
Adoption of a revised program at Mesa College. (**Attachment C**)

2. Cost and Funding

There is no additional cost to the District

C. PROPOSAL

The Board of Trustees hereby grants authority to take the action outlined in Part A.

Henry T. Ingle, Ph.D.
Vice Chancellor
Instructional Services

ACTION

Adoption of four new courses at City College.

Proposed courses at City College:

112 Comfort Heating Systems Theory
4 hours lecture, 4 units
Grade Only

Corequisite: Air Conditioning, Refrigeration, and Environmental Control Technology 113 with a grade of "C" or better, or equivalent.
Limitation on Enrollment: This course is not open to students with previous credit for Air Conditioning, Refrigeration, and Environmental Control Technology 134.
This course engages in the study, identification, and understanding of the safe operation of comfort heating equipment and systems. Instruction includes the use of combustion analyzers to evaluate the combustion process of various fuels, their heat output, analysis of bi-products, equipment capacity and combustion efficiency. The course includes discussions on equipment design, installation and maintenance in common types of comfort heating systems, including forced-air fuel-fired furnaces, boilers, heatpumps and airhandlers, hydronic heating and integrated conventional and alternative energy systems. This course is intended for students pursuing certificates or an associate degree in Air Conditioning, Refrigeration and Environmental Control Technology. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

113 Comfort Heating Systems Lab
6 hours lab, 2 units
Grade Only

Corequisite: Air Conditioning, Refrigeration, and Environmental Control Technology 112 with a grade of "C" or better, or equivalent.
Limitation on Enrollment: This course is not open to students with previous credit for Air Conditioning, Refrigeration, and Environmental Control Technology 135.
This course involves a series of demonstrations and lab projects to provide identification, knowledge and understanding of the safe operation of comfort heating equipment and systems. Readings from combustion analyzers are used to evaluate the combustion process of various fuels, their heat output, analysis of bi-products, equipment capacity and combustion efficiency. The course includes design, maintenance training and practice on common types of comfort heating systems, including forced-air gas-fired and oil-fired furnaces, boilers, furnaces, heatpump fancoils, hydronic heating and integrated conventional and alternative energy systems. This course is intended for students pursuing certificates or an associate degree in Air Conditioning, Refrigeration and Environmental Control Technology. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

144 Direct Digital Controls Theory
4 hours lecture, 4 units
Grade Only

Corequisite: Air Conditioning, Refrigeration, and Environmental Control Technology 145 with a grade of "C" or better, or equivalent.
Advisory: Computer Business Technology 161and 180, each with a grade of "C" or better, or equivalent.
This course is a study of Direct Digital Control (DDC) theory: rationale, DDC system design, DDC system sensors, DDC controllers and advanced heating, ventilation and air conditioning (HVAC) controls, network architecture, Internet protocol (IP) addressing and interoperation, open and non-proprietary systems, American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) BACnet, and the LonWorks platform. The course examines BACnet DDC hybrid control strategies using various analog and binary system actuators. Specific emphasis is placed on developing student skills using networks that are built into the AIRE Program DDC lab equipment and utilized throughout the world, including the SDCCD campuses and buildings. This course is intended for students pursuing certificates or an associate degree in Air Conditioning, Refrigeration and Environmental Control Technology. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

145 Direct Digital Controls Lab
6 hours lab, 2 units
Grade Only

Corequisite: Air Conditioning, Refrigeration, and Environmental Control Technology 144 with a grade of "C" or better, or equivalent.
Advisory: Computer Business Technology 161 and 180 each with a grade of "C" or better, or equivalent.
This course applies Direct Digital Control (DDC) theory to laboratory projects: system design, American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) BACnet DDC controller selection and integration with heating, ventilation and air conditioning (HVAC) system components, BACnet network architecture, development of graphical views and hierarchical database tree, logical BACnet program development, and construction of DDC system operator machine interface graphics. Course projects include the development of a facility graphical view and control hierarchy tree, setup of a control logic diagram using blocks, symbols and wires, and construction of an operator graphical interface. Laboratory training simulations are compared to actual DDC HVAC control strategies used by the San Diego Community College District's BACnet DDC system, and throughout the world. This course is intended for students pursuing certificates or an associate degree in Air Conditioning, Refrigeration and Environmental Control Technology.

ACTION

Adoption of a new course at City, Mesa, and Miramar College.

Proposed course at City, Mesa, and Miramar College:

280 Environmental Rating Scale
1 hours lecture, 1 unit
Grade Only

Advisory: English 42 and 43 each with a grade of "C" or better, or equivalent or Assessment Skill Levels R4 & W4.
This course provides students with an introduction to the Environmental Rating Scale administration, scoring system, profile, and improvement plan. The course focuses on environmental evaluation and program improvement. Students learn how to evaluate the quality of child care programs and how to increase the quality of care through practical improvements. This course is intended for child development professionals currently working in the field as well as those seeking professional development, child development permits, employment opportunities, or anyone with general interest in working with children. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

ACTION

Adoption of a Program Revision at Mesa College.

Proposed Program Revision at Mesa College:

Certificate of ~~Completion~~ Performance: Assistant Teacher

Courses Required for the Major:Units
~~CHIL 100, Introduction to Child Development OR~~
CHIL 101, Human Growth and Development 3
CHIL 180 Nutrition, Health and Safety for Children....3
Select Once Course From:
~~CHIL 111, Curriculum: Music/Motor Skills OR~~
~~CHIL 121, Curriculum: Art OR~~
~~CHIL 131, Curriculum: Language/Science OR~~
CHIL 141 The Child, Family and Community 3
~~CHIL 160, Observing and Understanding Children .....2~~
~~CHIL 161, Observations and Issues in Child Development..... 2~~
CHIL 270, Work Experience .....3 - 4
~~CHIL 291, Child Development Lab Practicum .....1 - 4~~
~~CHIL 291A, Child Development Center Practicum .....1~~
~~CHIL 291B, Child Development Center Practicum .....1~~
~~CHIL 291C, Child Development Center Practicum .....1~~
~~CHIL 291D, Child Development Center Practicum .....1~~

Total Units 12 - 13