A. <u>NAME OF AGENDA ITEM</u> 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 two new courses at City College. (Attachment A) Art-Fine Art Deactivation of a course at Mesa College. (Attachment B) Chemistry Adoption of two new courses at City College and Mesa College. (Attachment C) Electronic Systems Adoption of two new courses at City College. (Attachment D) Fashion Adoption of a course reactivation at Mesa College. (Attachment E) Microsoft Deactivation of nine courses at City College. (Attachment F1-F3)

Peace Studies Adoption of two new courses at City College. (Attachment G)

Photography Adoption of two new courses at City College. (Attachment H)

Radio and Television Deactivation of a course at City College. (Attachment I)

### 2. Cost and Funding

There is no additional cost to the District

Otto Lee Vice Chancellor Instructional Services

# C. <u>PROPOSAL</u>

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

Adoption of two new courses at City College.

Proposed courses at City College:

### 160 Solar Energy Utilization Theory 3 hours lecture, 3 units Grade Only

Corequisite: Air Conditioning, Refrigeration, and Environmental Control Technology 161. Advisory: Air Conditioning, Refrigeration, and Environmental Control Technology 100 and 124, each with a grade of "C" or better, or equivalent. This course studies solar-thermal and photovoltaic (PV) systems, siting considerations, types of collectors and systems, operating efficiencies, building codes and solar rights. Topics include: passive and active solar thermal systems; residential and commercial systems for water heating, space heating, space cooling, process heating, swimming pool heating, and hybrid systems. Study of photovoltaic technologies includes the solar cell, independent and grid-connected systems and electric bill reduction strategies. 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.

### 161 Solar Energy Utilization Lab 6 hours lab, 2 units Grade Only

Corequisite: Air Conditioning, Refrigeration, and Environmental Control Technology 160. Advisory: Air Conditioning, Refrigeration, and Environmental Control Technology 100 and 125, each with a grade of "C" or better, or equivalent. This course includes a series of solar thermal and photovoltaic (PV) laboratory projects. Solar collector and system performance data are recorded and analyzed and efficiencies calculated. Topics include collector/module azimuth and tilt, thermal open and closed loop systems, freeze protection, stagnation; stand-alone and gridconnected photovoltaic systems are studied. 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.

# <u>ACTION</u>

Deactivation of a course at Mesa College.

Proposed course deactivation at Mesa College (no longer active at any college):

## 177B Contemporary Wood Furniture II 1.5 hours lecture, 4.5 hours lab, 3 units Letter Grade or Credit/No Credit Option

*Prerequisite:* Art-Fine Art 177A with a grade of "C" or better, or equivalent. This course is a continuation of Fine Arts 177A and is designed for students who are preparing for the major in art, in particular those who are focusing on three-dimensional work or design. It includes intermediate levels of joinery and the study of methods used in the construction of contemporary wood casework and cabinet making. Bent lamination, vacuum forming and steam bending are introduced and incorporated in the final project. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

Adoption of a two new courses at City College and Mesa College.

Proposed new courses at City College and Mesa College:

# 111 Chemistry in Society

3 hours lecture, 3 units Grade Only

Advisory: English 51 and English 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5. Chemistry 111L with a grade of "C" or better, or equivalent. This is an introductory chemistry course for nonscience majors. The course emphasizes conceptual topics in chemistry and scientific thinking. Students learn to understand how society uses chemistry-based technologies and how to analyze current trends or news involving chemistry. Topics include a basic understanding of matter and energy, physical and chemical changes, the atom, nuclear chemistry, bonding, acids and bases, organic chemistry, and biochemistry. Current issues in environmental chemistry such as energy resources, air and water pollution are explored. Students discuss the effects and controversy surrounding the use of different forms of energy. In addition, current issues in organic and biochemistry are examined including trends in diets, certain medicines and drugs, and personal care items. Students planning on taking further courses in chemistry should take Chemistry 100 or Chemistry 152. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

### 111L Chemistry in Society Laboratory 3 hours lab, 1 unit Grade Only

Corequisite: Completion of or concurrent enrollment in: Chemistry 111 with a grade of "C" or better, or equivalent. Advisory: English 51 and English 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5. This laboratory course is intended for nonscience majors. It is designed to illustrate the principles of chemistry presented in Chemistry 111 in order for the student to understand how chemistry is used in our society. Experiments explore not only basic concepts in chemistry such as matter, energy, and the atom, but also explore real world applications of chemistry. This includes performing experiments related to the chemistry of the environment, household products, and biochemistry. Students learn how to work safely within the laboratory. Students that need to take further chemistry courses should enroll in Chemistry 152L or Chemistry 100L. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

Adoption of two new courses at City College.

Proposed courses at City College:

### 225 Microcontrollers

3 hours lecture, 3 units Grade Only

*Corequisite: Completion of or concurrent enrollment in:* Electronic Systems 123, 124 and 225L, each with a grade of "C" or better, or equivalent.

*Advisory:* Mathematics 107 with a grade of "C" or better, or equivalent.

This course focuses on the fundamentals of both the hardware and software aspects of the microcontroller. Typical devices that are connected to the microcontroller are: switches, light emitting diodes, seven segment displays, stepper motors and a matrix keypad. An engineering evaluation board is used as the development system for the controller. Structured programming and flow charts are emphasized. Code is written in assembly language, compiled and then downloaded to the controller. This course is intended for students majoring in Engineering Technology. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities. 225L Microcontrollers Laboratory 4.5 hours lab, 1.5 units Grade Only

*Corequisite: Completion of or concurrent enrollment in:* Electronic Systems 123L, 124L and 225, each with a grade of "C" or better, or equivalent.

This laboratory demonstrates microcontroller applications. The course emphasizes microcontroller construction, design, programming and troubleshooting. Students conduct the laboratory with a software development kit (SDK) and microcontroller trainer equipment. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

Adoption of a course reactivation at Mesa College.

Proposed course reactivation at Mesa College:

### 131 Apparel Construction II 3 hours lecture, 3 units Grade Only

*Prerequisite:* Fashion 130 with a grade of "C" or better, or equivalent. Corequisite: Fashion 199C Advisory: English 51 and English 56 and Mathematics 35, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5, R5 and M30. Limitation on Enrollment: This course is not open to students with previous credit for Fashion 265: Clothing Construction. This course is a study of advanced apparel construction. Emphasis is placed on current fabrics and techniques used in contemporary ready-to-wear and couture. This course is intended for all fashion design majors and is open to students interested in fitting and constructing clothing. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

Deactivation of nine courses at City College.

Proposed course deactivations at City College(no longer active at any college):

### 44 Supervised Tutoring in Microsoft

This course is designed to prepare the student to succeed in the corequisite and subsequent subject matter courses. This course may be taken four times with a different corequisite subject matter course. College noncredit course.

### 50 Microsoft Networking Essentials 0.5 hour lecture, 1.5 hours lab, 1 unit Grade Only

This course introduces students to networking terms, concepts, and standards based on the Microsoft Official Curriculum (MOC). Topics include administrative planning, security, and disaster recovery. This course follows the Microsoft Official Curriculum and is intended to prepare students to start the Microsoft Certified Systems Engineer (MCSE) or the Microsoft Certified Systems Administrator (MCSA) certification tracks. (FT) Associate Degree Credit only and not Transferable.

# 70 Microsoft Sequel Server Database Design and Implementation

4.5 hours lab, 1.5 units Grade Only

This course provides students with the knowledge and skills to program a Microsoft Sequel Server (SQL) database. Emphasis is placed on creating and managing databases, data types, tables, and indexes, and implementing stored procedures, user-defined functions, and triggers. Course content also includes programming across multiple servers, optimizing query performance, analyzing queries and managing transactions and locks. This course follows the Microsoft Official Curriculum (MOC) and helps students prepare for the Microsoft Certification exam 70-229 (or current test). This course may be taken three times with new technologies. (FT) Associate Degree Credit only and not Transferable.

# 71 Microsoft SQL Server System Administration

6 hours lab, 2 units Grade Only

*Advisory:* Microsoft 52 with a grade of "C" or better, or equivalent.

This course is required for the Microsoft Certified Systems Engineer (MCSE) program. Students gain an understanding of the product's architecture and perform the procedures to install, configure, and administer the program using the current version of Microsoft SQL Server System. This course follows the Microsoft Official Curriculum (MOC) and helps the student prepare for the Microsoft Certification Exam 70-228 (or current test). This course may be taken three times with new technologies. (FT) Associate Degree Credit only and not Transferable.

### 80 Microsoft Exchange Server Administration 4.5 hours lab, 1.5 units Grade Only

*Advisory:* Microsoft 52 with a grade of "C" or better, or equivalent.

This course provides students with the knowledge and skills necessary to install, configure and administer a Microsoft Exchange Server. Emphasis is placed on practical hands-on learning through projects in each chapter. This course follows the Microsoft Official Curriculum (MOC) and provides the student with the skills required to pass the Microsoft Certification 70-224 (or current test). This course may be taken three times with new technologies. (FT) Associate Degree Credit only and not Transferable.

#### 136 Planning and Maintaining a Microsoft Windows Server 2003 Network Infrastructure II

### 0.5 hour lecture, 3 hours lab, 1.5 units Letter Grade or Credit/No Credit Option

Prerequisite: Microsoft 130 and 132, each with a grade of "C" or better, or equivalent. This course is the second part of the Microsoft Server Network Infrastructure series and provides students with the knowledge and skills necessary to plan and maintain a Windows Server (current edition) Network Infrastructure. Students learn the needed strategies to plan, optimize, and troubleshoot the Dynamic Host Configuration Protocol (DHCP), Domain Name System (DNS), Windows Internet Naming Service (WINS); and IPSec (Internet Protocol Security) network access. This course follows the Microsoft Official Curriculum (MOC) and it is intended to prepare students to take the Microsoft's Planning and Maintaining a Microsoft Windows Server Network Infrastructure component of the Microsoft Certified Systems Engineer (MCSE) and Microsoft exam # 70-293. This course may be taken three times with new technologies. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

# 140 Designing Security for Microsoft Networks

### 1 hour lecture, 1.5 hours lab, 1.5 units Letter Grade or Credit/No Credit Option

Prerequisite: Microsoft 130 and 132, each with a grade of "C" or better, or equivalent. This course provides students with the knowledge and skills to design a secure network infrastructure. Topics include assembling the design team, modeling threats, and analyzing security risks in order to meet business requirements for securing computers in a networked environment. The course encourages decision-making skills through an interactive tool that simulates real-life scenarios that the target audience may encounter. This course follows the Microsoft Official Curriculum (MOC) and it is intended to prepare students to take the Microsoft's certification exam that focuses on the Microsoft Certified Systems Engineer's security design requirement (Exam 79-298). This course may be taken three times with new technologies. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

### 170 Programming a Microsoft SQL Server 1 hour lecture, 4.5 hours lab, 2.5 units Letter Grade or Credit/No Credit Option

*Prerequisite:* Microsoft 132 with a grade of "C" or better, or equivalent.

This course provides students with the knowledge and skills to program a Microsoft Sequel Server (SQL) database. Emphasis is placed on creating and managing databases, data types, tables, and indexes, and implementing stored procedures, user-defined functions, and triggers. Course content also includes programming across multiple servers, optimizing query performance, analyzing queries and managing transactions and locks. This course follows the Microsoft Official Curriculum (MOC) and helps students prepare for the Microsoft Certification exam 70-229 (or current test). (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

### 171 Microsoft SQL Server System Administration 1 hour lecture, 4.5 hours lab, 2.5 units Grade Only

*Prerequisite:* Microsoft 132 with a grade of "C" or better, or equivalent. This course is required for the Microsoft

Certified Systems Engineer (MCSE) program. Students gain an understanding of the product's architecture and perform the procedures to install, configure, and administer the program using the current version of Microsoft Sequel (SQL) Server System. This course follows the Microsoft Official Curriculum (MOC) and helps the student prepare for the Microsoft Certification Exam 70-228 (or current test). (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

Adoption of two new courses at City College.

Proposed courses at City College:

### 102 Nonviolence and Conflict Resolution 3 hours lecture, 3 units Grade Only

*Advisory:* English 101 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course explores nonviolence and conflict resolution through an analysis of theory and application of both strategies. Students are able to contemplate the relationship between nonviolence and conflict resolution and how these techniques may be applied. Emphasis is placed on the history of nonviolent leaders and social movements nationally and internationally which have resulted in the promotion of peace, the application of justice and the preservation of human rights. This course is intended for all students interested in peace studies, conflict resolution and international relations. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

# 201 Environmental Sustainability, Justice and Ethics

3 hours lecture, 3 units Grade Only

*Prerequisite:* English 101 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6. Philosophy 102B and Biology 101, each with a grade of "C" or better, or equivalent. Advisory: Completion of or concurrent enrollment in: English 205 with a grade of "C" or better, or equivalent. This course analyzes environmental issues related to sustainability, justice and ethics. Environmental sustainability theories are examined by addressing economic, cultural, social, political and ecological issues. The philosophical basis of environmental ethics provides a framework of the various worldviews and theoretical orientations. Students apply theories learned to assess international and national environmental justice case studies. This course is intended for students interested in Peace Studies, Sustainability and Environmental Ethics. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

Adoption of two new courses at City College.

Proposed courses at City College:

### 243 Advanced Digital Photography 1.5 hours lecture, 4.5 hours lab, 3 units Letter Grade or Credit/No Credit Option

*Prerequisite:* Photography 143 with a grade of "C" or better, or equivalent. This course further hones the skills learned in the Introduction to Digital Photography course. Emphasis is placed on capturing, retouching, and printing digital files. Topics include High Dynamic Range and Enhanced Depth of Field imaging, single- and multi-row stitching for unlimited resolution, and shooting tethered for professional photo sessions. This course is designed for advanced photography students who have a solid foundation in basic digital acquisition and editing. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

### 259 The Photographic Portfolio 1.5 hours lecture, 4.5 hours lab, 3 units Letter Grade or Credit/No Credit Option

*Prerequisite:* Photography 100 or 143, with a grade of "C" or better, or equivalent. This course covers the design, fabrication, editing, sequencing, assembly, and presentations of portfolios\par of work for professional photo students wanting to sell their photographic services or products and for art photographers seeking to show their work in galleries or museums. It is designed for intermediate and advanced students to create and polish their portfolios. This course may be taken up to four times with each iteration covering a different type of portfolio. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

Deactivation of a course at City College.

Proposed course deactivation at City College(no longer active at any college):

### 200 Introduction to Mass Communications 3 hours lecture, 3 units Grade Only

Advisory: English 51 and English 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5. This course is designed to provide students with a basic understanding of industries, technologies, issues, and historical foundations that make up mass communications in the United States. The course includes discussions about current practices, problems, issues and significant trends. The origin and current operations of each media industry are analyzed through the insights of scholars, creative talent, business, and government leaders. The economic, political, societal, and organizational aspects affecting new media are explored. This is a course for transfer students and those seeking employment in communications. Associate Degree Credit & transfer to CSU and/or private colleges and universities.