

# CONSENT AGENDA ACTION ITEM

**Governing Board Agenda**

**Meeting Date:** November 25, 2008

<u>Item Number</u>	<u>Item Title</u>	<u>Responsible Agents</u>
	Curriculum	Dr. Maria Harper-Marinick

**Recommendation**

The curriculum proposals attached have been processed through all procedures established by the Maricopa County Community Colleges.

It is recommended that the proposals be approved as submitted.

AGENDA HIGHLIGHTS: Please refer to the curriculum Summary on page 2 for a complete listing of all program and course proposals.

**Justification**

<b>Funding</b>	<b>Approvals/Certifications</b>
<p><u>Source:</u></p> <p><u>Account Identification:</u></p>	<p>Chancellor _____</p> <p>Academic &amp; Student Affairs _____</p> <p>Business Services _____</p> <p>Human Resources _____ ITS _____</p> <p>Res Dev &amp; Cmty Affairs _____</p> <p>College President _____</p>

GBA November 25, 2008 MCCC D Governing Board Action Items  
Curriculum Summary

COURSE PROPOSALS:

Course Modifications.....page 5

GCC BIO215  
GWCC ELC105, FAC101, FAC105, GTC206, HVA101, HVA103, HVA105, MET206  
MCC HES126, PED133  
RSC CCT190, CCT191, EEP288, EEP289, EEP289AA

New Courses.....page 13

GCC BIO173, BIO175, BIO208, BIO210  
MCC ECN110, ECN204, ECN208, EXS230, GPH240, JRN225, REL291  
PC AJS112PS, EMT112PS, FSC112PS, TEC232, TEC233  
RSC CCT269, CTE240, CTE250, EDU260AA, EDU260AB, EDU261AA, EDU261AB,  
EDU262AA, EDU262AB, EDU263AA, EDU263AB, EED245, EED265, EED275,  
EED277, EEP224, UCS162

PROGRAM PROPOSALS:

New Occupational Programs (NOP).....page 22

EMCC CCL/5657 Public Works Leadership 22

Occupational Program Modifications (OPM).....page 23

CGCC AAS/3113 Biomedical Research Technology 23  
Shared by: CGCC, GWCC, SMCC  
EMCC AAS/3137 Administration of Justice 26  
CCL/5655\* Evidence Technology 28  
GCC AAS/3034 Biotechnology and Molecular Biosciences 29  
PC CCL/5557 Firefighter Operations 32  
Shared by: GC, MCC, PC, PVCC, SCC  
CCL/5941 Fashion Illustration, Level I 33  
CCL/5949 Pattern Design, Level II 34

Note: \*Indicates Addition of Occupational Program from OPM process

GBA November 25, 2008 MCCC D Governing Board Action Items  
Curriculum Summary

PROGRAM PROPOSALS: - Continued

Occupational Program Deletions (OPD).....page 35

PC	CCL/5026	Computer Hardware and Desktop Support	35
		Shared by: CGCC, EM, GW, MC, PC, SC	
	CCL/5943	Fashion Illustration, Level II	36
	CCL/5945	Fashion Illustration, Level III	37

New Academic Programs (NAP).....page 38

CGCC	AC/6229	Sustainability and Ecological Literacy	38
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**CURRICULUM ACTIVITY: COURSES FOR November 25, 2008**

<b>Total Course Proposals Submitted (21 with 0 modules added, 0 X-refs added and, 0 X-refs deleted)</b>												
<b>Proposal Type/Outcomes</b>	<b>CGCC</b>	<b>EMCC</b>	<b>GWCC</b>	<b>GCC</b>	<b>MCC</b>	<b>PVCC</b>	<b>PC</b>	<b>RSC</b>	<b>SCC</b>	<b>SMCC</b>	<b>Dist</b>	<b>Totals</b>
Course Modification (CM)			8	1	2			5				16
Course Deletions												0
CM: X-Ref Added (new course generated)												0
CM: Modules Added (new courses generated)												0
CM: Variation Credits/Periods Module Added (new courses generated)												0
New Course (excludes above CM additions)				4	7		5	17				33
<b>Total Courses College Columns</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>5</b>	<b>9</b>	<b>0</b>	<b>5</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>
<b>Overall New Courses Generated for MCCC</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>7</b>	<b>0</b>	<b>5</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33</b>
<b>Overall Course Modifications Generated for MCCC</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>

\*Exp = Experimental Courses      # = AES or MIR (Aerospace Studies or Military Science)

**CURRICULUM ACTIVITY: PROGRAMS FOR November 25, 2008**

<b>Total Program Proposals Submitted (12, with 0 Program Addition(s))</b>												
<b>Proposal Type/Outcomes</b>	<b>CGCC</b>	<b>EMCC</b>	<b>GWCC</b>	<b>GCC</b>	<b>MCC</b>	<b>PVCC</b>	<b>PC</b>	<b>RSC</b>	<b>SCC</b>	<b>SMCC</b>	<b>Dist</b>	<b>Totals</b>
Occupational Program Deletions (OPD)							3					3
New Occupational Program (NOP) (college specific)		1										1
NOP-Shared (*primary college)												0
Occupational Program Modification (OPM)	1	1		1			3					6
OPM-Program Additions (new programs generated)		1										1
OPM-Program Additions-shared (^primary college)												0
OPM-Change in Availability (shared, new programs generated, *primary college)												0
APM-Change in Availability (programs no longer offered)												0
Academic Program Deletions (APD)												0
New Academic Program (NAP) (college specific)	1											1
NAP-Shared (*primary college)												0
Academic Program Modification (APM)												0
APM-Program Additions-college specific (new programs generated)												0
APM-Change in Availability (new program generated)												0
<b>MCCC New Programs Generated</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>MCCC Modified Programs Generated</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>

Shared Programs include programs offered by two or more colleges and District Wide Programs are offered by all 10 colleges.

**NOTE:** Program attachments use strikeovers to signify deletion of program information. Text in bold print signifies additions to the program.

**ATTACHMENT: CM**  
**COURSE MODIFICATIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

ACT CREDITS PERIODS

PRESENT:

BIO215	Biotechnology Internship	LEC	3.0	3.0
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Internship experience in a biotechnology laboratory. Requires 240 clock hours in the laboratory setting. Setting, achieving, and evaluating goals for hands-on learning experience in a biotechnology laboratory. Development of skills and knowledge needed to work in a biotechnology laboratory.

Prerequisites: Permission of Program Director and (BIO212AA or BIO212BA).

Course Notes: May be repeated for a total of six (6) credits.

PROPOSED: (Change in: Description, Prerequisites, Course Notes.)

BIO215	Biotechnology Internship	LEC	3.0	3.0
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Internship experience in a biotechnology laboratory. Setting, achieving, and evaluating goals for hands-on learning experience in a biotechnology laboratory. Development of skills and knowledge needed to work in a biotechnology laboratory.

Prerequisites: Permission of Program Director and (BIO212AA, or BIO212BA, or BIO208, or BIO209).

Course Notes: BIO215 requires 240 clock hours in the laboratory setting.

Type: 0	College: GCC	Effective: 2009 Spring
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PRESENT:

CCT190	Microsoft Windows Service 2003 Management	L+L	3.0	4.0
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Skills and knowledge to manage Microsoft Windows Server 2003. Includes access and security issues, group policy implementation, server administration, and drivers, disks, data storage maintenance. Design a disaster recovery plan and software update schedule.

Prerequisites: None.

PROPOSED: (Change in: Description, Competencies, Outline.)

CCT190	Microsoft Windows Service 2003 Management	L+L	3.0	4.0
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Skills and knowledge to manage Microsoft Windows Server 2003. Includes access and security issues, group policy implementation, server administration, and drivers, disks, data storage maintenance. Design a disaster recovery plan and software update schedule. Also covers Active Directory Administration.

Prerequisites: None.

Type: 0	College: RSC	Effective: 2008 Fall
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**ATTACHMENT: CM**  
**COURSE MODIFICATIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

ACT CREDITS PERIODS

PRESENT:

CCT191	MS Windows Server 2003 Network Infrastructure Plan and Maintenance Strategy	L+L	3.0	4.0
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Planning and maintaining Microsoft Windows Server 2003 network infrastructure. Design process for all elements, such as Transmission Control Protocol/Internet Protocol (TCP/IP), Domain Name System (DNS), and Windows Internet Name Service (WINS). Includes a master project plan to deploy and manage a new network.  
 Prerequisites: CCT194.

PROPOSED: (Change in: Description, Prerequisites, Competencies, Outline.)

CCT191	MS Windows Server 2003 Network Infrastructure Plan and Maintenance Strategy	L+L	3.0	4.0
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Planning and maintaining Microsoft Windows Server 2003 network infrastructure. Design process for all elements, such as Transmission Control Protocol/Internet Protocol (TCP/IP), Domain Name System (DNS), and Windows Internet Name Service (WINS). Includes a master project plan to deploy and manage a new network as well as Active Directory implementation.  
 Prerequisites: CCT190.

Type: 0      College: RSC      Effective: 2008 Fall

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PRESENT:

EEP288	Student Teaching Lab - Early Childhood	LAB	4.0	5.0
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Supervised student teacher practicum. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.  
 Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program and (EDU220, EDU251, EEP240, EEP242, EEP244, EEP246, and EEP276) and permission of Department or Division.

PROPOSED: (Change in: Description.)

EEP288	Student Teaching Lab - Early Childhood	LAB	4.0	5.0
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Supervised (K-3) student teacher practicum. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.  
 Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program and (EDU220, EDU251, EEP240, EEP242, EEP244, EEP246, and EEP276) and permission of Department or Division.

Type: A      College: RSC      Effective: 2009 Spring

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**ATTACHMENT: CM**  
**COURSE MODIFICATIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

ACT CREDITS PERIODS

PRESENT:

EEP289	Internship: Early Childhood Infant, Toddler, Preschool	LEC	4.0	4.0
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Work experience with infants, toddlers and/or preschoolers in early care and education settings. 80 hours of designated work per credit.  
 Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate early childhood teacher preparation program and (EDU220, EDU251, EEP240, EEP242, EEP244, EEP246, and EEP276) and permission of Department or Division.

PROPOSED: (Change in: Description, Course Notes.)

EEP289	Internship: Early Childhood Infant, Toddler, Preschool	LEC	4.0	4.0
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Supervised field experience with infants, toddlers and/or preschoolers in early care and education settings.  
 Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate early childhood teacher preparation program and (EDU220, EDU251, EEP240, EEP242, EEP244, EEP246, and EEP276) and permission of Department or Division.  
 Course Notes: EEP289 requires 180 hours of supervision in the classroom.

Type: A      College: RSC      Effective: 2009 Spring

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PRESENT:

EEP289AA	Internship: Early Childhood Infant, Toddler, Preschool Special Education	LEC	4.0	4.0
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Work experience with infants, toddlers and/or preschoolers in early care and education settings. 80 hours of designated work per credit.  
 Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate early childhood teacher preparation program and (EDU220, EDU251, EEP240, EEP242, EEP244, EEP246, and EEP276) and permission of Department or Division.

PROPOSED: (Change in: Description, Course Notes.)

EEP289AA	Internship: Early Childhood Infant, Toddler, Preschool Special Education	LEC	4.0	4.0
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Supervised field experience with infants, toddlers and/or preschoolers in early care and education settings.  
 Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate early childhood teacher preparation program and (EDU220, EDU251, EEP240, EEP242, EEP244, EEP246, and EEP276) and permission of Department or Division.  
 Course Notes: EEP289AA requires 180 hours of supervision in the classroom.

Type: A      College: RSC      Effective: 2009 Spring

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**ATTACHMENT: CM**  
**COURSE MODIFICATIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

ACT CREDITS PERIODS

PRESENT:

ELC105	Electricity for Industry	LEC	3.0	3.0
X FAC/HVA105				

Electricity related to industrial applications. Operation of and safety protocols for the use of electrical meters. Electrical loads calculations and evaluation of air conditioning power sources. Single-phase motors, motor resistance and motor terminals. Function of electro-magnetic solenoids and transformers. National Electric Code.

Prerequisites: None. Corequisites: ELC/FAC/HVA105LL or permission of Instructor.

PROPOSED: (Change in: Description, Competencies, Outline.)

ELC105	Electricity for Industry	LEC	3.0	3.0
X FAC/HVA105				

Electricity related to industrial applications. Operation of and safety protocols for the use of electrical meters. Electrical loads calculations and evaluation of electro-mechanical power sources. Single-phase motors, motor resistance and motor terminals. Function of electro-magnetic solenoids and transformers. National Electric Code.

Prerequisites: None. Corequisites: ELC/FAC/HVA105LL or permission of Instructor.

Type: 0      College: GWCC      Spring Effective: 2009

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PRESENT:

FAC101	Refrigeration Components and Applications I	LEC	2.0	2.0
X HVA101				

Major components of refrigeration systems. Properties of refrigerants and piping practices.

Prerequisites: None. Corequisites: FAC/HVA101LL or permission of Instructor.

PROPOSED: (Change in: Description, Competencies, Outline.)

FAC101	Refrigeration Components and Applications I	LEC	2.0	2.0
X HVA101				

Major components of refrigeration systems. Properties of refrigerants and piping practices. Principles of pressure, work, energy, power, matter, internal energy, heat, temperature and the ideal gas processes. Saturated and superheated vapors. Pressure-enthalpy chart and its component parts, vapor compression system, cycle analysis of a single saturated cycle.

Prerequisites: None. Corequisites: FAC/HVA101LL or permission of Instructor.

Type: 0      College: GWCC      Spring Effective: 2009

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**ATTACHMENT: CM**  
**COURSE MODIFICATIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

ACT CREDITS PERIODS

PRESENT:

FAC105	Electricity for Industry	LEC	3.0	3.0
X ELC/HVA105				

Electricity related to industrial applications. Operation of and safety protocols for the use of electrical meters. Electrical loads calculations and evaluation of air conditioning power sources. Single-phase motors, motor resistance and motor terminals. Function of electro-magnetic solenoids and transformers. National Electric Code.

Prerequisites: None. Corequisites: ELC/FAC/HVA105LL or permission of Instructor.

PROPOSED: (Change in: Description, Competencies, Outline.)

FAC105	Electricity for Industry	LEC	3.0	3.0
X ELC/HVA105				

Electricity related to industrial applications. Operation of and safety protocols for the use of electrical meters. Electrical loads calculations and evaluation of electro-mechanical power sources. Single-phase motors, motor resistance and motor terminals. Function of electro-magnetic solenoids and transformers. National Electric Code.

Prerequisites: None. Corequisites: ELC/FAC/HVA105LL or permission of Instructor.

Type: 0      College: GWCC      Spring Effective: 2009

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PRESENT:

GTC206	CNC Programming	L+L	3.0	6.0
X MET206				

Manual programming using a PC to generate program media. Set-up and operation of a three axis machine. Study of management implications and advantages of computer numerical control (CNC).

Prerequisites: GTC102 or machine shop experience or permission of program director.

PROPOSED: (Change in: Periods From: 6 To: 4, Load From: 5.1 To: 3.7, Description, Prerequisites, Competencies, Outline.)

GTC206	CNC Programming	L+L	3.0	4.0
X MET206				

CNC Programming of Word Address Language (G&M Code) for computer numerical control (CNC) Machine tools. 2, 3 and 4-Axis CNC Programming for CNC controlled machines. Computer based tool path verification, CNC controller tool path verification and CNC machine tool program verification. Study of tooling, Speeds, Feeds and material removal as related to CNC machine tools and CNC controlled machines.

Prerequisites: MET231 or machine shop experience or permission of Program Director.

Type: 0      College: GWCC      Spring Effective: 2009

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**ATTACHMENT: CM**  
**COURSE MODIFICATIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

ACT CREDITS PERIODS

PRESENT:

HES126	Women's Health Issues	LEC	2.0	2.0
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Develops awareness of health issues related to women. Examines diseases common to women. Explores predisposing and precipitating factors affecting health and reviews current treatment of disease. Focuses on the development of behaviors that promote a healthy and productive life.  
 Prerequisites: None.

PROPOSED: (Change in: Credits From: 2 To: 3, Periods From: 2 To: 3,  
 Load From: 2 To: 3, Description, Competencies, Outline.)

HES126	Women's Health Issues	LEC	3.0	3.0
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Develops awareness of women's health issues across cultures, lifespan, socioeconomic status, education and addresses global concerns and inequalities. The course introduces women's health issues through the history of the Women's Health Movement and the political climate and economic systems in the United States. Addresses women's health issues regarding sexual health and reproduction and examines many chronic diseases common to women. Explores predisposing and precipitating factors affecting women's health and reviews current treatment of disease. Identifies interpersonal and social issues related to women's health and focuses on the development of behaviors that promote a healthy and productive life.  
 Prerequisites: None.

Type: A	College: MCC	Effective: 2009 Summer I
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PRESENT:

HVA101	Refrigeration Components and Applications I	LEC	3.0	3.0
X FAC101				

Major components of refrigeration systems. Properties of refrigerants and piping practices.  
 Prerequisites: None. Corequisites: FAC/HVA101LL or permission of Instructor.

PROPOSED: (Change in: Description, Competencies, Outline.)

HVA101	Refrigeration Components and Applications I	LEC	3.0	3.0
X FAC101				

Major components of refrigeration systems. Properties of refrigerants and piping practices. Principles of pressure, work, energy, power, matter, internal energy, heat, temperature and the ideal gas processes. Saturated and superheated vapors. Pressure-enthalpy chart and its component parts, vapor compression system, cycle analysis of a single saturated cycle.  
 Prerequisites: None. Corequisites: FAC/HVA101LL or permission of Instructor.

Type: O	College: GWCC	Spring Effective: 2009
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**ATTACHMENT: CM**  
**COURSE MODIFICATIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

ACT CREDITS PERIODS

PRESENT:

MET206	CNC Programming	L+L	3.0	6.0
X GTC206				

Manual programming using a PC to generate program media. Set-up and operation of a three axis machine. Study of management implications and advantages of computer numerical control (CNC).

Prerequisites: GTC102 or machine shop experience or permission of program director.

PROPOSED: (Change in: Periods From: 6 To: 4, Load From: 5.1 To: 3.7, Description, Prerequisites, Competencies, Outline.)

MET206	CNC Programming	L+L	3.0	4.0
X GTC206				

CNC Programming of Word Address Language (G&M Code) for computer numerical control (CNC) Machine tools. 2, 3 and 4-Axis CNC Programming for CNC controlled machines. Computer based tool path verification, CNC controller tool path verification and CNC machine tool program verification. Study of tooling, Speeds, Feeds and material removal as related to CNC machine tools and CNC controlled machines.

Prerequisites: MET231 or machine shop experience or permission of Program Director.

Type: 0      College: GWCC      Spring Effective: 2009

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PRESENT:

PED133	Advanced Strength Training	LEC	2.0	2.0
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An advanced study of the science and techniques of strength fitness. Designed for the fitness professional who is or will be training advanced strength body builders, powerlifters, and advanced fitness enthusiasts. Also addresses current topics, theories and techniques.

Prerequisites: GCC Personal trainer certificate or permission of Instructor.

PROPOSED: (Change in: Activity Type From: LEC To: L+L, Periods From: 2 To: 4, Load From: 2 To: 3.4, Title, Description, Prerequisites, Competencies, Outline.)

PED133	Olympic Style Weight Lifting	L+L	2.0	4.0
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Advanced study of the science, strategy, and techniques of Olympic Style Weightlifting. For the fitness professional who is interested in competing, or is seeking to incorporate advanced strength and conditioning modalities. Addresses current topics, theories and techniques.

Prerequisites: None.

Type: A      College: MCC      Effective: 2009 Summer I

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**ATTACHMENT: NC**  
**NEW COURSES: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

		<u>ACT</u>	<u>CREDITS</u>	<u>PERIODS</u>
BIO210	Advanced Lab Instrumentation	L+L	3.0	6.0

Provides training in the principles, operation and interpretation of data from laboratory instrumentation.

Prerequisites: BIO208, or BIO209, or permission of Instructor.

Type: O      College: GCC      Effective: 2009 Spring

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CCT269	Certified Information Systems Security Professional Exam Preparation	Lec	3.0	3.0
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Certified Information Systems Security Professional (CISSP) certification exam preparation. Common Body of Knowledge (CBK) domains emphasized. Covers various information security system components including access control, Cryptography, and business continuity and disaster recovery plans. Computer laws and ethical standards for the information security professional included.

Prerequisites: CCT268.

Type: O      College: RSC      Effective: 2009 Spring

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CTE240	Career and Technical Education: Designing, Implementing and Managing Student Organizations	Lec	2.0	2.0
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Overview of Career and Technical Student Organizations (CTSO). Examination of historical perspectives, recruitment, and retention of student members and implications of state and federal CTSO standards. Emphasis on funding organizations and fiscal responsibility, with focus on developing and conducting student activities.

Prerequisites: None.

Course Notes: CTE240 coursework intended for Arizona Department of Education Provisionally certified Career and Technical Education instructors.

Type: A      College: RSC      Effective: 2008 Fall

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CTE250	Career and Technical Education: Principles and Practices of Cooperative Education Programs	Lec	3.0	3.0
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Examines high school cooperative education programs. Emphasis on state and federal youth employment laws, work-based learning principles, work-place standards, and criteria related to career and technical education cooperative programs.

Prerequisites: None.

Course Notes: CTE250 coursework intended for Arizona Department of Education Provisionally certified Career and Technical Education instructors.

Type: A      College: RSC      Effective: 2008 Fall

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**ATTACHMENT: NC  
NEW COURSES: MARICOPA COMMUNITY COLLEGES  
MCCCD GOVERNING BOARD DATE: 11/25/08**

		<u>ACT</u>	<u>CREDITS</u>	<u>PERIODS</u>
ECN110	Economics of Sports	Lec	3.0	3.0
<p>Basic microeconomics principles applied to traditional product and factor market theory and analysis of contemporary economic issues in sports. Topics include market structures and outcomes, the market for franchises, barriers to entry, rival leagues, player productivity, and competitive and collusive behavior among participants. Prerequisites: None.</p>				
Type: A	College: MCC	Effective: 2009 Spring		
ECN204	Macroeconomics Issues	Lec	3.0	3.0
<p>Macroeconomic principles applied to current problems of economic policy, e.g., inflation, unemployment, gross national product (GDP), forecasting, ramifications for the international system. Prerequisites: None.</p>				
Type: A	College: MCC	Effective: 2009 Spring		
ECN208	Microeconomics Issues	Lec	3.0	3.0
<p>Microeconomic principles applied to current problems of market structure, consumer preference, supply and demand, and the theory of the firm. Topics will include contemporary events that are suitable for application of the economic way of thinking. Prerequisites: None.</p>				
Type: A	College: MCC	Effective: 2009 Spring		
EDU260AA	Art Methods and Curriculum Development for Elementary	Lec	4.0	4.0
<p>Overview and practical application of teaching elementary art. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education Professional Teaching Standards. Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program. Course Notes: Approved school-based practicum required.</p>				
Type: A	College: RSC	Effective: 2009 Spring		

**ATTACHMENT: NC**  
**NEW COURSES: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

		<u>ACT</u>	<u>CREDITS</u>	<u>PERIODS</u>
EDU260AB	Art Methods and Curriculum Development for Secondary	Lec	4.0	4.0

Overview and practical application of teaching secondary art. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education Professional Teaching Standards.  
 Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.  
 Course Notes: Approved school-based practicum required.

Type: A      College: RSC      Effective: 2009 Spring

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EDU261AA	Dance Methods and Curriculum Development for Elementary	Lec	4.0	4.0
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Overview and practical application of teaching elementary dance and movement. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education Professional Teaching Standards.  
 Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.  
 Course Notes: Approved school-based practicum required.

Type: A      College: RSC      Effective: 2009 Spring

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EDU261AB	Dance Methods and Curriculum Development for Secondary	Lec	4.0	4.0
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Overview and practical application of teaching secondary dance and movement. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education Professional Teaching Standards.  
 Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.  
 Course Notes: Approved school-based practicum required.

Type: A      College: RSC      Effective: 2009 Spring

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EDU262AA	Dramatic Arts Methods and Curriculum Development for Elementary	Lec	4.0	4.0
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Overview and practical application of teaching elementary dramatic arts. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on State Board of Education Professional Teaching Standards.  
 Prerequisites: Baccalaureate Degree and formal admission to a state approved post-baccalaureate teacher preparation program.  
 Course Notes: Approved school-based practicum required.

Type: A      College: RSC      Effective: 2009 Spring

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**ATTACHMENT: NC**  
**NEW COURSES: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

		<u>ACT</u>	<u>CREDITS</u>	<u>PERIODS</u>
EED265	Early Childhood Internship: K-3	Lab	4.0	5.0

Supervised student teacher practicum. Emphasis on the provision of instruction to learners. Covers lesson plan development, classroom procedures, classroom management, and educator professionalism. Includes learner preparation, learner engagement, and learner outcome awareness.

Prerequisites: EED100, EED200, EED212, EED215, EED220, EED222, EED270, EED275, and EED280.

Type: A      College: RSC      Effective: 2008 Fall

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EED275	Early Learning Curriculum and Instruction: Math and Science	Lec	3.0	3.0
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Overview and practical application of teaching math and science concepts to typical and atypical toddlers, preschoolers, and students Kindergarten-third grade (K-3). Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on overview and practical application of National Association for the Education of Young Children Standards, Early Learning Standards, Arizona Academic Standards (K-3), State Board of Education Professional Teaching Standards and National Council of Teachers of Mathematics Standards. Practicum required. Prerequisites: CFS/ECH176 or EED205.

Type: A      College: RSC      Effective: 2008 Fall

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EED277	Early Learning Curriculum and Instruction: Language Arts, Social Studies, Art, Music and Movement	Lec	3.0	3.0
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Overview and practical application of teaching language arts, social studies, art, music and movement to typical and atypical toddlers, preschoolers, and students K-3. Covers teaching strategies, learning environments, teaching resources, and use of technology. Emphasis on overview and practical application of National Association for the Education of Young Children Standards, Early Learning Standards, Arizona Academic Standards (K-3), and State Board of Education Professional Teaching Standards. Practicum required. Prerequisites: CFS/ECH176 or EED205.

Type: A      College: RSC      Effective: 2008 Fall

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**ATTACHMENT: NC**  
**NEW COURSES: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

		<u>ACT</u>	<u>CREDITS</u>	<u>PERIODS</u>
EEP224	Child Development: Prenatal to Age Eight	Lec	3.0	3.0

Examination of process of physical, social, emotional, cognitive, language, and literacy development of typical and atypical young children; prenatal through age eight. Consideration of public health issues and safety procedures within early childhood settings. Overview of nutritional needs and issues of physical fitness and well-being in typical and atypical young children. Includes practical application and fieldwork experience.

Prerequisites: Baccalaureate Degree from a regionally accredited institution.

Type: A      College: RSC      Effective: 2009 Spring

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EMT112PS	Public Safety Emergency Telecommunications	L+L	3.0	3.0
X AJS/FSC112PS				

In-depth coverage of established techniques and procedures for handling routine and emergency public safety telephone calls and radio (contact) communications. Nationally recognized procedures for processing 9-1-1 emergency calls, field unit safety, injury scenarios, and demonstrating positive public relations. Fundamental skills and responsibilities for fire, emergency medical, and law enforcement complaint report processing as well as federal laws regarding proper processing, retention, and dissemination of security information. Definitions of terms unique to fire suppression, emergency medical, and law enforcement situations common within the public safety sector.

Prerequisites: None.

Type: O      College: PC      Effective: 2009 Spring

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EXS230	Introduction to Research Methods in Health and Exercise Science	Lec	3.0	3.0
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Introduction to the general nature of research with specific application to accessing, reading, evaluating, and reporting research in health and exercise science. Introduce students to select, data-based literature in order to engender an appreciation for and ability to critically evaluate health/exercise science research.

Prerequisites: (ENGL101 or ENGL107) and MAT082 or permission of Instructor.

Type: A      College: MCC      Effective: 2009 Spring

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**ATTACHMENT: NC**  
**NEW COURSES: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

		<u>ACT</u>	<u>CREDITS</u>	<u>PERIODS</u>
FSC112PS	Public Safety Emergency Telecommunications	L+L	3.0	3.0
X	AJS/EMT112PS			

In-depth coverage of established techniques and procedures for handling routine and emergency public safety telephone calls and radio (contact) communications. Nationally recognized procedures for processing 9-1-1 emergency calls, field unit safety, injury scenarios, and demonstrating positive public relations. Fundamental skills and responsibilities for fire, emergency medical, and law enforcement complaint report processing as well as federal laws regarding proper processing, retention, and dissemination of security information. Definitions of terms unique to fire suppression, emergency medical, and law enforcement situations common within the public safety sector.  
 Prerequisites: None.

Type: O      College: PC      Effective: 2009 Spring

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GPH240	Natural Hazards, Disasters, and Catastrophes	Lec	3.0	3.0
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Emphasis on interaction of physical and cultural geography in potentially hazardous atmospheric, oceanic, geologic, and astronomic processes. Exploration of hazard risk analysis.  
 Prerequisites: ENGL101.

Type: A      College: MCC      Effective: 2009 Spring

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JRN225	Photojournalism	L+L	3.0	3.0
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Reporting the news as a photojournalist, with emphasis on the development and creation of news photographs. Experience in shooting, editing and transmitting digital photos using Photoshop, InDesign and QuarkXpress software.  
 Prerequisites: None.

Type: A      College: MCC      Effective: 2009 Spring

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REL291	Religion and Sexuality	Lec	3.0	3.0
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Exploration of the perspectives of various religious traditions on human sexuality. Includes consideration of all aspects of sexual practice as well as its incorporation into religious discourse and practice and its impact on social norms and structures.  
 Prerequisites: Student must be 18 years or older and permission of Instructor or Department or Division Chair.

Type: A      College: MCC      Effective: 2009 Spring

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**ATTACHMENT: NC  
 NEW COURSES: MARICOPA COMMUNITY COLLEGES  
 MCCC CD GOVERNING BOARD DATE: 11/25/08**

		<u>ACT</u>	<u>CREDITS</u>	<u>PERIODS</u>
TEC232	Costume Construction	L+L	3.0	5.0

Costume construction techniques applied to period reproduction, vintage, fantasy and anime; stage and dance costumes. Includes alteration of commercial patterns, drafting of original patterns, and fitting techniques.  
 Prerequisites: TEC111 and (TEC224, or TEC225, or TEC226, or permission of Instructor).  
 Course Notes: TEC232 may be repeated for a total of twelve (12) credit hours with permission of Instructor.

Type: O      College: PC      Effective: 2009 Fall

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TEC233	Computer-Assisted Pattern Making	L+L	3.0	5.0
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Pattern making using the computer and various software programs. Includes measuring, block patterns, pattern development, production patterns, modifications for size and fit, and markers.  
 Prerequisites: TEC225 or permission of Instructor.  
 Course Notes: TEC233 may be repeated for a total of twelve (12) credit hours with permission of Instructor.

Type: O      College: PC      Effective: 2009 Fall

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UCS162	Advanced Metering Technician	LEC	3.0	3.0
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Mathematical and meter knowledge for advanced metering technicians. Includes equations, geometric shapes, coordinates, and complex numbers. Covers meter testing, function, and operation of various types of meters  
 Prerequisites: Permission of Department or Division.

Type: O      College: RSC      Effective: 2008 Fall

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ATTACHMENT: NOP  
NEW OCUPATIONAL PROGRAMS: MARICOPA COMMUNITY COLLEGES  
MCCCD GOVERNING BOARD DATE: 11/25/08

Proposal Development Type:**NOP**  
Award Type:**CCL**  
Effective First Year Term:**2009 Spring**  
Overall G.P.A.:**2.0**

Program Title:**Public Works Leadership**  
Initiating College:**EMCC**  
Program Availability:**College Specific**  
Total Credits:**7-9**

Major Code:**5657**  
Initiator:**Frederick Maihofer**

CIPS Code: **44.04.01**  
Instructional Council:**Drafting(24)**

Description: **The Certificate of Completion (CCL) in Public Works Leadership provides professional development for public works employees. The student develops supervision techniques including the functions of planning, organizing, staffing, motivating and controlling, as well as day-to-day strategic operations of public works management.**

Program Notes:  
**+indicates course has prerequisites and/or corequisites**  
**Students must earn a grade of "C" or better for all courses within the program.**

Admission Criteria:**None**

Program Prerequisites:**None**

Required Courses: **Credits: 7-9**

<b>BLT110</b>	<b>Techniques of Public Works Supervision</b>	<b>3</b>
<b>+ BLT210</b>	<b>Advanced Topics in Public Works Management</b>	<b>3</b>
<b>+ BLT298AA</b>	<b>Special Projects (1) OR</b>	
<b>+ BLT298AB</b>	<b>Special Projects (2) OR</b>	
<b>+ BLT298AC</b>	<b>Special Projects (3)</b>	<b>1-3</b>

Restricted Electives:**None**

Free Electives:**None**

General Education:**None**

ATTACHMENT: OPM  
 OCCUPATIONAL PROGRAM MODIFICATIONS: MARICOPA COMMUNITY COLLEGES  
 MCCCC GOVERNING BOARD DATE: 11/25/08

Proposal Development Type: <b>OPM</b>	Program Title: <b>Biomedical Research Technology</b>
Award Type: <b>AAS</b>	Initiating College: <b>CGCC</b>
Effective First Year/Term: <b>20092</b>	Program Availability: <b>Shared by: CGCC, GWCC, SMCC</b>
Overall G.P.A.: <b>2.0</b>	Total Credits: <b>64</b>

Major Code: <b>3113</b>	CIPS Code: <b>26-1201</b>
Initiator: <b>Pushpa Ramakrishna</b>	Instructional Council Receiving Proposal: <b>Biology (19)</b>

PROPOSED: (Bold text=additions. Strike throughs = deletions)

Description: **The Associate in Applied Science (AAS) in Biomedical Research Technology program includes significant course work in both biology and chemistry. Additionally, it includes an emphasis in bio-safety, business and regulatory issues and a structured internship component that has been developed in partnership with Southeast Valley biomedical companies along with local educational institutions. The program is designed to provide students with a working knowledge of the field by focusing on both theory and application in lab settings, as well as consideration of current topics in biomedical research.**

Program Notes: + indicates course has prerequisites and/or corequisites.  
 Students must earn a grade of "C" or better for all courses required within the program.

Admission Criteria: None

Program Prerequisites: Credits: ~~14-16~~ 9-11

- |                       |  |              |
|-----------------------|--|--------------|
| + ENG071              | Fundamental of Writing (3) OR<br>Appropriate English placement test score                                  | 3            |
| + MAT090              | Developmental Algebra (5) OR   |              |
| + MAT091              | Introductory Algebra (4) OR  |              |
| + MAT092              | Introductory Algebra (3) OR  |              |
| + MAT093              | Introductory Algebra/Math Anxiety Reduction (5) OR<br>Satisfactory score on District placement exam.       | 3-5          |
| + RDG091              | College Reading Skills I (3) OR<br>Appropriate Reading placement test score OR<br>Permission of instructor | 3            |
| <del>+ BIO212AA</del> | <del>Biotechnology I</del>   | <del>5</del> |

Required Courses: Credit: 43

- |            |  |   |   |
|------------|--|---|---|
| BIO181     | General Biology  | 4 |   |
| + BIO205   | Microbiology   | 4 |   |
|            | BIO211AA Biotechnology Seminar: Biomedical Applications        |   | 1 |
| + BIO211AB | Biotechnology Seminar: Laboratory Protocol                     |   | 1 |
|            | BIO211AE Biotechnology Seminar: Business and Regulatory Issues |   | 1 |
| + BIO212AB | Biotechnology II (5) OR  |   |   |
| + BIO212BA | Cell Biotechnology (5)   | 5 |   |
|            | BIO213 Bio Safety 1  |   |   |
| + BIO215   | Biotechnology Internship                                       | 3 |   |
| + BIO247   | Applied Biosciences: Biotechnology                             |   | 4 |
| + CHM151   | General Chemistry I AND  |   | 3 |
| + CHM151LL | General Chemistry Laboratory<br>AND                            |   | 1 |
| + CHM130   | Fundamental Chemistry (3) AND                                  |   |   |
| + CHM130LL | Fundamental Chemistry Laboratory (1)<br>OR                     |   |   |

ATTACHMENT: OPM  
 OCCUPATIONAL PROGRAM MODIFICATIONS: MARICOPA COMMUNITY COLLEGES  
 MCCCC GOVERNING BOARD DATE: 11/25/08

Proposal Development Type: <b>OPM</b>	Program Title: <b>Biomedical Research Technology</b>
Award Type: <b>AAS</b>	Initiating College: <b>CGCC</b>
Effective First Year/Term: <b>20092</b>	Program Availability: <b>Shared by: CGCC, GWCC, SMCC</b>
Overall G.P.A.: <b>2.0</b>	Total Credits: <b>64</b>

Major Code: <b>3113</b>	CIPS Code: <b>26-1201</b>
Initiator: <b>Pushpa Ramakrishna</b>	Instructional Council Receiving Proposal: <b>Biology (19)</b>

**(AAS in Biomedical Research Technology continued)**

PROPOSED: (Bold text=additions. Strike throughs = deletions)

+ <b>CHM152</b>	<b>General Chemistry II (3) AND</b>	
+ <b>CHM152LL</b>	<b>General Chemistry Laboratory (1)</b>	<b>4</b>
+ <b>CHM230</b>	<b>Fundamental Organic Chemistry</b>	<b>3</b>
+ <b>CHM230LL</b>	<b>Fundamental Organic Chemistry Laboratory</b>	<b>1</b>
+ <b>CHM260</b>	<b>Fundamental Biochemistry</b>	<b>3</b>
+ <b>CHM260LL</b>	<b>Fundamental Biochemistry Laboratory</b>	<b>1</b>
<b>CSC180</b>	<b>Computing for Scientists, Engineers and Medical/Health Specialists (3) OR</b>	
+ <b>CSC283</b>	<b>Bioinformatics and Scientific Computing (3)</b>	<b>3</b>

Restricted Electives: None

Free Electives: None

General Education: Credits: 21

CORE Credits: 15

**First-Year Composition**

+ <b>ENG101</b>	<b>First-Year Composition (3) AND</b>	
+ <b>ENG102</b>	<b>First-Year Composition (3)</b>	
	<b>OR</b>	
+ <b>ENG107</b>	<b>First-Year Composition for ESL (3) AND</b>	
+ <b>ENG108</b>	<b>First-Year Composition for ESL (3)</b>	<b>6</b>

**Oral Communication**

<b>COM100</b>	<b>Introduction to Human Communication (3)</b>	
	<b>OR</b>	
+ <b>COM225</b>	<b>Public Speaking (3)</b>	
	<b>OR</b>	
+ <b>COM230</b>	<b>Small Group Communication (3)</b>	<b>3</b>

**Critical Reading**

+ <b>CRE101</b>	<b>Critical and Evaluative Reading I (3) OR Equivalent as indicated by assessment</b>	<b>3</b>
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**Mathematics**

+ <b>MAT122</b>	<b>Intermediate Algebra (3) OR Equivalent OR Higher Level Math course</b>	<b>3</b>
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ATTACHMENT: OPM  
OCCUPATIONAL PROGRAM MODIFICATIONS: MARICOPA COMMUNITY COLLEGES  
MCCCD GOVERNING BOARD DATE: 11/25/08

Proposal Development Type: **OPM**  
Award Type: **AAS**  
Effective First Year/Term: **20092**  
Overall G.P.A.: **2.0**

Program Title: **Biomedical Research Technology**  
Initiating College: **CGCC**  
Program Availability: **Shared by: CGCC, GWCC, SMCC**  
Total Credits: **64**

Major Code: **3113**  
Initiator: **Pushpa Ramakrishna**

CIPS Code: **26-1201**  
Instructional Council Receiving Proposal: **Biology (19)**

*(AAS in Biomedical Research Technology continued)*

PROPOSED: (Bold text=additions. Strike throughs = deletions)

**DISTRIBUTION Credits: 6**

**Humanities and Fine Arts**

**PHI213 Medical and Bio-Ethics (3)**

**OR**

**+ HCR210 Clinical Health Care Ethics (3)**

**3**

**Social and Behavioral Sciences**

**Any approved general education course in the Social and Behavioral Sciences area 3**

**Natural Science**

**Met by CHM courses in the required courses area.**

**ATTACHMENT: OPM**  
**OCCUPATIONAL PROGRAM MODIFICATIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

Proposal Development Type:**OPM**  
Award Type:**AAS**  
Effective First Year Term:**2009 Spring**  
Overall G.P.A.: **2.0**

Program Title:**Administration of Justice**  
Initiating College:**EMCC**  
Program Availability:**College Specific**  
Total Credits:**64**

Major Code:**3137**  
Initiator:**Eddie Zuleger**

CIPS Code: **43.01.04**  
Instructional Council Receiving Proposal: **Administration of Justice Studies (01)**

PROPOSED: (Bold text=additions. Strike throughs = deletions)

Description: The Administration of Justice program is designed to prepare men and women for careers within the criminal justice system, including, but not limited to: law enforcement, the courts, probation and parole, corrections, and the various social service agencies that support the criminal justice system. It is interdisciplinary in nature and provides the student with a broad knowledge of the conceptual occupational issues and concerns existent within the criminal justice system. The program also provides criminal justice practitioners with the opportunity for continued education and academic growth and development.

**Program Notes:**

Students must earn a grade of "C" or better for all courses within the Program.

+ indicates course has prerequisites and/or corequisites.

Students who have completed an Arizona POST certified academy may be waived from the following courses: AJS101, AJS109, AJS260, AJS270, AJS275, AJS107, and AJS205 through the "credit by evaluation" process. Students without prior experiences in the field of law enforcement should consult with the program director.

Admission Criteria: None

Program Prerequisites: None

**Required Courses: Credits: 33**

AJS101	Introduction to Criminal Justice	3
AJS109	Substantive Criminal Law	3
AJS123	Ethics and the Administration of Justice (3) OR	
PAD101	Survey of Public Administration (3)	3
AJS131	Police Management Techniques I	3
+ AJS132	Police Management Techniques II	3
AJS211	Police Planning	3
AJS225	Criminology	3
AJS249	Community Policing	3
AJS260	Procedural Criminal Law	3
AJS270	Community Relations	3
AJS275	Criminal Investigations I	3

**Restricted Electives: 6**

AJS110	Law and Legal Review I	3
AJS124	Correctional Institutions	3
AJS133	Correctional Supervision I	3
AJS200	Current Issues in Criminal Justice	3
AJS201	Rules of Evidence	3
AJS205	Criminal Justice Reporting Writing	3
AJS210	Constitutional Law	3
AJS212	Juvenile Justice Procedures	3
AJS220	Organized Crime	3
AJS230	The Police Function	3
AJS107	Patrol Procedures	3

ATTACHMENT: OPM  
OCCUPATIONAL PROGRAM MODIFICATIONS: MARICOPA COMMUNITY COLLEGES  
MCCCD GOVERNING BOARD DATE: 11/25/08

Proposal Development Type: **OPM**  
Award Type: **AAS**  
Effective First Year Term: **2009 Spring**  
Overall G.P.A.: **2.0**

Program Title: **Administration of Justice**  
Initiating College: **EMCC**  
Program Availability: **College Specific**  
Total Credits: **64**

Major Code: **3137**  
Initiator: **Eddie Zuleger**

CIPS Code: **43.01.04**  
Instructional Council Receiving Proposal: **Administration of Justice Studies (01)**

***(AAS in Administration of Justice continued)***

PROPOSED: (Bold text=additions. Strike throughs = deletions)

Free Electives: None

General Education: Credits: 25

CORE: Credits: 15

First-Year Composition

Any approved general education course in the First Year Composition Area 6

Oral Communication

Any approved general education course in the Oral Communication Area 3

Critical Reading

Any approved general education course in the Critical Reading Area 3

Mathematics

Any approved general education course in the Mathematics Area 3

DISTRIBUTION: Credits: 10

Humanities and Fine Arts

Any approved general education course in the Humanities and Fine Arts Area 3

Social and Behavioral Sciences

Any approved general education course from the Social and Behavioral Sciences Area 3

Natural Sciences

Any approved general education course from the Natural Sciences Area 4

ATTACHMENT: OPM  
OCCUPATIONAL PROGRAM MODIFICATIONS: MARICOPA COMMUNITY COLLEGES  
MCCCD GOVERNING BOARD DATE: 11/25/08

Proposal Development Type: **OPM**  
Award Type: **AAS**  
Effective First Year Term: **2009 Spring**  
Overall G.P.A.: **2.0**

Program Title: **Administration of Justice**  
Initiating College: **EMCC**  
Program Availability: **College Specific**  
Total Credits: **64**

Major Code: **3137**  
Initiator: **Eddie Zuleger**

CIPS Code: **43.01.04**  
Instructional Council Receiving Proposal: **Administration of Justice Studies (01)**

***(AAS in Administration of Justice continued)***

PROPOSED: (Bold text=additions. Strike throughs = deletions)

Program Addition: **CCL/5655: Evidence Technology**  
Total Credits: **25**  
Overall G.P.A.: **2.00**  
CIPS Code: **43.01.04**  
Program Availability: **College Specific**

Description: **The Certificate of Completion (CCL) in Evidence Technology prepares students for careers as police or civilian crime scene technicians. The program provides comprehensive instruction in crime scene photography, fingerprint classification and processing, crime scene investigation and search techniques, collection, packaging, and processing of evidence, chemical processing of evidence, and related skills such as, proper courtroom demeanor.**

Program Notes:

+ indicates course has prerequisite and/or corequisites

Students must earn a grade of "C" or better for all courses within the Program.

Admission Criteria: **None**

Program Prerequisites: **None**

Required Courses: **Credits: 25**

<b>AJS123</b>	<b>Ethics and the Administration of Justice</b>	<b>3</b>
<b>AJS201</b>	<b>Rules of Evidence</b>	<b>3</b>
<b>AJS275</b>	<b>Criminal Investigation I</b>	<b>3</b>
<b>AJS213</b>	<b>Evidence Technology/Fingerprints</b>	<b>3</b>
<b>AJS215</b>	<b>Criminalistics: Physical Evidence</b>	<b>3</b>
<b>AJS216</b>	<b>Criminalistics: Biological Evidence</b>	<b>3</b>
<b>AJS241</b>	<b>Police Photography</b>	<b>3</b>
<b>+ AJS242</b>	<b>Crime Scene Processing</b>	<b>3</b>
<b>AJS290BN</b>	<b>Courtroom Testimony Seminar</b>	<b>1</b>

Restricted Electives: **None**

Free Electives: **None**

General Education: **None**

ATTACHMENT: OPM  
 OCCUPATIONAL PROGRAM MODIFICATIONS: MARICOPA COMMUNITY COLLEGES  
 MCCCDC GOVERNING BOARD DATE: 11/25/08

Proposal Development Type: <b>OPM</b>	Program Title: <b>Biotechnology and Molecular Biosciences</b>
Award Type: <b>AAS</b>	Initiating College: <b>GCC</b>
Effective First Year Term: <b>2009 Spring</b>	Program Availability: <b>College Specific</b>
Overall G.P.A.: <b>2.0</b>	Total Credits: <b>63-65</b>

Major Code: <b>3034</b>	CIPS Code: <b>26.12.01</b>
Initiator: <b>Karen Conzelman</b>	Instructional Council Receiving Proposal: <b>Biology (19)</b>

PROPOSED: (Bold text=additions. Strike throughs = deletions)

**Proposed Total Program Credits To: 61-63**

Description: ~~This~~ **The Associate in Applied Science (AAS) in Biotechnology and Molecular Biosciences** program will specifically train technicians to work in research and development, biomanufacturing, and the drug discovery and testing field of Biotechnology. The exposure to an academic environment that simulates the contemporary biotechnological workplace, inclusive of analytical, critical thinking and problem-solving skills, will form a strong technical foundation sought by employers. The successful completion of the program will also provide the educational background for those wishing to pursue a career in the pharmaceutical industry, clinical laboratory medicine, forensics or environmental testing laboratories.

Program Notes:

+ indicates course has prerequisite and/or corequisites

Students must earn a grade of "C" or better for each course listed in the Required Courses category.

Admission Criteria: None

Program Prerequisites: ~~None~~ **Credits: 2**

**Students may request permission of department to waive program prerequisites.**

<b>BIO173</b>	<b>Basic Instrumentation and Lab Math</b>	<b>1</b>
<b>BIO175</b>	<b>Research Methods in Biology</b>	<b>1</b>

Required Courses: Credits: ~~42~~ **40**

<b>BIO156</b>	<b>Introductory Biology for Allied Health (4) OR</b>	
BIO181	General Biology (Majors) I (4)	4
+ BIO205	Microbiology	4
+ <b>BIO208</b>	<b>Nucleic Acids Methods</b>	<b>3</b>
+ <b>BIO209</b>	<b>Biomolecular Separations</b>	<b>3</b>
+ <b>BIO210</b>	<b>Advanced Lab Instrumentation</b>	<b>3</b>

**Select 3 credit hours of Biology Seminar (BIO211AA and BIO211AB may each be repeated to apply toward Seminar credit total):**

BIO211AA	Biotechnology Seminar: Biomedical Applications (1) OR	4
+ BIO211AB	Biotechnology Seminar: Laboratory Protocol (1) OR	4
<del>+ BIO211AC</del>	<del>Biotechnology Seminar: Current Topics in Agriculture</del>	<del>1</del>
+ BIO211AE	Biotechnology Seminar: Business and Regulatory Issues (1)	4 <b>3</b>
<del>+ BIO212AA</del>	<del>Biotechnology I</del>	<del>5</del>
<del>+ BIO212AB</del>	<del>Biotechnology II (5) OR</del>	
<del>+ BIO212BA</del>	<del>Cell Biotechnology (5)</del>	<del>5</del>
+ BIO215	Biotechnology Internship (3)	6

**Two (2) semesters of internship are required.**

ATTACHMENT: OPM  
 OCCUPATIONAL PROGRAM MODIFICATIONS: MARICOPA COMMUNITY COLLEGES  
 MCCCCD GOVERNING BOARD DATE: 11/25/08

Proposal Development Type: <b>OPM</b>	Program Title: <b>Biotechnology and Molecular Biosciences</b>
Award Type: <b>AAS</b>	Initiating College: <b>GCC</b>
Effective First Year Term: <b>2009 Spring</b>	Program Availability: <b>College Specific</b>
Overall G.P.A.: <b>2.0</b>	Total Credits: <b>63-65</b>

Major Code: <b>3034</b>	CIPS Code: <b>26.12.01</b>
Initiator: <b>Karen Conzelman</b>	Instructional Council Receiving Proposal: <b>Biology (19)</b>

***(AAS in Biotechnology and Molecular Biosciences continued)***

PROPOSED: (Bold text=additions. Strike throughs = deletions)

**Proposed Total Program Credits To: 61-63**

+ CHM130	Fundamental Chemistry (3) AND	
+ CHM130LL	Fundamental Chemistry Laboratory (1) OR	
+ CHM151	General Chemistry I (3) AND	
+ CHM151LL	General Chemistry I Laboratory (1)	4
+ CHM230	Fundamental Organic Chemistry (3) AND	
+ CHM230LL	Fundamental Organic Chemistry Laboratory (1)	4
+ CHM260	Biochemistry	3
	CSC180	Computing for Scientists, Engineers and Medical/Health Specialists (3) OR
+ CSC283	Bioinformatics and Scientific Computing (3)	3

Restricted Electives: None

Free Electives: None

General Education: Credits: 21-23

**CORE: Credits: 15-17**

First-Year Composition

+ ENG101	First-Year Composition (3) OR	
+ <b>ENG107</b>	<b>First-Year Composition for ESL (3) AND</b>	
+ ENG111	Technical Writing (3) OR	
+ ENG102	First-Year Composition (3) OR	
+ <b>ENG108</b>	<b>First-Year Composition for ESL</b>	6

Oral Communication

	COM100	Introduction to Human Communication (3) OR	
+ COM225	Public Speaking (3) OR		
+ COM230	Small Group Communication (3)		3

Critical Reading

+ CRE101	Critical and Evaluative Reading I (3) OR exemption by testing	0-3
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Mathematics

+ MAT120	Intermediate Algebra (5) OR	
+ <b>MAT121</b>	<b>Intermediate Algebra (4) OR</b>	
+ MAT122	Intermediate Algebra (3) OR Equivalent OR higher level Mathematics course	3-5

ATTACHMENT: OPM  
OCCUPATIONAL PROGRAM MODIFICATIONS: MARICOPA COMMUNITY COLLEGES  
MCCCD GOVERNING BOARD DATE: 11/25/08

Proposal Development Type: <b>OPM</b>	Program Title: <b>Biotechnology and Molecular Biosciences</b>
Award Type: <b>AAS</b>	Initiating College: <b>GCC</b>
Effective First Year Term: <b>2009 Spring</b>	Program Availability: <b>College Specific</b>
Overall G.P.A.: <b>2.0</b>	Total Credits: <b>63-65</b>

Major Code: <b>3034</b>	CIPS Code: <b>26.12.01</b>
Initiator: <b>Karen Conzelman</b>	Instructional Council Receiving Proposal: <b>Biology (19)</b>

***(AAS in Biotechnology and Molecular Biosciences continued)***

PROPOSED: (Bold text=additions. Strike throughs = deletions)

**Proposed Total Program Credits To: 61-63**

**DISTRIBUTION: Credits: 6**

Humanities and Fine Arts		
PHI213	Medical and Bio-Ethics	3
Social and Behavioral Sciences		
Any approved general education course from the Social & Behavioral Sciences area		3
Natural Sciences		
Met by BIO181, CHM130 OR CHM151, and CHM230 in Required Courses area.		0



**ATTACHMENT: OPM**  
**OCCUPATIONAL PROGRAM MODIFICATIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

Proposal Development Type: **OPM**  
Award Type: CCL  
Effective First Year Term: **2009 Fall**  
Overall G.P.A.: 2.00

Program Title: Fashion Illustration, Level I  
Initiating College: PC  
Program Availability: College Specific  
Total Credits: 13

Major Code: 5941  
Initiator: Sylvia Phillips  
Sciences (34)

CIPS Code: 50.04.07  
Instructional Council Receiving Proposal: Family and Consumer

PROPOSED: (Bold text=additions. Strike throughs = deletions)

**Proposed Program Title To: Fashion Illustration**

Description: ~~The Certificates of Completion in Fashion Illustration allow students to attain skills at three distinct levels. Each level prepares the student for more advanced instruction in this field. Level I includes instruction in computer graphic art, life drawing, fashion illustration, apparel construction, and textiles.~~ **The Certificate of Completion (CCL) in Fashion Illustration includes an advanced study of proportion and techniques used in drawing fashion figures and flats. A variety of media is used to illustrate various fabrics, textures, and patterns. A professional fashion illustration portfolio is completed.**

Program Notes:

+ indicates course has prerequisites and/or corequisites.

Students must earn a grade of "C" or better in all courses within the program.

Admission Criteria: None

Program Prerequisites: None

Required Courses: **Credits: 13 22**

<del>ART100</del>	<del>Introduction to Computer Graphic Art</del>	<del>1</del>
ART116	Life Drawing I	3
<del>TEC111</del>	<del>Clothing Construction</del>	<del>3</del>
<b>TEC125</b>	<b>Fashion Design</b>	<b>3</b>
TEC134	Fashion Illustration I	3
<b>+ TEC135</b>	<b>Fashion Illustration II</b>	<b>3</b>
<b>+ TEC136</b>	<b>Fashion Illustration III</b>	<b>3</b>
<b>+ TEC221</b>	<b>Computer-Assisted Fashion Design</b>	<b>3</b>
TEC222	Textiles	3
<b>+ TEC236</b>	<b>Portfolio Development</b>	<b>1</b>

Restricted Electives: None

Free Electives: None

General Education: None

**ATTACHMENT: OPM**  
**OCCUPATIONAL PROGRAM MODIFICATIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

Proposal Development Type: **OPM**  
Award Type: CCL  
Effective First Year Term: **2009 Fall**  
Overall G.P.A.: 2.00

Program Title: Pattern Design, Level II  
Initiating College: PC  
Program Availability: College Specific  
Total Credits: 7

Major Code: 5949  
Initiator: Sylvia Phillips  
Sciences (34)

CIPS Code: 19.09.01  
Instructional Council Receiving Proposal: Family and Consumer

PROPOSED: (Bold text=additions. Strike throughs = deletions)

**Proposed Total Program Credits To: 15**

Description: The Certificates of Completion (CCL) in Pattern Design develop the skills necessary to create patterns at two distinct levels. At Level II, students apply advanced flat pattern techniques. Draping for fashion design, **pattern drafting, computer-assisted pattern making**, and completion of original designs are emphasized.

Program Notes:

+ indicates course has prerequisites and/or corequisites.

Students must earn a grade of "C" or better for all courses within the program.

Admission Criteria:

Program Prerequisites: Credits: 12

Certificate of Completion in Pattern Design, Level I (5947) 12

Required Courses: Credits: ~~7~~ 15

+ <b>TEC224</b>	<b>Pattern Drafting</b>	<b>2</b>
+ TEC226	Draping for Fashion Design	3
+ <b>TEC228</b>	<b>Advanced Draping for Fashion Design</b>	<b>3</b>
+ TEC230	Pattern Design II	3
+ <b>TEC233</b>	<b>Computer-Assisted Pattern Making</b>	<b>3</b>
+ TEC270	Design Studio	1

Certificates may contain additional course requirements.

Restricted Electives: None

Free Electives: None

General Education: None

ATTACHMENT: OPD  
OCCUPATIONAL PROGRAM DELETIONS: MARICOPA COMMUNITY COLLEGES  
MCCCD GOVERNING BOARD DATE: 11/25/08

Proposal Development Type: **OPD**  
Award Type: CCL  
Effective First Year Term: 2001 Fall  
Effective Last Year Term: **2009 Spring**  
Overall G.P.A.: 2.00

Program Title: Computer Hardware and Desktop Support  
Initiating College: PC  
Program Availability: Shared by: CG, EM, GW, MC, PC, SC  
Total Credits: 16-20

Major Code: 5026  
Faculty Initiator: Diane Stark

CIPS Code: 47.01.04  
Instructional Council: Computer Information Systems (12)

**Rationale: This certificate has had one completer at PC (Phoenix College). In addition, the BPC170 course in the Required Courses area is no longer offered at PC and the CIS102 course in the Required Courses area has been cancelled due to low enrollment whenever it has been offered at PC. Students seeking completion will be referred to one of the participating sister colleges for completion.**

**ATTACHMENT: OPD**  
**OCCUPATIONAL PROGRAM DELETIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

Proposal Development Type: **OPD**  
Award Type: CCL  
Effective First Year Term: **1999 Fall**  
Effective Last Year Term: **2009 Spring**  
Overall G.P.A.: 2.00

Program Title: Fashion Illustration, Level II  
Initiating College: PC  
Program Availability: College Specific  
Total Credits: 9

Major Code: 5943  
Faculty Initiator: Sylvia Phillips

CIPS Code: 50.04.07  
Instructional Council: Family and Consumer Sciences (34)

Rationale: This program was initiated in Fall 1999 with the intent to provide students with beginning, intermediate and advanced skills in the area of Fashion Illustration. Today's workforce needs no longer warrant these three levels. The program title and requirements are being modified into one CCL/5941 in Fashion Illustration.

**ATTACHMENT: OPD**  
**OCCUPATIONAL PROGRAM DELETIONS: MARICOPA COMMUNITY COLLEGES**  
**MCCCD GOVERNING BOARD DATE: 11/25/08**

Proposal Development Type: **OPD**  
Award Type: CCL  
Effective First Year Term: **1999 Fall**  
Effective Last Year Term: **2009 Spring**  
Overall G.P.A.: 2.00

Program Title: Fashion Illustration, Level III  
Initiating College: PC  
Program Availability: College Specific  
Total Credits: 5-6

Major Code: 5945  
Faculty Initiator: Sylvia Phillips

CIPS Code: 50.04.07  
Instructional Council: Family and Consumer Sciences (34)

Rationale: This program was initiated in Fall 1999 with the intent to provide students with beginning, intermediate and advanced skills in the area of Fashion Illustration. Today's workforce needs no longer warrant these three levels. The program title and requirements are being modified into one CCL/5941 in Fashion Illustration.

ATTACHMENT: NAP  
NEW ACADEMIC PROGRAMS: MARICOPA COMMUNITY COLLEGES  
MCCCD GOVERNING BOARD DATE: 11/25/08

Proposal Development Type: <b>NAP</b>	Program Title: <b>Sustainability and Ecological Literacy</b>
Award Type: <b>AC</b>	Initiating College: <b>CGCC</b>
Effective First Year/Term: <b>2009 Spring</b>	Program Availability: <b>College Specific</b>
Overall G.P.A.: <b>2.0</b>	Total Credits: <b>16</b>

Major Code: <b>6229</b>	CIPS Code: <b>03.01.04</b>
Faculty Initiator: <b>Darien Ripple</b>	Instructional Council: <b>Philosophy (80)</b>

Description: **The interdisciplinary Academic Certificate (AC) in Sustainability and Ecological Literacy enhances students' understanding of sustainable living practices associated with economics, equity and the environment. Through a combination of coursework and experiential learning, students engage in critical thinking, inquiry, and discourse, skills necessary for becoming socially responsible citizens who are ecologically and environmentally aware. The certificate is designed for, although not limited to, students seeking an Associate in Arts Degree and planning transfer to four-year colleges and universities.**

**Program Notes: + indicates course has prerequisites and/or corequisites. Students must earn a grade of "C" or better in all courses within the program.**

**Admission Criteria: None**

**Program Prerequisites: Credit: 3**

+ ENG101	First Year Composition (3) OR	
+ ENG107	First Year Composition for ESL (3)	3

**Required Courses: Credit: 7**

+ PHI216	Environmental Ethics	3
BIO105	Environmental Biology (4) OR	
GLG110	Geological Disasters and the Environment (3) AND	
GLG111	Geological Disasters and the Environment Lab (1)	4

**Humanities, Social Science and Wellness: Credit: 9**

**Students will choose 2 different courses from the following list:**

+ ECN263	The Economics of Natural Resources, Population and the Environment (3)	
ENH206	Nature and Environmental Literature (3)	
ENH260	Literature of the Southwest (3)	
HUM201	Humanities: Universal Themes (3)	
REC150AB	Outdoor Adventure Skills (3)	6

**Students will choose 1 course from the following list:**

HIS110	World History to 1500 (3)	
HIS111	World History 1500 to the Present (3)	
HUM250	Ideas And Values in The Humanities (3)	
PHI104	World Philosophy (3)	
POS120	World Politics (3)	
PSY132	Psychology and Culture (3)	
SOC101	Introduction to Sociology (3)	3