Quinsigamond Community College Memorandum

To: The College Community

From: Pat Toney, Vice President for Academic Affairs

Subj: Academic Matters from December 11, 2012

Date: January 24, 2013

Final approval has been given to the academic matters acted upon at the December 11, 2012 meeting of the Learning Council. All actions are effective Fall 2013 unless otherwise noted.

I. BUSINESS & TECHNOLOGY DIVISION

Business Administration

- ACC 101 Financial Accounting I
 - o Revise the course description as follows: Under "areas of study" in the course description, change "financial statement analysis" to "financial statement preparation."
- ACC 102 Financial Accounting II
 - o Revise the course description from "Students use their knowledge of financial statements..." to "Students use their knowledge of preparing financial statements..."
- ACC 211 Federal Taxation
 - o Revise the course description to remove preparation of "partnership, and corporation" (tax returns).
- ACC 231 Computerized Accounting
 - o Revise the course description to include description of software used.
- BSS 104 Business Office Procedures
 - Revise course description to include appointment scheduling records management including medical, and compliances.
 - Note friendly amendment: proposed wording "medical records management" changed to "records management including medical."
- Business Administration/Career A.S. Business Administration Option
 - o Change one Social Science Elective in Semester 2 to an Elective.
 - O Note Comment: proposed change to BUS 250 was sent back to Division.
- MGT 216 Entrepreneurship
 - o Revise course name and description.
- Entrepreneurship Certificate
 - o Revise name to "Entrepreneurship and Small Business Management."

Electronics and Related Programs

- Create a new course, ELT 130 Embedded Microcontrollers
- ELM 251 Instrumentation and Control Technology
 - o Remove prerequisite ELT 121 Digital Computer Circuits.

- o Add prerequisite ELT 130 Embedded Microcontrollers.
- ELT 299 Cooperative Experience and Seminar
 - o Remove prerequisite of "ELT 122 Microprocessors or CSC 233 Computer Hardware & Support."
 - o Add prerequisite ELT 130 Embedded Microcontrollers.
- ELM 299 Cooperative Experience and Seminar
 - o Remove prerequisite, "Approval of Program Coordinator."
 - o Add prerequisites ELT 104 Electronics II and ELT 130 Embedded Microcontrollers.
- Electronics Technology Certificate
 - Remove the requirement "ELT 105 CAD for Technicians or CIS 111 Microcomputer Applications or CIS 115 Introduction to Computer Applications in Telecommunications."
 - Replace "ELT 122 Microprocessors or CSC 233 Computer Hardware and Support" with ELT 130 Embedded Microcontrollers.
 - O Note friendly amendment: Remove "Retire ELT 105 CAD for Technicians."
- Electronics Technology A.S. Electronics Technician Option
 - Remove the requirement "ELT 105 CAD for Technicians or CIS 111 Introduction to Microcomputer Applications or CIS 115 Introduction to Computer Applications in Telecommunications."
 - o Replace "ELT 122 Microprocessors or CSC 233 Computer Hardware & Support" with ELT 130 Embedded Microcontrollers.
 - o Note friendly amendment: Remove "Retire ELT 105 CAD for Technicians."
- Electronics Technology A.S. Biomedical Instrumentation Option
 - o Remove "ELT 105 CAD for Technicians or CIS 111 Introduction to Microcomputer Applications or CIS 115 Introduction to Computer Applications in Telecommunications."
 - Replace "ELT 122 Microprocessors or CSC 233 Computer Hardware & Support" with ELT 130 Embedded Microcontrollers.
 - o Move CSC 141 Windows Client Operating Systems from Semester 2 to Semester 1.
 - o Add CSC 234 Networking Technologies
 - o Replace Program Elective with ELM 251 Instrumentation and Control Technology.
 - o Note friendly amendment: Remove "Retire ELT 105 CAD for Technicians."
- Electromechanical Technology A.S. Career Option
 - o Replace "ELT 122 Microprocessors or CSC 233 Computer Hardware & Support" with ELT 130 Embedded Microcontrollers.
- Electromechanical Technology A.S. Transfer Option
 - Replace "ELT 122 Microprocessors or CSC 233 Computer Hardware & Support" with ELT 130 Embedded Microcontrollers.
 - o Note friendly amendment: Remove "Retire ELT 105 CAD for Technicians."

Heating, Ventilation & Air Conditioning

- Create a new course, HVC 106 Comfort Heating Systems.
- Create a new course, HVC 107 Comfort Cooling Systems.
- Heating, Ventilation, & Air Conditioning Certificate
 - o Replace HVC 103 Air Conditioning Systems (Semester 1) with HVC 106 Comfort Heating Systems (Semester 1) and HVC 107 Comfort Cooling Systems (Semester 2)
 - o Remove Elective from Semester 1.
 - o Add Program note: "Students are strongly encouraged to take HVC 101, 102, and 106 together; and HVC 107, 104, and 105 together."

II. HEALTHCARE DIVISION

Surgical Technology

- SUR 115 Asepsis
 - o Remove co-requisites of SUR 101 and SUR 111.
 - o Add prerequisite "Enrollment limited to Surgical Technology majors only."
 - o Move from Fall semester to Summer semester.
- SUR 101 Perioperative Issues
 - o Reduce credits from 5 credits to 3 credits.
 - o Change course description and content.
 - o Change prerequisites from "BIO 100 or BIO 140" to "BIO 100 or BIO 140, SUR 115."
 - o Add co-requisite SUR 111.
- SUR 111 Operating Room Techniques
 - O Change credits from 4 credits to 5 credits.
 - O Change course description and content.
 - o Add prerequisites "SUR 115, ALH 102."
 - o Change corequisites from "SUR 101, SUR 115" to "SUR 101."
- SUR 121 Surgical Procedures I: General, Obstetrics/Gynecology and Orthopedic
 - O Change course name to Surgical Procedures I.
 - O Change content and course description.
 - O Change credits from 3 credits to 8 credits.
 - o Change prerequisites from "BIO 140" to "BIO 100 or BIO 140, SUR 115."
 - o Add corequisite SUR 111.
- SUR 199 Clinical Externship I
 - o Change course name to Clinical I.
 - o Change prerequisites from "BIO 100 or BIO 140" to "SUR 101, SUR 111, SUR 121, SUR 230."
 - o Change from Fall semester to Spring semester.
- SUR 221 Surgical Procedures II: Opthalmology, Ear/Nose/Throat, Dental/Oral/Maxillofacial, Plastic/Reconstructive & Genitourinary
 - O Change course name to Surgical Procedures II.
 - O Change content and course description.
 - o Change corequisite SUR 121 to prerequisite SUR 121.
 - o Move from Semester 2 to Semester 3.
- SUR 225 Advanced Surgical Procedures: Thoracic, Neurosurgery, Peripheral & Cardiovascular
 - o Remove from curriculum
- SUR 290 Clinical Externship II
 - o Change course name to Clinical II
 - o Remove corequisite SUR 221.
 - o Add prerequisite SUR 199.
 - o Change course description.
- SUR 299 Advanced Clinical Externship
 - O Change course name to Clinical III.
 - o Change prerequisite from SUR 221 to SUR 290.
 - o Remove corequisite SUR 225.

- Surgical Technology Certificate
 - o ALH 102 added (1st semester) to curriculum
 - o SUR 115 remove corequisite, moved from 2nd semester to 1st semester
 - o SUR 101 pre/corequisite change, credit change decrease from 5 to 3, content and course description change
 - O SUR 111 pre/corequisite change, credit change increase from 4 to 5, content and course description change
 - O SUR 121 pre/corequisite change, credit increase from 6 to 8, content and course description change, combine SUR 121 and SUR 211 and name change
 - o SUR 199 pre/corequisite change and name change
 - O SUR 221 pre/corequisite change, move from 2nd to 3rd semester, content and course description change and name change
 - o SUR 225 remove from curriculum
 - o SUR 290 pre/corequisite change, course description change and name change
 - o SUR 299 pre/corequisite change and name change

Nursing

- NUR 100 Paramedic to ADN Bridge
 - o Change course description.
 - Change prerequisite from "Paramedic Certification in the state of Massachusetts. Has met admission requirements for the Associate Degree in Nurse Education Program which includes completion of BIO 111, BIO 112, PSY 101, ENG 101" to "Paramedic Certification in the state of Massachusetts, BIO 111, BIO 112, PSY 101, ENG 101."
 - o Change course description.
- NUR 101 Advanced Placement Nursing I
 - o Change course description.
 - o Change prerequisites from "BIO 112, NUR 100 or admission to LPN to ADN program, PSY 101" to "BIO 111, BIO 112, NUR 100, ENG 101, PSY 101."

HealthCare Certificates

- Create Healthcare Certificate Emergency Medical Technician.
- Create Healthcare Certificate Nursing Assistant.
- Create Healthcare Certificate Pharmacy Technician.
- Create Healthcare Certificate Phlebotomy/EKG Technician.

III. HUMAN SERVICES & SCIENCES DIVISION

- BIO 105 Principles of Ecology
 - o Change course description.
 - Note friendly amendment: proposed change in prerequisites was tabled.
- Create a new course, HUS 244 Human Services Practicum II, effective Spring 2014.

1.	Course Number and Name: ACC 101 Financial Accounting I	
2.	Originator: Carol Murphy	Date: September 18, 2012
3.	Division Dean: Kathy Rentsch	Date: October 15, 2012
4.	Brief Description of the Proposal:	www. WGi-l statement
	Under "areas of study" in the course description, change "financial preparation."	statement analysis" to "financial statement
5.	Effective Date: Fall 2013	
6.	Recommended by the Business & Technology Division Date: 1 Comment:	
7.	AA Leadership Team: Not Recommended:	Date:
	Recommended: Not Recommended:	
8.		Date: 11/20/12
	Recommended: Not Recommended:	,
9.	7	Date: 12/11/12
	Recommended: Not Recommended:	
1	0. VP/Academic Affairs: Approved:	Dates HI /12
	Comments:	

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE COURSE REVISION PROPOSAL

The state of the s		
Type of Revision:		
Elective Type other (explain)		
Course Discipline or Department: Accounting Division: Business and Technology		
Current Course Number: ACC 101		
Current Course Name: Financial Accounting I		
Current Course Description (as it appears in the college catalog):		
1 (11		
ACC 101 Financial Accounting I - 3 credits		
This course focuses on the relationships between business activities and events and the impact they have		
on financial statements from a prepare/user-of-accounting perspective. Students study financial		
transactions for both service and merchandising businesses and relate the transactions to a company's		
assets, liabilities, owners' equity, revenues, expenses, and cash flow. Areas of study include the basic		
assets, habitates, owners equity, revenues, expenses, and cash now. Areas of study include the basic		
accounting model, the process of the accounting cycle, accounting principles and terminology, financial		
statement analysis, and computerized accounting applications.		
Prerequisites: ENG 100 or appropriate placement score, MAT 090. F/S/SU		
Proposed Description (include all proposed changes):		
ACC 101 Financial Accounting I - 3 credits		
This course focuses on the relationships between business activities and events and the impact they have		
on financial statements from a prepare/user-of-accounting perspective. Students study financial		
transactions for both service and merchandising businesses and relate the transactions to a company's		
assets, liabilities, owners' equity, revenues, expenses, and cash flow. Areas of study include the basic		
accounting model, the process of the accounting cycle, accounting principles and terminology, financial		
statement preparation, and computerized accounting applications.		
Prerequisites: ENG 100 or appropriate placement score, MAT 090. F/S/SU		
Rationale for the change:		
This change reflects actual course content. Students have always prepared financial statements in ACC		
101 and analyzed them in ACC 102.		
Provide a description of any change in course content.		
and the state of t		
There is no change in course content. Students have always prepared financial statements in ACC 101 and		
analyzed them in ACC 102.		
analyzed them in Nee 102.		
Does the course revision affect another department? Please on for the little of the course		
Does the course revision affect another department? Please confer with the coordinator of the affected		
department.		
Affected department(s) N/A		
If this change affects a program grid, please submit a current and proposed program grid for each program		
affected Does not affect grid		
Please submit a syllabus to your dean with all of the revisions included.		

1.	Course Number and Name: ACC 102 Financial Accounting II		
2.	Originator: Carol Murphy	Date: September 18, 2012	
3.	Division Dean: Kathy Rentsch	Date: October 15, 2012	
4.	Brief Description of the Proposal:		
	Change course description from "Students use their knowledg knowledge of preparing financial statements"	e of financial statements" to "Students use their	
5.	Effective Date: Fall 2013		
	Recommended by the Business & Technology Division Domment:	,	
7.	AA Leadership Team: Not Recommended:		
	Recommended: Not Recommended:		
8.	VP/Academic Affairs:	Date:	
	Comments:		
9.	Learning Council:	Date: 12/11/12	
	Recommended: Not Recommended: Comments:		
10.	VP/Academic Affairs:	Date:/>////	
	Approved: Not Approved:	<u> </u>	

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE COURSE REVISION PROPOSAL

- An		
Type of Revision:		
Dicetive 13pc outer (explain)		
Course Discipline or Department: Accounting Division: Business and Technology		
Current Course Number: ACC 102		
Current Course Name: Financial Accounting II		
Current Course Description (as it appears in the college catalog):		
ACC 102 Financial Accounting II - 3 credits		
This course builds on the material learned in ACC101. Students use their knowledge of financial		
statements to analyze and communicate a variety of financial information including accounting for		
accruals, inventory, equity and debt issues, and cash flow statement analysis. Students demonstrate the		
knowledge they gain by working with Web resources to present a financial analysis of a public		
corporation.		
Prerequisite: ACC 101. F/S/SU		
Proposed Description (include all proposed changes):		
an proposed changes).		
ACC 102 Financial Accounting II - 3 credits		
This course builds on the material learned in ACC101. Students use their knowledge of preparing		
financial statements to analyze and communicate a variety of financial information including accounting		
for accruals, inventory, equity and debt issues, and cash flow statement analysis. Students demonstrate the		
knowledge they gain by working with Web resources to present a financial analysis of a public corporation.		
Prerequisite: ACC 101. F/S/SU		
4		
Rationale for the change:		
This change reflects natural course content. Students have always 1.5		
This change reflects actual course content. Students have always prepared financial statements in ACC 101 and analyzed them in ACC 102.		
101 and analyzed ment in ACC 102.		
Provide a description of any change in course content.		
There is no shange in source soutest Challette I		
There is no change in course content. Students have always prepared financial statements in ACC 101 and analyzed them in ACC 102.		
analyzed them in Acc 102.		
Does the course revision affect another department? Please confer with the coordinator of the affected		
department.		
Affected department(s)N/A		
If this change affects a program grid, please submit a current and proposed program grid for each program		
affected		
Does not affect grid		
Please submit a syllabus to your dean with all of the revisions included.		

1.	Course Number and Name : ACC 211 Fed	eral Taxation	
2.	Originator: Carol Murphy		Date: September 18, 2012
3.	Division Dean: Kathy Rentsch		Date: October 15, 2012
4.	Brief Description of the Proposal:		
	Change course description to remove prepara	tion of "partnership, an	nd corporation (tax returns)."
5.	Effective Date: Fall 2013		
6.	Recommended by the Business & Technolo Comment:	gy Division Date: 1	1.15.12
7.	AA Leadership Team: Recommended: Comments:	Jupun	
8.	VP/Academic Affairs: Recommended: Not Recomments:	mmended:	Date:
9.		ommended:	,
10.	VP/Academic Affairs: Approved: Not App Comments:	roved:	Date: Date:

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE COURSE REVISION PROPOSAL

Type of Revision:		
_\Description PrerequisiteCorequisite Number Name#credits		
Elective Type other (explain)		
Course Discipline or Department: Accounting Division: Business and Technology		
Current Course Number: ACC 211		
Current Course Name: Federal Taxation		
Current Course Description (as it appears in the college catalog):		
current course Description (as it appears in the contege catalog).		
ACC 211 Federal Taxation - 3 credits		
ACC 211 reactal faxation - 3 creams		
This course examines basic federal income and employment taxes. Students learn how to prepare individual, partnership , and corporation tax returns including the appropriate schedules, manually and		
on computers. Topics covered include analysis of tax problems, identification of tax issues, income		
inclusion and exclusion, deductible business and non-business expenses, gains and losses, tax credits,		
special taxes, and current tax laws and procedures.		
Prerequisite: ENG 100 or appropriate placement score. F		
2 1010 qualitative 2110 100 on appropriate practice and appropriate and appropriate practice and appropriate practice and appropriate practice and appropriate practice and appropriate and appropriate practice and appropriate and		
Proposed Description (include all proposed changes):		
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ACC 211 Federal Taxation - 3 credits		
This course examines basic federal income and employment taxes. Students learn how to prepare		
individual tax returns including the appropriate schedules, manually and on computers. Topics covered		
include analysis of tax problems, identification of tax issues, income inclusion and exclusion, deductible		
business and non-business expenses, gains and losses, tax credits, special taxes, and current tax laws and		
procedures.		
Prerequisite: ENG 100 or appropriate placement score. F		
Rationale for the change:		
The tax code is becoming more and more complex. Students need to be very proficient in tax preparation		
for individuals to effectively participate in the VITA program. Corporate and other business taxes are		
very complicated and should be covered in a separate course.		
Provide a description of any change in course content.		
Corporate and partnership tax preparation will be eliminated in order to focus on tax preparation for		
individuals.		
Does the course revision affect another department? Please confer with the coordinator of the affected		
department.		
Affected department(s)N/A		
Affected department(s)		
If this shapes affects a program guid places submit a superior described in		
If this change affects a program grid, please submit a current and proposed program grid for each program		
affected Does not affect grid Please submit a syllabus to your dean with all of the revisions included.		
Please supmit a syllabus to your dean with all of the revisions included.		

1.	Course Number and Name: AC	CC 231 Computerized Accoun	ting
2.	Originator: Jane Joyce	Date	:: 10/22/12
3.	Division Dean: Kathy Rentsch	Date	:: 10.23.12
4.	Brief Description of the Proposal	: change course description to	include description of software used
5.	Effective Date: Fall 2013		,
6.	Recommended by the Business & Comment:	A im Bron	
7.	AA Leadership Team:		Date:
	Recommended: Comments:	Not Recommended:	
8.	VP/Academic Affairs:	long	Date: _//28/17
	Recommended:	Nor Recommended:	<u></u>
9.	Learning Council:	Janisa	Date: 13/1/12
	Recommended:Comments:	Not Recommended:	
10.	VP/Academic Affairs:	Mong	Date:
	Approved:	Not Approved:	

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE COURSE REVISION PROPOSAL

Type of Revision: X_ Description Prerequisite Corequisite Number Name #credits
Elective Type other (explain)
Course Discipline or Department: Accounting Division: Business and Technology Current Course Number: ACC 231
Current Course Name: Computerized Accounting
Current Course Description (as it appears in the college catalog):
ACC 231 Computerized Accounting 3 cr
This course focuses on understanding accounting through a mastery of general ledger software applications. Students set up and maintain a computerized accounting records system by recording the transactions necessary to operate a service and merchandising business. This course covers the areas of cash, accounts receivable, accounts payable, and payroll transactions. Students learn how to create these transactions on a computer and how to understand and interpret the resulting financial reports. Prerequisite: ACC 101. S
Proposed Description (include all proposed changes):
ACC 231 Computerized Accounting 3 cr
This course focuses on understanding accounting through a mastery of general ledger software applications, using industry standard software. Students set up and maintain a computerized accounting records system by recording the transactions necessary to operate a service and merchandising business. This course covers the areas of cash, accounts receivable, accounts payable, and payroll transactions. Students learn how to create these transactions on a computer and how to understand and interpret the resulting financial reports Prerequisite: ACC 101. S
Rationale for the change:
This change identifies to students the type of software used, and that it is what is currently used by business industry.
Provide a description of any change in course content. None
Does the course revision affect another department? Please confer with the coordinator of the affected department. No Affected department(s)
If this change affects a program grid, please submit a current and proposed program grid for each program affected. n/a
Please submit a syllabus to your dean with all of the revisions included.

1.	Course Number and Name: BSS 104 Business Office Procedures		
2.	Originator: Maryann Kania	Date: October 11, 2012	
3.	Division Dean: Kathy Rentsch	Date: October 15, 2012	
4.	Brief Description of the Proposal:		
	Change course description to include appointment scheduling, med to the course description.	lical records management, and compliances	
5.	Effective Date: Fall 2013		
6.	Recommended by the Business & Technology Division Date: Comment:	11.15.12	
7.	AA Leadership Team: Not Recommended: Not Recommended:		
8.	VP/Academic Affairs: Recommended: Comments:	Date: 4/25/2	
9.	Recommended: Not Recommended:		
10	Comments: Friendly anneadout - change in to incord managened incle VP/Academic Affairs: Not Approved: Not Approved:	Date: 12/11/12	
	Comments:		

COURSE REVISION PROPOSAL

Type of Revision:		
Elective Type other (explain)		
Course Discipline or Department: Business Career Division: Business and Technology		
Current Course Number: BSS 104		
Current Course Name: Business Office Procedures		
Current Course Description (as it appears in the college catalog):		
- -		
BSS 104 Business Office Procedures - 3 credits		
This course prepares students for office support tasks required in a business. Topics covered include the		
virtual worker, current employment structure, human relations, time and organization management.		
records management, communication, technology used for tasks, decision-making, creative thinking, and		
lifelong learning skills.		
Prerequisites: BSS 101, CIS 111, ENG 100. F/S/SU		
Proposed Description (include all proposed changes):		
BSS 104 Business Office Procedures - 3 credits		
This course prepares students for office support tasks required in all types of businesses. Topics covered		
include the virtual worker, current employment structure, appointment scheduling, human relations.		
time and organization management, medical records management, compliances , communication.		
technology used for tasks, decision-making, creative thinking, and lifelong learning skills.		
Prerequisites: BSS 101, CIS 111, ENG 100. F/S/SU		
Rationale for the change:		
Better reflects the changing office environment and the career paths of our students.		
Provide a description of any change in course content.		
Medical records will be added to general records management and compliances such as FERPA and		
HIPPA will be covered.		
Does the course revision affect another department? Please confer with the coordinator of the affected		
department.		
Affected department(s)N/A		
If this change affects a program grid, please submit a current and proposed program grid for each program		
affected		
does not affect grid		
Please submit a syllabus to your dean with all of the revisions included.		

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

1.	Program Name: Business Administration/ Career – Associate in Option	Science – Business Administration
2.	Originator: Jean McLean	Date: November 1, 2012
3.	Division Dean: Kathy Rentsch	Date: November 15, 2012
4.	Brief Description of the Proposal:	sent back to
	Replace BUS 250 Business Administration Capstone with a Bus Social Science Electives with a free or guided Elective.	iness Elective. Replace one of two
5.	Effective Date: Fall 2013	
6.	Recommended by the Business & Technology Division Date: 1	1.15.12
	Comments:	
		Date: 11/28 vision. Change one elective approved at AACT. Date: 11/28/12
	Recommended: Not Recommended: Comments: VP/Academic Affairs: Poly and performance of the pe	Date: 13/11/12 medient tecords moragere medient tecords moragere Date: 12/11/12
	Approved: Not Approved: Comments:	

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

Program:		
Business Administration/Career – A.S. – Business Administration Option		
Division:		
Business and Technology		
Degree type:		
AS		
Provide a detailed list of the proposed changes to the program.		
1. Semester 4. Remove BUS 250 Business Administration Capstone		
2. Semester 4: Replace BUS 250 with a Business Elective		
3. Semester 2: Remove Social Science Electives		
4. Semester 2: Replace Social Science Elective with an Elective		
Attachments:		
X Current program grid		
X Proposed program grid		
1 1 Toposed program give		
Submit separate proposals for any new courses or revised courses in the program.		
no new courses		
Provide a rationale for the proposed changes.		
These changes would allow for the following certificates to flow seamlessly into the Business		
Administration/Career degree:		
Accounting Finance Certificate		
Insurance Certificate		
Entrepreneurship Certificate		
In the current program, students have 6 unused credits when they complete the certificate and		
move on to the degree.		
Do any of the proposed changes affect the program goals, the program student learning outcomes,		
or the course mapping of the General Education Learning Outcomes? If so please provide the		
revisions.		
No, students who are not working toward a certificate can still use the Elective to take a Social		
Science if they choose to. BUS 250 will-still-be a Business Elective and student can take it as		
such if they choose to.		
Do any of the proposed changes affect another department? Examples include the deletion or		
addition of program courses that are offered by other departments. Please confer with the		
coordinators of affected departments.		
Department(s) Affected: Social Science		
Do any of the proposed changes affect articulation agreements? Consult with the Transfer		
Coordinator. No		
Coordinator. No		
For an associate degree program, are there any changes in the number of general education credits		
that could affect Mass Transfer? No		
If yes please provide a rationale.		
my so premo pre manama.		
Will any of the following be required:		
Additional staffno Additional space _no Additional equipmentno		
Provide a rationale for any needs indicated and include approximate cost of equipment.		

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ISINESS ADMINISTRATION CAREER - /	
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Course Title	Course #	Offered	Plan to	Grade	Credits	Course # Offered Plan to Grade Credits Prerequisites
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Semester 1						
Introduction to Microcomputer Applications or	CIS 111	F/S/SU				
	CIS 112	F/S			က	CIS 111
Principles of Macroeconomics	ECO 215	F/S/SU			က	ENG 100 or approp place score
English Composition & Literature I	ENG 101	F/S/SU		3	က	ENG 100
Introduction to Business	MGT 101	F/S/SU			က	ENG 091 with a grade of "C" or higher and passing the ENG 096 departmental writing final examination essay or appropriate
Math Elective*	MAT	F/S/SU			က	MAT 099
Semester 2				1.3) (4)	
Financial Accounting I	ACC 101	F/S/SU			က	ENG 100 or approp place score, MAT 090
Business Law I <u>or</u>	BSL 101	F/S/SU			,	
E-Business Law & Ethics	BSL 103	F/S			က	Coreq-CIS 111
English Composition & Literature II	ENG 102	F/S/SU			က	ENG 101
Speech Communication Skills	SPH 101	F/S/SU			က	Pre/Coreq ENG 101
Social Science Elective	1				က	
Semester 3						
Financial Accounting II	ACC 102	F/S/SU			က	ACC 101
Integrated Communications for Business	BUS 201	F/S/SU			က	CIS 111, ENG 101
Business or Concentration Elective**	ŀ				က	
Humanities Elective	ì				က	
Social Science Elective	i				3	3
Semester 4						
Business Administration Capstone	BUS 250	F/S			က	42 credits completed in the degree program
Business or Concentration Elective**	:				က	
Elective	į				3	
Humanities Elective	į				က	note in the second
Lab Science or Science Elective	ŀ				3-4	
Total credits required		,		L	60-61	

identified on page 189 of the College catalog or select courses from the various

concentrations found on page 67.

**Students may select any Business elective a

*MAT 100 or higher

 Students should note that many required courses have ENG and/or MAT prerequisites.

Program Notes:

508.854.4410

Jean McLean

Program Coordinator:

program.

imclean@qcc.mass.edu

• This program can be completed at the Southbridge location.

The Next Step: Enter the workforce or transfer to a four-year

 High School Diploma or GED (refer to page 9)

Admission Requirements:

Business Administration Career

The Program:

Associate in Science

The Degree:

Students are encouraged, but not required, to identify a Concentration any Business elective will fulfill the degree requirement.

There are no specific Technical Performanc Standards defined for this program.

Technical Performance Standards:

de: BB) - PROPOSED	
Cod	
(Program (•
1 Science	
ssociate in	
V CAREER - A	The second secon
S ADMINISTRATION	and an experience of the second secon
BUSINESS /	Selection of the select

F/S/SU
F/S/SU 3
F/S/SU 33 F/S/SU 34 F/S/SU 35 F/SU 35 F/S/SU 35 F/SU 35 F/S/SU 55 F/S/SU 55 F/S/SU 55 F/SU 55 F/S
F/S/SU 3 F/S 3 F/S 3 F/S 3 F/S 3
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	. Course Number and Name: MG	T 216 Entrepreneurship
. 2	. Originator: Jean McLean	Date: 10/24/12
3	. Division Dean: Kathy Rentsch	Date: 11.15.12
4	Brief Description of the Proposal content re: managing and growing	: Change course name and description to reflect change in certificate. Add a small business.
5	Effective Date: Fall 2013	
6	Recommended by the Business & Comment:	Technology Division Date: 11.15.12
7.	AA Leadership Team:	un Burun Date: 11/28/12
	Recommended: Comments:	Not Recommended:
8.	VP/Academic Affairs:	Money Date: 11/28/2
	Recommended:Comments:	Not Recommended:
9.	Learning Council:	Date: 13/11/12
	Recommended:Comments:	Not Recommended:
10	. VP/Academic Affairs:	Date: 12/11/2
	Approved:Comments:	Not Approved

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE COURSE REVISION PROPOSAL

Type of Revision:					
✓_ Description Prerequisite Corequisite Number _✓_ Name #credits					
Elective Type other (explain)					
Course Discipline or Department: Management Division: Business and Technology					
Current Course Number: MGT 216					
Current Course Name: Entrepreneurship					
Current Course Description (as it appears in the college catalog):					
MGT 216 Entrepreneurship 3 credits This course examines entrepreneurship — the ability to organize, manage, own, and assume the risk of a business venture. Students gain an understanding of the role of the entrepreneur, learn how to develop a business plan, and become familiar with business and management functions as they relate to the operations of a business. The areas of finance, marketing, law, tax, insurance, and credit are examined. In addition, students learn the competitive, economic, and personnel considerations necessary to organizing and owning a business. Prerequisite: ENG 100 or appropriate placement score. F/S/SU					
Proposed Description (include all proposed changes):					
MGT 216 Entrepreneurship and Small Business Management 3 credits					
This course examines the leadership and management skills needed to succeed in starting, managing and					
growing a small business. Students learn about the challenges of being an entrepreneur/small business					
owner, examining the advantages and disadvantages, the risks and rewards. Students develop an					
understanding of business ethics, strategic planning, small business marketing concepts, stakeholder					
relationship management, basic accounting principles, and administrative processes. Topics studied					
include the various types of small business ownership, from start ups and franchises, to buying an existing					
business or taking over a family owned operation. Other topics include how to research and write a					
business plan and identifying sources of financing. Prerequisite: ENG 100 or appropriate placement score. F/S/SU					
Trefequisite. ENG 100 or appropriate placement score. F/S/SU					
Rationale for the change: This course name and description more accurately reflect the course content					
and the addition of "Small Business Management" to the name of the Certificate.					
to the name of the Continuate.					
Provide a description of any change in course content. The course content will not change. Virtually all					
entrepreneurship textbooks assume that the entrepreneur will continue to operate and manage the business					
and have content on doing so. The authors also assume that many entrepreneurs will buy existing					
businesses and discuss the merits and pitfalls of various forms of small business ownership.					
the ments and preams of various forms of small business ownership.					
Does the course revision affect another department? Please confer with the coordinator of the affected					
department.					
Affected department(s)N/A					
If this change affects a program grid, please submit a current and proposed program grid for each program					
affected					
Please submit a syllabus to your dean with all of the revisions included					

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

1.	Program Name:	Entrepreneurship Certificate	
2.	Originator:	Jean McLean	Date: Oct 22, 2012
3.	Division Dean:	Kathy Rentsch	Date: 10.25.12
4.	Brief Description Small Business Ma	of the Proposal: Change certificate name from "Inagement."	Entrepreneurship" to "Entrepreneurship and
5.	Effective Date: Fal	1 2013	
6.	Recommended by	the Business & Technology Division Date:11	1.15.12
	Comments:		
7.	AA Leadership Te Recommended: Comments:	am: A un Brown Not Recommended:	Date:
8.	VP/Academic Affa Recommended: Comments:		Date:
9.	Learning Council: Recommended: Comments:		Date: 12 1/12
	VP/Academic Affai Approved: Comments:	Not Approved:	Date:

FOR NEW PROGRAM/CERTIFICATE OR PROGRAM/CERTIFICATE CLOSURE ONLY President: ______ Date: _____ Approved: _____ Not Approved: _____ Approved: _____ Not Approved: _____

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

Program:
Entrepreneurship Certificate
Division:
Business and Technology
Degree type:
Certificate
Provide a detailed list of the proposed changes to the program.
Change the program name from "Entrepreneurship" to "Entrepreneurship and Small
Business Management."
Attachments:
X Current program grid
X Proposed program grid
A Troposed program grid
Submit separate proposals for any new courses or revised courses in the program.
See MGT 216 Entrepreneurship course revision form
FF
Provide a rationale for the proposed changes.
"Entrepreneurship" is not eligible for Federal financial aid according to the DOE.
By including "Small Business Management" it should qualify.
Do any of the proposed changes affect the program goals, the program student learning outcomes,
or the course mapping of the General Education Learning Outcomes? If so please provide the
revisions.
MGT 216, Entrepreneurship will also change to Entrepreneurship and Small Business
Management. The course description will reflect the inclusion of managing and growing a
small business.
Do any of the proposed changes affect another department? Examples include the deletion or
addition of program courses that are offered by other departments. Please confer with the
coordinators of affected departments. No
Department(s) Affected:
Do any of the proposed changes affect articulation agreements? Consult with the Transfer
Coordinator. No
For an associate degree program, are there any changes in the number of general education credits
that could affect MassTransfer? No
mat could arrect tytass transfer: 140
f yes please provide a rationale.
i you preuse provide a rationale.
Will any of the following be required:
Additional staffno_ Additional spaceno_ Additional equipment no
Provide a rationale for any needs indicated and include approximate cost of equipment.
and morade approximate cost of equipment.

ENTREPRENEURSHIP CERTIFICATE (Program Code: EN) – CURRENT

College Tifle						
	Course #	Offered	Dian to Take			n series de la contraction del
The second of th	The State State State of the State S		ו מון ונו ומוב	ciane	Credits	Prerequisites
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rui chienen suib	MCT 24E	CL				
Introduction to Microcomputer Applications	012 DM	7/3			~	ENIO 400
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inalicial Accounting I	ACC 101					
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Personal Financial Planning	i				>	
Billing and deliber	FIN 111	F/S/SU			c	application score
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Small Business Finance	THEOLOGY					
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l otal credits required					ກ	ENG 100 or appropriate score
The grant of the control of the cont					27	

ENTREPRENEURSHIP and SMALL BUSINESS MANAGEMENT CERTIFICATE (Program Code: EN) - PROPOSED

	Prerequisites	odewooden waa had produkteen maa kaa maa kaa maa kaa maa maa maa maa	ENC 400 or energy and a second	Live for or appropriace score	ENG 100 or appropriate score MAT 600	anning place score	MAT 000 or appropriate	ENG 400 or applied place score	Live too of appropriace score	APP 40.4	ACC 101	FNG 100 or approx 2000 00000	ENG 100 or appropriate score	apploin place score
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Offered	50510		F/S/SU	F/S/SU	E/S/SI I	000	F/S/SU	F/S/SU		S	S	F/S/SU	F/S/SU	
Course #	THE PROPERTY AND ADDRESS OF THE PROPERTY OF TH	The state of the s	MGT 216	CIS 111	ACC 101	· ·	FIN 111	ENG 101		FIN 216	ACC 231	ECO 216	MRK 201	
Course Title	Samorfor	Enfronzancia municipalita del Composito del	Introduction to Misses and Small Business Management	min ordenion to Microcomputer Applications	Financial Accounting I	Personal Financial Diamning	Finalish Composition 9 1 to a to 1	1.	Seminary of the seminary of th	Ome de la	Microaconomics*	Principles of Marketina	Total prodite received	יסומו סובתווס ובלתוו בת

Program Notes:

• Students should note that many required courses have ENG and/or MAT prerequisites.

Program Notes;
• Students should note that many required courses have ENG and/or MAT prerequisites.

NEW COURSE PROPOSAL

1.	Course Number a	nd Name: ELT	T 130 E	mbedded Micro	control	lers
2.	Originator:	Jim Heffernan	1		Date:	30 October, 2012
3.	Division Dean:	Kathy Rentsch	h		Date:	30 October, 2012
4.	Brief Description	of the Proposal	:			
	Create a new course	e, ELT 130 Emb	edded N	Aicrocontrollers.		
5.	Effective Date: Fa	all 2013				
6.	Recommended by Comments:	the Business &	Techno	ology Division		Date: 11.15.12
7.	AA Leadership Te Recommended: Comments:		Not Re	Bennecommended:		Date:///28/11-
8.	VP/Academic Affa Recommended: Comments:		Not Re	commended:		Date: 4/2-8/12
9.	Learning Council: Recommended: Comments:		Not Re	ccommended:		Date: (2/11/12
10.	VP/Academic Affai Approved:		Not Ap	proved:		Date: 2/11/12

NEW COURSE PROPOSAL

Course Discipline/Division: Business and Technology Division – Electronics/Electromechanical Technology Department						
	Electromechanical Technology Department					
Course Number:						
ELT 130	·					
Course Name:						
Embedded Microcontrollers						
Prerequisites and/or corequisites (confer with affects						
Prerequisites: ELT 103 Electronics I, ELT 121 D	ligital Computer Circuits					
CIP code (check with IRaP Office):						
15.0303 and 15.0403						
Effective Term/year:						
Spring 2013						
Give a rationale for the new course. Be sure to indicate	ate whether this course replaces another course.					
ELT 130 Embedded Microcontrollers replaces ELT 122 Microprocessors. Microcontrollers are prevalent in electronic and electromechanical systems, and are much more relevant than microprocessors to the kinds of systems that graduates will work with. The primary goal of this course is to make sure students get systems-level experience in the first year of the program.						
A recent and extensive survey of job postings for Electronics and Electromechanical Technicians shows a strong need for graduates who can build, test, and troubleshoot systems. This is a system-level, project-based course that aims to give students this kind of experience in the first year of their program. Microcontrollers are prevalent in electronic and electromechanical systems and provide a good platform on which students can build functioning systems. Students also gain experience programming microcontrollers and creating graphic programs with LabView, both of which have broad applications throughout the field of electronics. This course also sets the stage for further exploration of microcontrollers, LabView programming, and electronic systems in the second year of the Electronics and Electromechanical Technology programs.						
Is the course content similar to other courses now off If yes, attach a statement for the coordinator of the de						
Please indicate if this course will serve as any of the following types of electives Elective Discipline specific (name the discipline) — Electronics/Electromechanical Program specific (name the program) — Electronics Technology, Electromechanical Technology Multiple perspective (confer with the Liberal Arts Coordinator)						
Is this course required for a program? If yes, submit	a separate Program Revision Proposal or New					
Program Proposal.						
Yes, this course will be required for the Electronic	es Technology Program, the Electromechanical					
Technology Program, and the Certificate in Electi						
Even a stand annual limit out to mark 10	E-marked and the state of the s					
Expected enrollment per term: 16	Expected enrollment per year: 32					

Will any of the following be required:					
Additional staff	Additional space	Additional equipmentX_			
Provide a rationale for any needs indicated above and include approximate cost of equipment. Since this is a project-based course, the department will provide materials for the projects. Actual materials will vary depending on the types of projects, but the estimated cost would be \$2000 per section.					
Library print and non-print resources in support of this course: \$500					

Course Materials

Course number:			
ELT 130			
Course name:			
Embedded Microcontrolle	ers		
Credits: 4			,,,
Lecture Hours: 3	Lab hours: 3	Clinic Hours:	**********
General course description	and prerequisites (as it will appe	ear in the catalog):	

urse description and prerequisites (as it will appear in the catalog):

This is a project-oriented course where students apply the basic concepts they learn in ELT 103 and ELT 121 to microcontroller-based systems. Students gain valuable experience reading schematics and wiring diagrams, interfacing real-world devices to microcontroller inputs and outputs, and programming the microcontroller to perform various functions. Students also gain experience using LabView graphical programming for data acquisition and control. Students also practice PC board design, soldering, and troubleshooting techniques.

All required texts and paperbacks, including information on publisher and edition used (provide a suggested text):

There are no required texts for this course.

Instructional Objectives (list):

Lectures are designed to support students in the completion of projects. The primary focus will be introducing students to the tools and technologies they will need, including:

- 1. Reading and creating basic schematics and wiring diagrams.
- 2. Interfacing devices to microcontroller inputs and outputs.
- 3. Introduction to microcontroller programming with examples.
- 4. Introduction to graphical programming with LabView.
- 5. A/D conversion and data acquisition.
- 6. Printed circuit board layout.
- 7. Soldering techniques.
- 8. Overview of sensors with examples.
- 9. Overview and demonstration of Servo positioning motors.

Teaching procedures: (provide suggested teaching methodology):

- 1. Whiteboard instruction with PowerPoint presentations
- 2. Demonstrations of Arduino interfacing and programming
- 3. Demonstrations of LabView programming examples
- 4. Supplementary handouts as needed
- 5. Project assignments

Course topics and/or assignments and/or required and/or supplemental reading (provide a list of suggested course topics):

Weeks 1-2

- Reading basic schematics and wiring diagrams
- Interfacing simple devices to microcontroller inputs and outputs
- Interfacing the Arduino microcontroller to an LCD display
- Lab Orientation Safety

Project 01: Programming basic digital logic functions on the Arduino

Weeks 3-4

- Interfacing to microcontroller analog inputs
- A/D Conversion
 - Sampling
 - Resolution
- Arduino programming examples
- Drawing schematics

Project 02: Microcontroller programming with analog inputs

Weeks 5-7

- Introduction to graphical programming with LabView
- Connecting to the Arduino microcontroller through LabView
- LabView programming examples
- Drawing schematics and wiring diagrams

Project 03: Graphical programming with LabView

Weeks 8-9

- Interfacing a microcontroller to a servo positioning motor
- Arduino programming examples
- LabView programming examples
- PC Board layout
- Introduce ideas/suggestions for final projects

Project 04: Controlling a servo positioning motor

Weeks 10-11

- Interfacing various sensors to a microcontroller
- Arduino programming examples
- LabView programming examples
- Students submit final project proposals

Project 05: Data acquisition and control

Weeks 12-14

- Arduino programming examples
- LabView programming examples
- Problem sessions as needed

Project 06: Final project

Week 15

Student project presentations

Other information:

Suggested basis for student grading and criteria for evaluating student performance

Evaluation:

Projects: 80% Attendance: 20%

Numeric grades will be converted into letter grades using the table in the QCC catalog.

Project grades will be based on the following criteria:

System function – does the system function as required?

Construction – wiring organization, mechanical layout, PC board layout (if applicable) Programming – Concise, logical programming with clear and concise comments inserted

Schematics and other technical diagrams - Correctness, readability

Written description and summary - Grammar and punctuation, clarity of ideas, concise

Suggested attendance policy

Attendance is expected and required at each scheduled class session. Attendance in class is vital to successful completion of the course. It also reflects the development of good work habits. When employers call to ask about a student's performance, the first question they ask is usually regarding attendance in class.

Suggested plagiarism statement

Cheating and copying will not be tolerated. Students are expected to learn from each other and from other sources but must do their own work. Copied work will result in a grade of zero.

Suggested assessment methodologies

See criteria for evaluating student performance above.

Please submit a syllabus for this new course to your dean.

Done.

List the Student Learning Outcomes for this course in the table below. Recommendations for writing SLOs can be found in the *General Information for Academic Affairs Proposals* document that is available on the QCC's Intranet under Frequently Used Forms (Academic Governance Forms).

COU	RSE STUDENT LEARNING OUTCOMES FOR ELT 130 Embedded Microcontrollers		
Upon	completion of the course, students will be able to:		
1	Build basic microcontroller-based systems according to electronic schematics and wiring diagrams.		
2	Test microcontroller-based systems using basic electronic test equipment such as multi-meters and		
	oscilloscopes.		
3	Program a microcontroller to perform basic functions.		
4	Write basic data acquisition and control programs using LabView.		
5	Create schematics and wiring diagrams using a schematic capture program.		
6	Demonstrate good soldering technique in the assembly of PC boards.		
7	Document a system including description of the system, schematics, wiring diagrams, physical diagrams,		
	description of the process used to create the system, description of troubleshooting and results of tests.		

How does the course support general education? Using the chart below, indicate the degree or level of connection between the course and outcome as indicated here.

I – Introductory/Background – There is an indirect relationship between the course and the outcome. The outcome itself is not the focus of the course but at least one element of the course serves as a building block to the achievement of the final outcome. For example, course elements may provide the knowledge, skills or attitudes necessary for the ultimate achievement of the outcome.

M – Intermediate/Transitional - There is more of a direct relationship between the course and the outcome than Introductory. A mixture of course elements supports the final achievement of the outcome, but the final integration of knowledge, skills and attitudes necessary for its achievement is not accomplished in this course. For example, knowledge, skills and/or attitudes (at least 2 of the 3) required for achievement of the outcome may be the focus of the course or course element, but the integration of all three is not.

E – Emphasized – There is a direct relationship between the course and the outcome. At least one element of the course focuses specifically on the complex integration of knowledge, skills and attitudes necessary to perform the outcome.

CONNECTION OF ELT 130 Embedded Microcontrollers TO GENERAL EDUCATION	I,M,E
STUDENT LEARNING OUTCOMES	
Communication Skills: Students will write and speak effectively.	M
Information Literacy: Students will locate, evaluate and apply reliable and appropriate information.	Е
Quantitative Reasoning: Students will apply the concepts and methods of mathematics to solve	Е
problems.	
Scientific Reasoning: Students will relate scientific methods of inquiry to the acquisition of	Е
knowledge.	
Technical Literacy: Students will utilize computer an emerging technologies effectively.	Е
Aesthetics: Students will appreciate the variety of human experiences as expressed through the arts.	N/A
Multiple Perspectives: Students will demonstrate knowledge and appreciation of diverse cultures.	N/A
Ethics: Students will develop an awareness of personal obligations and responsibilities in one's	I
community of influence.	
Impact of Technology: Students will reflect on the impact of scientific and technological advances	Ι
on the individual, society and the environment.	
Civic Literacy: Students will demonstrate awareness of the responsibilities of local, national and	N/A
international citizenship.	

1.	Course Number a	nd Name: El	LM 251 Instrumentation	and Control	Technology
2.	Originator:	Jim Hefferna	n	Date: 31 Oc	tober, 2012
3.	Division Dean:	Kathy Rentso	ch	Date: 31 Oc	tober, 2012
4.	Brief Description	of the Proposa	I:		
	Remove prerequisi Microcontrollers (r		ital Computer Circuits. Ac	ld prerequisite	ELT 130 Embedded
5.	Effective Date: Fa	all 2013			
6.	Recommended by Comment:	the Business &	& Technology Division	Date: 11.15.1	2
7.	AA Leadership Te	eam:	in Duran	Date	: 11/28/12
	Recommended: Comments:		Not Recommended:	····	,
8.	VP/Academic Affa	nirs:	Doney.	Date	: 1/28/12
	Recommended: Comments:		Not Recommended:		,
9.	Learning Council:		Ja Win	Date	12/11/12
	Recommended:Comments:		Not Recommended:	-	
10.	VP/Academic Affa	irs:	Ivney	Date:	12/11/2
	Approved:		Not Approved:		

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE COURSE REVISION PROPOSAL

Type of Revision:	No. 1 No. 1 No. 1 Hour Man		
Description _X_ Prerequisite Corequisite Number Name #credits			
Elective Type other (explain)			
Course Discipline or Department:	Division:		
Electromechanical Technology	Business and Technology		
Current Course Number: ELT 251			
Current Course Name: Instrumentation and Contr			
Current Course Description (as it appears in the colle	ge catalog):		
This course covers the theory and application of mechanical processes and their control circuits. All major aspects of a control system are studied, including controllers, drivers, actuators, sensors and feedback control. Topics include AC and DC motors, brushless motors, stepper motors, sensors, transducers, servomechanisms, and pneumatics. Students gain skills designing, characterizing, and troubleshooting small-scale control systems. Prerequisites: ELT 104, ELT 121. F			
Proposed Description (include all proposed changes):			
This course covers the theory and application of mechanical processes and their control circuits. All major aspects of a control system are studied, including controllers, drivers, actuators, sensors and feedback control. Topics include AC and DC motors, brushless motors, stepper motors, sensors, transducers, servomechanisms, and pneumatics. Students gain skills designing, characterizing, and troubleshooting small-scale control systems. Prerequisites: ELT 104, ELT 130. F/S			
Rationale for the change:			
ELT 130 is a new project-based course that introduces students to the tools and technology of electronic and electromechanical systems, including schematic drawing, microcontroller interfacing and programming, and graphical programming with LabView. Students will be expected to use these technologies in ELM 251, which is a more in-depth study of electronic and electromechanical systems. There is ample evidence that technology students benefit greatly from working with systems first and then proceeding to more detailed study of the system components, so ELT 130 must be a prerequisite to ELM 251.			
Provide a description of any change in course content	. No change in course content.		
Does the course revision affect another department? F	Please confer with the coordinator of the affected		
department. Affected department(s)none			
If this change affects a program grid, please submit a	current and proposed program and for each program		
affected			
Please submit a syllabus to your dean with all of the r	evisions included		

COURSE REVISION PROPOSAL

1.	Course Number a	nd Name: EL	11 299 Cooperative Ex	perience	and Seminar
2.	Originator:	Jim Hefferna	n	Date:	31 October, 2012
3.	Division Dean:	Kathy Rentsc	h	Date:	31 October, 2012
4.	Brief Description	of the Proposal	:		
			Microprocessors or CSC ficrocontrollers (new co		mputer Hardware & Support." Add
5.	Effective Date: Fa	ıll 2013			
6.	Recommended by Comment:	the Business &	z Technology Division	Date: 1	1.15.12
7.	AA Leadership Te	eam:	in Berne		Date:
	Recommended: Comments:		Not Recommended: _		
8.	VP/Academic Affa Recommended: Comments:		Not Recommended:		Date: 11/28/12
9.	Learning Council: Recommended: Comments:	,	Not Recommended:		Date: 12/11/12
	VP/Academic Affai Approved:	irs:	Not Approved:		Date: 12/11/12

COURSE REVISION PROPOSAL

Type of Revision:				
Description _X_ Prerequisite Corequisite Number Name #credits				
Elective Type other (explain)				
Course Discipline or Department:	Division:			
Electromechanical Technology	Business and Technology			
Current Course Number: ELT 299				
Current Course Name: Cooperative Work Experien	ice & Seminar			
Current Course Description (as it appears in the college	ge catalog):			
This course provides students with a structured learning experience by applying classroom theory to practical work experience. Students participate in seminars to exchange information about their work experience. The number of credits earned is determined by the number of weeks and hours per week required by the cooperative work experience and the established learning objectives. Prerequisites: ELT 104, ELT 122 or CSC 233. F/S/SU				
Proposed Description (include all proposed changes):				
This course provides students with a structured learning experience by applying classroom theory to practical work experience. Students participate in seminars to exchange information about their work experience. The number of credits earned is determined by the number of weeks and hours per week required by the cooperative work experience and the established learning objectives. Prerequisites: ELT 104, ELT 130. F/S/SU				
Rationale for the change:				
ELT 122 Microprocessors is being replaced by ELT 130 Embedded Microcontrollers, and the option to take CSC 233 has been eliminated, so neither of those prerequisites will be valid. ELT 130 is particularly important as a prerequisite, because it is a project-based course where students build, test and troubleshoot systems, and develop many of the real-world skills they need to function as entry-level technicians.				
Provide a description of any change in course content.	No change in course content.			
Does the course revision affect another department? Please confer with the coordinator of the affected department. Affected department(s)none				
If this change affects a program grid, please submit a affected Please submit a syllabus to your dean with all of the re				
ricase subtitut a syllabus to your dealt with all of the re	evisions included.			

1.	Course Number a	ind Name: E.	LM 299 Cooperative Exp	erience	and Seminar
2.	Originator:	Jim Hefferna	an	Date: 3	31 October, 2012
3.	Division Dean:	Kathy Rents	ch	Date: 3	31 October, 2012
4.	Brief Description	of the Proposa	ıl:		
	Remove prerequisi ELT 130 Embedde	te, "Approval o	of Program Coordinator." A lers (new course)	add prere	equisites ELT 104 Electronics II and
5.	Effective Date: Fa	all 2013			
6.	Recommended by Comment:	the Business &	& Technology Division	Date: 11	15.12
7.	AA Leadership Te	eam:	in Benn		Date: 4/2 F/12
	Recommended: Comments:		Not Recommended:		_
8.	VP/Academic Affa	nirs:	They		Date: 1//28/12
	Recommended: Comments:	/	Not Recommended:		_
9.	Learning Council:		Jor in		Date: 12/11/12
	Recommended:Comments:		Not Recommended:		_
10.	VP/Academic Affa	ins:	Wey	<u></u>	Date: 12/11/12
	Approved: L Comments:	<u>_</u>	Not Approved:		, ,

COURSE REVISION PROPOSAL

Type of Davisions			
Type of Revision:			
	uisite Number Name #credits		
Elective Type other (explain)			
Course Discipline or Department:	Division:		
Electromechanical Technology	Business and Technology		
Current Course Number: ELM 299			
Current Course Name: Cooperative Work Experier	ice & Seminar		
Current Course Description (as it appears in the college	ge catalog):		
This course provides students with a structured learning	ng experience while applying classroom theory to a		
practical work experience. Students participate in a se	minar where they exchange feedback about their		
work experiences. The number of credits earned is de	termined by the number of weeks and hours per		
week required by the cooperative work experience and	d the established learning objectives.		
Prerequisite: Approval of program coordinator. F/S/S	SU		
Proposed Description (include all proposed changes):			
This course provides students with a structured learning	ng experience while applying classroom theory to a		
practical work experience. Students participate in a se	minar where they exchange feedback about their		
work experiences. The number of credits earned is det	termined by the number of weeks and hours per		
week required by the cooperative work experience and			
Prerequisite: ELT 104, ELT 130 F/S/SU			
Rationale for the change:			
Students applying for a Co-op in Electromechanical T	echnology need to have completed at least the first		
year technical courses in Electronics so they can funct			
is particularly important, because it is a project-based	course where students build, test and troubleshoot		
systems, and develop many of the real-world skills they need to advance in their field.			
Provide a description of any change in course content.	No change in course content.		
1 , 3			
D 1			
Does the course revision affect another department? Please confer with the coordinator of the affected			
department.			
Affected department(s)none			
TC (1' 1 CC) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
If this change affects a program grid, please submit a c	current and proposed program grid for each program		
affected			
Please submit a syllabus to your dean with all of the re	evisions included		

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

2.	Originator:	Jim Heffernan	Date: 30 October, 2012
3.	Division Dean:	Kathy Rentsch	Date: 30 October, 2012
4.	Brief Description	of the Proposal:	
		ntroduction to Computer Applications	echnicians or CIS 111 Microcomputer Applications or in Telecommunications." Retire ELT 105 CAD for
	2. Replace "I ELT 130 E	ELT 122 Microprocessors or CSC 233 Embedded Microcontrollers. Retire EI	3 Computer Hardware and Support" with a new course, LT 122 Microprocessors.
5.	Effective Date: Fal	II 2013	
6.	Recommended by	the Business & Technology Division	Date: 11.15.12
	Comments:		
7.	AA Leadership Te	am: Jin Minun	
	Recommended: Comments:	Not Recommended:	
8.	VP/Academic Affair Recommended: Comments:		Date: 4/2 1/2
9.	Learning Council:	Jon Sonz	Date: 12/11/12
	Recommended:	Not Recommended:	nove "Retire ELT 105 (AD for Date:
10.	VP/Academic Affai	rs: Not Approved:	Date: 18/11/12
	Comments:		

1. Program Name: Electronics Technology Certificate

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

Program: Electronics Technology Certificate

Division: Business and Technology

Degree type: Associate in Science

Provide a detailed list of the proposed changes to the program.

- 1. Semester 1: Remove the requirement "ELT 105 CAD for Technicians or CIS 111 Microcomputer Applications or CIS 115 Introduction to Computer Applications in Telecommunications." Retire ELT 105 CAD for Technicians.
- 2. Semester 2: Replace "ELT 122 Microprocessors or CSC 233 Computer Hardware and Support" with a new course, ELT 130 Embedded Microcontrollers. Retire ELT 122 Microprocessors.

Attachments:

- X Current program grid
- X Proposed program grid

Submit separate proposals for any new courses or revised courses in the program.

Provide a rationale for the proposed changes.

- 1. Use of word processing and spreadsheets are embedded throughout ELT and ELM courses, and most students come to QCC proficient in these applications, so it is unnecessary to make it a program requirement. The most important content from ELT 105 (electronic CAD, soldering) is being moved into the new course, ELT 130, so ELT 105 is no longer necessary.
- 2. Based on an analysis of current local job postings, companies are seeking technicians that can apply the concepts of Electronics to building, testing and troubleshooting systems. Microcontrollers provide a good platform on which students can build functioning systems. Microcontrollers are prevalent in electronic and electromechanical systems, and are much more relevant than microprocessors to the kinds of systems that graduates will work with. The new course ELT 130 includes outcomes that will be essential to the Electronics and Electromechanical program, therefore it cannot be optional.

Do any of the proposed changes affect the program goals, the program student learning outcomes, or the course mapping of the General Education Learning Outcomes? If so please provide the revisions.

The new course, ELT 130, includes the most important outcomes of ELT 105 CAD for Technicians, and it brings important new outcomes to the program that will increase the employability of graduates. The new course meets all of the same general education requirements as ELT 122, which it is replacing.

Learning Council - December 11, 2012

Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the
coordinators of affected departments.
Department(s) Affected: None
Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator.
There are no transfer agreements that specifically identify ELT 122 Microprocessors, so replacing that course will not have any effect.
For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? No
If yes please provide a rationale.
Will any of the following be required:
Additional staff Additional space Additional equipment X
Provide a rationale for any needs indicated and include approximate cost of equipment.
Since the new course ELT 130 is a project-based course, the department must provide materials for the projects. Actual materials will vary depending on the types of projects, but the estimated cost would be \$2000 per section.

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

1. Program Name: Electronics Technology – A.S. - Electronics Technician Option

2.	Originator:	Jim Heffernan	Date: 30 October, 2012
3.	Division Dean:	Kathy Rentsch	Date: 30 October, 2012
4.	Brief Description	of the Proposal:	
	1. Remove the re Applications of	equirement "ELT 105 CAD for Tech or CIS 115 Introduction to Computer	nicians or CIS 111 Introduction to Microcomputer Applications in Telecommunications." Retire ELT 105
	2. Replace "ELT 130 Embedde	T 122 Microprocessors or CSC 233 Co d Microcontrollers.	omputer Hardware & Support" with a new course, ELT
5.	Effective Date: Fa	II 2013	
6.	Recommended by	the Business & Technology Division	Date: 11.15.12
	Comments:		
7.	AA Leadership Te Recommended: Comments:		n Date: 11/28/12
	comments.		
8.	VP/Academic Affa	irs: Joney	Date: 11/28/12
	Recommended:Comments:	Not Recommended:	. '
9.	Learning Council:	- Jan	Date: 12/11/12
	Recommended:Comments:	Not Recommended: _	Demove "Rétire ELT 105."
10.	VP/Academic Affai	de amendement: B	Date: 12/11/12_
	Approved: Comments:	4.5	

Learning Council - December 11, 2012

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

Program: Electronics Technology - Electronics Technician Option

Division: Business and Technology

Degree type: Associate in Science

Provide a detailed list of the proposed changes to the program.

- 1. Semester 1: Remove the requirement "ELT 105 CAD for Technicians or CIS 111 Introduction to Microcomputer Applications or CIS 115 Introduction to Computer Applications in Telecommunications." Retire ELT 105.
- 2. Semester 2: Replace "ELT 122 Microprocessors or CSC 233 Computer Hardware & Support" with a new course, ELT 130 Embedded Microcontrollers.

Attachments:

- X Current program grid
- X Proposed program grid

Submit separate proposals for any new courses or revised courses in the program.

Provide a rationale for the proposed changes.

- 1. Use of word processing and spreadsheets are embedded throughout ELT and ELM courses, and most students come to QCC proficient in these applications, so it is unnecessary to make it a program requirement. The most important content from ELT 105 (electronic CAD, soldering) is being moved into the new course, ELT 130, so ELT 105 is no longer necessary.
- 2. Based on an analysis of current local job postings, companies are seeking technicians that can apply the concepts of Electronics to building, testing and troubleshooting systems. Microcontrollers provide a good platform on which students can build functioning systems. Microcontrollers are prevalent in electronic and electromechanical systems, and are much more relevant than microprocessors to the kinds of systems that graduates will work with. The new course ELT 130 includes outcomes that will be essential to the Electronics and Electromechanical program, therefore it cannot be optional.

Do any of the proposed changes affect the program goals, the program student learning outcomes, or the course mapping of the General Education Learning Outcomes? If so please provide the revisions.

The new course, ELT 130, includes the most important outcomes of ELT 105 CAD for Technicians, and it brings important new outcomes to the program that will increase the employability of graduates. The new course meets all of the same general education requirements as ELT 122, which it is replacing.

- - ---, or --- proposes emanges anseer anomor department. Examples metade me detention of addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. Department(s) Affected: None Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. There are no transfer agreements that specifically identify ELT 122 Microprocessors, so replacing that course will not have any effect. For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? No If yes please provide a rationale. Will any of the following be required: Additional staff Additional space Additional equipment X Provide a rationale for any needs indicated and include approximate cost of equipment. Since the new course ELT 130 is a project-based course, the department must provide materials for the projects. Actual materials will vary depending on the types of projects, but the estimated cost would be \$2000 per section.

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

1. Program Name: Electronics Technology – A.S. - Biomedical Instrumentation Option

2.	Originator:	Jim Heffernan	Date: 30 October, 2012
3.	Division Dean:	Kathy Rentsch	Date: 30 October, 2012
4.	Brief Description	of the Proposal:	
	 Replace "ELT Embedded Mic Move CSC 141 Add CSC 234 1 	ion to Computer Applications in Telec	nter Hardware & Support" with new course: ELT 130
5.	Effective Date: Fa	II 2013	
6.	Recommended by	the Business & Technology Division	Date: 11.15.12
	Comments:	Δ -	
7.	AA Leadership Te Recommended: Comments:	nam: 1 m Bunun Not Recommended: _	Date:
8.	VP/Academic Affa Recommended: Comments:	irs:Not Recommended:	Date:
9.	Learning Council: Recommended: Comments:	Not Recommended	Date: 12/11/12 Bemore Betwee ELT 105." Date: 2/11/12
10.	VP/Academic Affai Approved: Comments:	Not Approved:	Date:

Learning Council - December 11, 2012

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

Program: Electronics Technology - Biomedical Instrumentation Option

Division: Business and Technology

Degree type: Associate in Science

Provide a detailed list of the proposed changes to the program.

- 1. Semester 1: Remove "ELT 105 CAD for Technicians or CIS 111 Computer Applications or CIS 115 Introduction to Computer Applications in Telecommunications." Retire ELT 105.
- 2. Semester 2: Replace "ELT 122 Microprocessors or CSC 233 Computer Hardware & Support" with new course: ELT 130 Embedded Microcontrollers. Retire ELT 122.
- 3. Move CSC 141 Windows Client Operating Systems from Semester 2 to Semester 1
- 4. Semester 2: Add CSC 234 Networking Technologies.
- 5. Semester 3: Replace Program Elective with ELM 251 Instrumentation and Control Technology.

Attachments:

- X Current program grid
- X Proposed program grid

Submit separate proposals for any new courses or revised courses in the program.

Provide a rationale for the proposed changes.

- 1. Use of word processing and spreadsheets are embedded throughout ELT and ELM courses, and most students come to QCC proficient in these applications, so it is unnecessary to make it a program requirement. The most important content from ELT 105 (electronic CAD, soldering) is being moved into the new course, ELT 130, so ELT 105 is no longer necessary.
- 2. Based on an analysis of current local job postings, companies are seeking technicians that can apply the concepts of Electronics to building, testing and troubleshooting systems. Microcontrollers provide a good platform on which students can build functioning systems. Microcontrollers are prevalent in electronic and electromechanical systems, and are much more relevant than microprocessors to the kinds of systems that graduates will work with. The new course ELT 130 includes outcomes that will be essential to the Electronics and Electromechanical program, therefore it cannot be optional.
- 3. Based on several visits to the Biomedical Equipment departments at St. Vincent Hospital and UMass Medical Center, and based on numerous discussions with technicians and their supervisors, it is clear that modern hospitals have become highly networked environments. Many of the devices that technicians work on and the problems they are called to solve involve network connection issues.
- 4. According to supervisors and technicians in the field, much of the equipment that biomedical equipment technicians deal with involves actuators, valves, sensors and

venue: envane. Since Beni est provides die skongest toeds on diese teelmologies, it should be required of all graduates of the Biomedical Instrumentation Option. 5. Do any of the proposed changes affect the program goals, the program student learning outcomes, or the course mapping of the General Education Learning Outcomes? If so please provide the revisions. The new course, ELT 130, includes the most important outcomes of ELT 105 CAD for Technicians, and it brings important new outcomes to the program that will increase the employability of graduates. The new course meets all of the same general education requirements as ELT 122, which it is replacing. Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. Department(s) Affected: None Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. There are no transfer agreements that specifically identify ELT 122 Microprocessors, so replacing that course will not have any effect. For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? No If yes please provide a rationale. Will any of the following be required: Additional space Additional staff Additional equipment X Provide a rationale for any needs indicated and include approximate cost of equipment. Since the new course ELT 130 is a project-based course, the department must provide materials for the projects. Actual materials will vary depending on the types of projects.

but the estimated cost would be \$2000 per section.

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

1.	Program Name:	Electromechanical Technology – A.S C	areer, Option
2.	Originator:	Jim Heffernan	Date: 30 October, 2012
3.	Division Dean:	Kathy Rentsch	Date: 30 October, 2012
4.	Brief Description	of the Proposal:	
		2 Microprocessors or CSC 233 Comp controllers. Retire ELT 122 Micropro	uter Hardware & Support" with a new course, ELT 130 cessors
5.	Effective Date: Fa	ll 2013	
6.	Recommended by	the Business & Technology Division	Date: 11.15.12
	Comments:		
7.		eam: A in Brown	Date: 11/2 F/12
	Recommended: Comments:	Not Recommended:	
8.	VP/Academic Affa	nirs: Tre	Date:
	Recommended: Comments:	Not Recommended:	
9.	Learning Council:		Date:
	Recommended:Comments:	Not Recommended:	
10.	VP/Academic Affa	irs:	Date: 4/1//2
	Approved:	Not Approved:	

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

Program: Electromechanical Technology - Career Option

Division: Business and Technology

Degree type: Associate in Science

Provide a detailed list of the proposed changes to the program.

In Semester 2, Replace "ELT 122 Microprocessors or CSC 233 Computer Hardware & Support" with a new course, ELT 130 Embedded Microcontrollers. Retire ELT 122 Microprocessors

Attachments:

X Current program grid

X Proposed program grid

Submit separate proposals for any new courses or revised courses in the program.

Provide a rationale for the proposed changes.

Based on an analysis of current local job postings, companies are seeking technicians that can apply the concepts of Electronics to building, testing and troubleshooting systems. Microcontrollers provide a good platform on which students can build functioning systems. Microcontrollers are prevalent in electronic and electromechanical systems, and are much more relevant than microprocessors to the kinds of systems that graduates will work with. The new course ELT 130 includes outcomes that will be essential to the Electronics and Electromechanical program, therefore it cannot be optional.

Do any of the proposed changes affect the program goals, the program student learning outcomes, or the course mapping of the General Education Learning Outcomes? If so please provide the revisions.

The new course, ELT 130, includes the most important outcomes of ELT 105 CAD for Technicians, and it brings important new outcomes to the program that will increase the employability of graduates. The new course meets all of the same general education requirements as ELT 122, which it is replacing.

Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. Department(s) Affected: None
Department(s) Affected. Note
Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator.
There are no transfer agreements that specifically identify ELT 122 Microprocessors, so replacing that course will not have any effect.
For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? No
If yes please provide a rationale.
Will any of the following be required: Additional staff Additional space Additional equipment _X_ Provide a rationale for any needs indicated and include approximate cost of equipment.
Since the new course ELT 130 is a project-based course, the department must provide materials for the projects. Actual materials will vary depending on the types of projects, but the estimated cost would be \$2000 per section.

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

1. Program Name: Electromechanical Technology – A.S. - Transfer Option

4. F	Brief Description of		Date: 30 October, 2012
F	Replace "ELT 122	of the Proposal:	
	Embedded Microc	2 Microprocessors or CSC 233 Computential Retire ELT 122 Microproc	iter Hardware & Support" with a new course, ELT 130 essors.
5. E	Effective Date: Fal	1 2013	
6. F	Recommended by	the Business & Technology Division	Date: 11.15.12
C	Comments:		
7. A	A Leadership Tea	am: Jim Benn	Date: 1//28/12
	Recommended: Comments:	Not Recommended:	<u>. </u>
8. V	P/Academic Affai	irs: Ove	Date:
	Recommended: Comments:	Not Recommended:	
9. L	earning Council:	1	Date: 12/11/12
	ecommended:	Not Recommended:	Bemore "Betire ELT 122 Micropiocesson).
10. V	P/Academic Affai	rs: Norg	Date:
	pproved: Comments:	Not Approved:	

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

Program: Electromechanical Technology - Transfer Option

Division: Business and Technology

Degree type: Associate in Science

Provide a detailed list of the proposed changes to the program.

In Semester 2, replace "ELT 122 Microprocessors or CSC 233 Computer Hardware & Support" with a new course, ELT 130 Embedded Microcontrollers. Retire ELT 122 Microprocessors.

Attachments:

X Current program grid

X Proposed program grid

Submit separate proposals for any new courses or revised courses in the program.

Provide a rationale for the proposed changes.

Based on an analysis of current local job postings, companies are seeking technicians that can apply the concepts of Electronics to building, testing and troubleshooting systems. Microcontrollers provide a good platform on which students can build functioning systems. Microcontrollers are prevalent in electronic and electromechanical systems, and are much more relevant than microprocessors to the kinds of systems that graduates will work with. The new course ELT 130 includes outcomes that will be essential to the Electronics and Electromechanical program, therefore it cannot be optional.

Do any of the proposed changes affect the program goals, the program student learning outcomes, or the course mapping of the General Education Learning Outcomes? If so please provide the revisions.

The new course, ELT 130, includes the most important outcomes of ELT 105 CAD for Technicians, and it brings important new outcomes to the program that will increase the employability of graduates. The new course meets all of the same general education requirements as ELT 122, which it is replacing.

Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. Department(s) Affected: None
Do any of the proposed changes affect articulation agreements? Consult with the Transfer
Coordinator.
There are no transfer agreements that specifically identify ELT 122 Microprocessors, so replacing
that course will not have any effect.
For an associate degree program, are there any changes in the number of general education credits
that could affect Mass Transfer? No
that could affect ivides france. The
If yes please provide a rationale.
Will any of the following be required:
Additional staff Additional space Additional equipment _X_
Provide a rationale for any needs indicated and include approximate cost of equipment.
Since the new course ELT 130 is a project-based course, the department must provide
materials for the projects. Actual materials will vary depending on the types of projects,
but the estimated cost would be \$2000 per section.
2 2

ELECTRONICS TECHNOLOGY CERTIFICATE (Program Code: CE) - CURRENT

		The second secon	and the special production of the state of t	Were attributions to be adding the more section	THE PROPERTY OF THE PROPERTY O	
Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
Semester 1						State of the Control
CAD for Technicians or	ELT 105	Ш				ENG 100 or approp place score
Introduction to Microcomputer Applications or	CIS 111	FISISU				
Introduction to Computer Applications in Telecommunications	CIS 115	FISISU			က	
Electronics I	ELT 103	F/S			4	ENG 100 or approp place score, MAT 099
Digital Computer Circuits	ELT 121	F/S			4	ENG 100 or approp place score, MAT 099
English Composition & Literature I	ENG 101	F/S/SU			က	ENG 100 or approp place score
College Algebra	MAT 100	F/S/SU			က	MAT 099 or approp place score
Semester 2						
Windows Client Operating Systems	CSC 141	F/S/SU			4	
Electronics 11	ELT 104	F/S			4	ELT 103
Microprocessors or	ELT 122	F/S				ELT 121
Computer Hardware & Support	CSC 233	F/S			4	Coreq-CSC 141
Total credits required					29	

ELECTRONICS TECHNOLOGY CERTIFICATE (Program Code: CE) - PROPOSED

Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
Semester 1	to major constitutina est establisha de se					
Electronics 1	ELT 103	F/S			4	ENG 100 or approp place score, MAT 099
Digital Computer Circuits	ELT 121	F/S			4	ENG 100 or approp place score, MAT 099
English Composition & Literature I	ENG 101	F/S/SU			က	ENG 100 or approp place score
College Algebra	MAT 100	F/S/SU			က	MAT 099 or approp place score
Semester 2						
Windows Client Operating Systems	CSC 141	F/S/SU			4	
Electronics II	ELT 104	F/S			4	ELT 103
Embedded Microcontrollers	ELT 130	F/S			4	ELT 103, ELT 121
Total credits required					26	

ELECTRONICS TECHNOLOGY – ELECTRONICS TECHNICIAN OPTION - Associate in Science (Program Code: ELET) – CURRENT

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Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
Semester 1					and his forward was reference (No constant of	
CAD for Technicians or	ELT 105	ш				ENG 100 or approprolace score
Introduction to Microcomputer Applications or	CIS 111	F/S/SU				
Introduction to Computer Applications in Telecommunications	CIS 115	F/S/SU			33	
Electronics I	ELT 103	F/S			4	ENG 100 or approp place score, MAT 099
Digital Computer Circuits	ELT 121	F/S			4	ENG 100 or approp place score, MAT 099
English Composition & Literature I	ENG 101	F/S/SU			3	ENG 100 or approp place score
College Mathematics I: Precalculus	MAT 123	F/S/SU			3	MAT 100 or approp place score
Semester 2						
Windows Client Operating Systems	CSC 141	F/S/SU			4	The second secon
Electronics II	ELT 104	F/S			4	ELT 103
Microprocessors or	ELT 122	F/S				ELT 121
Computer Hardware & Support	CSC 233	F/S			4	Coreq-CSC 141
English Composition & Literature II	ENG 102	F/S/SU			3	ENG 101
College Mathematics II: Trigonometry	MAT 124	F/S/SU			3	MAT 123
Semester 3						
Program Elective*	1			La contract de la con	4	
Calculus I	MAT 233	F/S/SU			4	MAT 124
Physics I	PHY 101	ட			4	Coreq-MAT 124
Humanities Elective	1				ന	
	1				ۍ.	
Semester 4						
Program Elective*	1				4	
Calculus II	MAT 234	F/S/SU			4	MAT 233
Physics II	PHY 102	တ			4	PHY 101
Technical Elective**	1				3	
Total credits required					89	
	URKA BROTT THE STREET STREET STREET WAS A THE STREET SERVICE STREET STREET, WAS DON	CONTROL OF THE STATE OF THE STA	and the state of t	Martiness and Commission of the Commission of th	volationament into a touristic father than 1 vol. on 1 co. in the mean	

Students should note that many required courses have ENG and/or MAT prerequisites
 For additional information see program introduction on page 120.
 *Program Elective may be any 200-Level ELT or ELM course.
 **Courses that satisfy Technical Electives are: any CSC course, any CST course, any ELM course, any 200 level ELT course, any 200 level ELT course.

ELECTRONICS TECHNOLOGY - ELECTRONICS TECHNICIAN OPTION - Associate in Science (Program Code: ELET) - PROPOSED

	ellinger med for control or resident and elementary and elementary	A CONTRACTOR OF THE PROPERTY O	CONTRACTOR OF THE CONTRACTOR O	ANAMAN CONTRACTOR OF THE PROPERTY OF THE PROPE		
Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
Semester 1			THE CONTRACTOR SPONSOR WITH COMMENT OF THE CONTRACTOR OF THE CONTR	on, with the light books from books of the second residence of the second secon	AND IN THE PROPERTY OF THE PARTY OF THE PART	
Electronics I	ELT 103	F/S			4	ENG 100 or approp place score, MAT 099
Digital Computer Circuits	ELT 121	F/S			4	ENG 100 or approp place score, MAT 099
English Composition & Literature I	ENG 101	F/S/SU			3	ENG 100 or approp place score
College Mathematics I: Precalculus	MAT 123	F/S/SU			3	MAT 100 or approp place score
Semester 2						
Windows Client Operating Systems	CSC 141	F/S/SU			4	
Electronics II	ELT 104	F/S			4	ELT 103
Embedded Microcontrollers	ELT 130	F/S			4	ELT 103, ELT 121
English Composition & Literature II	ENG 102	F/S/SU			3	ENG 101
College Mathematics II: Trigonometry	MAT 124	F/S/SU			3	MAT 123
Semester 3 April 1985						
Program Elective*	1				4	
Calculus I	MAT 233	F/S/SU			4	MAT 124
Physics	PHY 101	止			4	Coreq-MAT 124
Humanities Elective					က	
Social Science Elective	1			100000000000000000000000000000000000000	က	
Semester 4 miles and a seminary and						
Program Elective*					4	
Calculus II	MAT 234	F/S/SU			4	MAT 233
Physics II	PHY 102	S			4	PHY 101
Technical Elective**	1				. 3	
Total credits required					65	
	The last of the la	Control of the Contro		The Indiana Control of the Control o	######################################	

Students should note that many required courses have ENG and/or MAT prerequisites

For additional information see program introduction on page 120.
 *Program Elective may be any 200-Level ELT or ELM course.
 **Courses that satisfy Technical Electives are: any CSC course, any ELM course, any 200 level ELT course, any 200 level CIS course, any CSC courses or any 200 level MAT course.

ELECTRONICS TECHNOLOGY - BIOMEDICAL INSTRUMENTATION OPTION - Associate in Science (Program Code: ELBI) - CURRENT

Semester 1 ELT 105 F Credits Credits Omputer Applications in the Applications in Cis 115 ELT 105 FSSU 4 It is always postering systems ELT 121 FSSU 4 Semester 2 CSC 141 FSSU 4 Semester 2 CSC 141 FSSU 4 Semester 2 CSC 141 FSSU 4 Literature II MAT 123 FSSU 4 ELT 104 FSSU 4 ELT 104 FSSU 4 ELT 229 FSSSU 4 ELT 290 FSSSU 4 ELT 299 FSSSU 4 FSSSU A 4 Concepts FSSSU A Semester 4 BIO 101 FSSU 4 Description & Seminar ELT 299 FSSSU 4 Bio 100 FSSSU A 4 Bio 100 FSSSU A 4 Bio 100 FSSSU A 4				Thomas and the second s	A Particular Control of the Control		
CIS 111 FISISU STATE CIS 112 FISISU STATE STATE CIS 113 FISISU STATE STA	Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
CIS 115 FS/SU STATE TO STATE T	-				e de la companya de l	state, podemywer digitaling by a part a supplication	
CIS 111 FF/S/U STATE TO STATE	CAD for Technicians or	ELT 105	4				ENG 100 or approp place score
ELT 103	Introduction to Microcomputer Applications <u>or</u>	CIS 111	F/S/SU				•
ELT 103 ELT 121 ENG 101 MAT 123 ENG 101 MAT 123 CSC 141 ELT 104 F/S/SU MAT 124 F/S/SU BIO 101 F/S/SU BIO 100 F/S/SU BIO	Introduction to Computer Applications in Telecommunications	CIS 115	F/S/SU			8	
ELT 121	Electronics I	ELT 103	F/S			4	ENG 100 or approp place score, MAT 099
ENG 101 F/S/SU 3 3 4 4 4 4 4 4 4 4	Digital Computer Circuits	ELT 121	F/S			4	ENG 100 or approp place score, MAT 099
CSC 141 FISISU 3 CSC 141 FISISU 4 ELT 104 FIS 4 ELT 122 FIS 4 ENG 102 FISISU 3 MAT 124 FISISU 3 BIO 101 FISISU 3 ELT 299 FISISU 4 ELT 299 FISISU 3 PHY 101 FISISU 3 BIO 100 FISISU 4 FISISU 4 FISISU 4 FISISU 4 FISISU 6 A 4 A 4 A 4 A 4 A 6 A 7 A 6 A 7 A 7 A 7 BIO 100 FISISU 3 BIO 100 FISISU 3 BIO 100 FISISU 3 A 7 A 7 BHY 102 S 4 A 7 A 7 A 7 BHY 102 S 4 A 7 BHY 102 S 6 BHY 102 S 7 BHY 103 S 7 BHY 104 BIO 105 BHY 105 S 7	English Composition & Literature I	ENG 101	F/S/SU			3	ENG 100 or approp place score
CSC 141 ELT 104 ELT 104 ELT 122 ELT 122 CSC 233 FISS ENG 102 FISISU MAT 124 FISISU BIO 101 FISISU BIO 101 FISISU BIO 100 FISISU BIO 140 FISIS	College Mathematics I: Precalculus	MAT 123	F/S/SU	,		3	MAT 100 or approp place score
CSC 141 F/SIU 4 ELT 104 F/S 4 ELT 122 F/S 4 CSC 233 F/S/SU 3 ENG 102 F/S/SU 3 MAT 124 F/S/SU 4 BIO 101 F/S/SU 4 ELT 299 F/S/SU 3 PHY 101 F/S/SU 4 BIO 140 F/S/SU 4 BIO 140 F/S/SU 4 PHY 102 S 4 F/S/SU S 4 PHY 102 S 4 F/S/SU 8 4 PHY 102 S 4 PHY 103 S 4 PHY 104 S 4 PHY 105 S 4 A 4 4 B 4 4 B 4 4 B 4 4 B 4 4 B 4 4	Semester 2						
ELT 104	Windows Client Operating Systems	CSC 141	F/S/SU			4	
ELT 122 F/S 4 CSC 233 F/S/SU 4 ENG 102 F/S/SU 3 MAT 124 F/S/SU 4 BIO 101 F/S/SU 4 ELT 299 F/S/SU 3 PHY 101 F/S/SU 4 BIO 100 F/S/SU 4 BIO 140 F/S/SU 4 PHY 102 S 4 F/S/SU 8 4 PHY 102 S 4 BU 140 F/S/SU 4	Electronics II	ELT 104	F/S			4	ELT 103
CSC 233 F/S 4 ENG 102 F/S/SU 3 MAT 124 F/S/SU 3 BIO 101 F/S/SU 4 ELT 299 F/S/SU 3 PHY 101 F 4 BIO 100 F/S/SU 4 BIO 140 F/S/SU 4 PHY 102 S 4 F/S/SU 8 4 PHY 102 S 4 F/S/SU 8 4 F/S/SU 8 4 F/S/SU 8 4 PHY 102 S 4 F/S/SU 8	Microprocessors or	ELT 122	F/S			-	ELT 121
ENG 102 F/S/SU 3 MAT 124 F/S/SU 3 BIO 101 F/S/SU 4 ELT 299 F/S/SU 3 PHY 101 F/S/SU 3 BIO 100 F/S/SU 3 PHY 102 S 4 F/S/SU 6 PHY 102 S 4 F/S/SU 7 F/	Computer Hardware & Support	CSC 233	F/S			4	Coreq-CSC 141
BIO 101 F/S/SU	English Composition & Literature II	ENG 102	F/S/SU			က	ENG 101
BIO 101 F/S/SU 4 ELT 299 F/S/SU 3 PHY 101 F 6 BIO 100 F/S/SU 3 PHY 102 S 4 4 4 4 4 4 4 4 7 7 7 7 7 7	College Mathematics II: Trigonometry	MAT 124	F/S/SU			3	MAT 123
BIO 101 F/S/SU 4 ELT 299 F/S/SU 3 PHY 101 F/S/SU 3 BIO 100 F/S/SU 4 BIO 140 F/S/SU 4 PHY 102 S 4 F/S/SU 8 4<	Semester 3						· · · · · · · · · · · · · · · · · · ·
ELT 299 F/S/SU 3 PHY 101 F/S/SU 3 BIO 100 F/S/SU 4 BIO 140 F/S/SU 4 PHY 102 S 4 F/S/SU 5 PHY 102 S 4	General Biology: Core Concepts	BIO 101	F/S/SU			4	Coreq-ENG 101
ELT 299 F/S/SU 3 PHY 101 F 4 BIO 100 F/S/SU 4 BIO 140 F/S/SU 4 PHY 102 S 4 F/S/SU 3 4 PHY 102 S 4 F/S/SU 3 4 PHY 102 S 4 TAS/SU 3 4 A 4 4 A 4 4 A 4 4 A 4 4 A 4 4 A 4 4 B A 4 B A 4 B A 4 B A 4 B A 4 B A 4 B A 4 B A 4 B A 4 B A 4 </td <td>Program Elective*</td> <td></td> <td></td> <td></td> <td>-</td> <td>4</td> <td></td>	Program Elective*				-	4	
ester 4	Cooperative Work Experience & Seminar	ELT 299	F/S/SU	T of the second		က	ELT 104, ELT 122 or CSC 233
Hester 4 BIO 100 F/S/SU BIO 140 F/S/SU PHY 102 F/S/SU 7 4 4 4 4 4 7 7 7 7 7 7 7	Physics 1	PHY 101	Ш	TOTAL STATE OF THE		4	Coreq- MAT 124
ester 4 BIO 100 F/S/SU BIO 140 BIO 140 F/S/SU A 4 4 4 7 F/S/SU S F/S/SU 3 3	Social Science Elective		F/S/SU			က	
BIO 100 BIO 140 BIO 140 S PHY 102 S F/S/SU 8 4 4 4 3 3	Semester 4			- Andrews			
PHY 102 S 4 4 4 4 102 S 7 103 13 13 13 15 15 15 15 15 15 15 15 15 15 15 15 15	Principles of Human Biology <u>or</u>	BIO 100	F/S/SU			4	ENG 100 or approp place score
PHY 102 S 4 F/S/SU 3	Program Elective*	DH 140				4	
F/S/SU 3	Physics II	PHY 102	S			4	PHY 101
Translation of the state of the	Humanities Elective		F/S/SU			က	
	Total credits required					68	

<sup>Program Notes:
Students should note that many required courses have ENG and/or MAT prerequisites
For additional information see program introduction on page 120.
* Program Elective may be any 200-Level ELT or ELM course</sup>

Learning Council - December 11, 2012

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Semester 1 CSC 141 F/S/SU F/S	Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
CSC 141 F/S/SU 4 ELT 121 F/S 4 ELT 121 F/S 4 ELT 121 F/S 4 ENG 101 F/S/SU 3 RELT 130 F/S 4 ELT 130 F/S/SU 3 RNG 102 F/S/SU 3 MAT 124 F/S/SU 4 BIO 101 F/S/SU 3 PHY 101 F 4 F F 4 BIO 100 F/S/SU 3 PHY 101 F 6 F F 4 BIO 100 F/S/SU 4 BIO 100 F/S/SU 4 PHY 101 F 4 BIO 100 F/S/SU 4 BIO 140 F/S/SU 4	Semester 1						
ELT 103 F/S	Windows Client Operating Systems	CSC 141	FISISU			4	
erature I ELT 121 F/S 4 evalculus ENG 101 F/S/SU 3 Semester 2 CSC 234 F/S/SU 4 ss ELT 104 F/S 4 lers ELT 104 F/S 4 lers ELT 130 F/S 4 lers ELT 130 F/S/SU 4 igonometry MAT 124 F/S/SU 4 Semester 3 BIO 101 F/S/SU 4 incopts ELM 251 F/S/SU 4 rience & Seminar ELM 251 F/S/SU 4 PHY 101 F/S/SU 6 4 PHY 101 F/S/SU 4 4 Body F/S/SU 6 4 Body F/S/SU 6 4 Body F/S/SU 6 4 F/S/SU 6 4 Body F/S/SU 6 4 Body F/S/SU 6 4	Electronics		F/S			4	ENG 100 or approp place score, MAT 099
erature I ENG 101 F/S/SU 3 Semester 2 CSC 234 F/S/SU 3 semester 2 CSC 234 F/S 4 semester 2 CSC 234 F/S 4 llers ELT 104 F/S F/S 4 llers ELT 130 F/S 4 4 lerature II MAT 124 F/S/SU 3 4 Semester 3 BIO 101 F/S/SU 4 4 nrol Technology ELT 299 F/S/SU 4 rience & Seminar BIO 101 F/S/SU 4 4 PHY 101 F/S/SU A 4 Bio 140 F/S/SU A 4 Body Bio 140 F/S/SU 4 PHY 102 S 4 Body C F/S/SU 4 Body C F/S/SU A Body C F/S/SU A Body C F/S/SU A	Digital Computer Circuits	ELT 121	F/S			4	ENG 100 or approp place score, MAT 099
CSC 234 F/S 44 ELT 104 F/S 44 ELT 130 F/S/SU 3 MAT 124 F/S/SU 3 BIO 101 F/S/SU 3 BIO 101 F/S/SU 3 ELT 299 F/S/SU 3 F/S/SU 3 F/S/SU 3 F/S/SU 3 F/S/SU 3 F/S/SU 44 F/S/SU 3 F/S/SU 44 F/S/SU 3 F/S/SU 44 F/S/SU 3 F/S/SU 3 F/S/SU 44 F/S/SU 3 F/S/SU 3 F/S/SU 3 F/S/SU 44 F/S/SU 3 F/S/SU 3 F/S/SU 44 F/S/SU 5 F/S/SU 64	English Composition & Literature I	ENG 101	F/S/SU			3	ENG 100 or approp place score
CSC 234 F/S	College Mathematics I: Precalculus	MAT 123	F/S/SU			3	MAT 100 or approp place score
CSC 234 F/S 4 ELT 104 F/S 4 ELT 130 F/S 4 ENG 102 F/S/SU 3 ENG 102 F/S/SU 3 BIO 101 F/S/SU 4 ELT 299 F/S/SU 4 PHY 101 F/S/SU 3 BIO 100 F/S/SU 4 BIO 140 F/S/SU 4 BIO 140 F/S/SU 4 PHY 102 S 4 F/S/SU 8 4 PHY 102 S 4 F/S/SU 65 4 F/S/SU 65 65	Semester 2						
ELT 104 F/S 4 ELT 130 F/S 4 ENG 102 F/S/SU 3 MAT 124 F/S/SU 3 BIO 101 F/S/SU 4 ELM 251 F/S 4 ELM 251 F/S/SU 4 PHY 101 F/S/SU 3 BIO 100 F/S/SU 4 BIO 140 F/S/SU 4 PHY 102 S 4 PHY 102 S 4 F/S/SU S 4 PHY 102 S 4 PHY 102 S 4 F/S/SU S 4 PHY 102 S 4 F/S/SU 65	Networking Technologies	CSC 234	F/S			4	Coreq-CSC 141
ELT 130 F/S/SU 4 ENG 102 F/S/SU 3 MAT 124 F/S/SU 3 BIO 101 F/S/SU 4 ELM 251 F/S/SU 4 ELT 299 F/S/SU 3 PHY 101 F/S/SU 3 BIO 100 F/S/SU 4 PHY 102 S 4 PHY 102 S 4 F/S/SU	Electronics II	ELT 104	F/S			4	ELT 103
ENG 102 F/S/SU	Embedded Microcontrollers	ELT 130	F/S			4	ELT 103, ELT 121
BIO 101 F/S/SU 4 4 4 4 4 4 4 4 4	English Composition & Literature II	ENG 102	F/S/SU			3	ENG 101
BIO 101 F/S/SU 4 ELM 251 F/S ELT 299 F/S/SU 3 PHY 101 F F/S/SU 3 BIO 100 F/S/SU 3 BIO 140 F/S/SU 4 PHY 102 S 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 6	College Mathematics II: Trigonometry	MAT 124	F/S/SU			3	MAT 123
ELM 251 F/S U 4 ELM 251 F/S U 4 ELT 299 F/S/SU 3 PHY 101 F/S/SU 3 BIO 100 F/S/SU 4 BIO 140 F/S/SU 4 PHY 102 S 4 F/S/SU 655 65	Semester 3	and together comments of some bounds former comments for the comments of the c					The second secon
ELM 251 F/S 4 ELT 299 F/S/SU 3	General Biology: Core Concepts		F/S/SU			4	Coreq-ENG 101
ELT 299 F/S/SU	Instrumentation and Control Technology	ELM 251	FIS			4	ELT 104, ELT 130
ence Elective Semester 4 of Human Biology <u>or</u> Elective* Is Elective* Semester 4 BIO 100 F/S/SU BIO 140 F/S/SU	Cooperative Work Experience & Seminar	ELT 299	F/S/SU			က	ELT 104, ELT 130
ence Elective Semester 4 3 of Human Biology or Directive* BIO 100 F/S/SU 4 Elective* S 4 4 PHY 102 S 4 4 Steedtive F/S/SU 3 4 Atternamined Atternamined 5 4	Physics I	PHY 101	ட			4	Coreq- MAT 124
Semester 4 Semester 4 BIO 100 F/S/SU 4 of Human Biology or Diective* BIO 140 F/S/SU 4 Elective* S 4 4 ss Elective S 4 4 http://dx F/S/SU 3 http://dx A 4 4 http://dx Biology or BIO 140 A 4 PHY 102 S A 4 Alternatived Biology or BIO 140 Biology or BIO 140 Biology or BIO 140	Social Science Elective	-	F/S/SU			က	
of Human Biology or BIO 100 F/S/SU 4 on to the Human Body BIO 140 4 Elective* S 4 ss Elective F/S/SU 3 Atternatived 65	Semester 4						
Sective	Principles of Human Biology <u>or</u>		F/S/SU			4	ENG 100 or approp place score
PHY 102 S 4 4 5 5 5 5 65 65 65	Introduction to the Human Body					V	
ss Elective – F/S/SU 3	Program Elective*		C			4 5	777
F/S/SU	Physics II		S			4	
	Humanities Elective	i	F/S/SU			3	
	Total credits required					65	

- Program Notes:
 Students should note that many required courses have ENG and/or MAT prerequisites
 For additional information see program introduction on page 120.
 * Program Elective may be any 200-Level ELT or ELM course.

ELECTROMECHANICAL TECHNOLOGY - CAREER OPTION - Associate in Science (Program Code: EPCA) - CURRENT

Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
Semester 1			*		Temporal de Colomon de Colomo de Col	
Electronics I	ELT 103	F/S			4	ENG 100 or approp place score, MAT 099
Digital Computer Circuits	ELT 121	F/S			4	ENG 100 or approp place score, MAT 099
English Composition & Literature I	ENG 101	F/S/SU			က	ENG 100 or approp place score
Mathematics Elective Semester 9	1		And the second s		m	
Windows Client Operating Systems	000 444	1/0/0/1				
Floatonice II	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	00/0/1			4 -	i i
	- C- 104	ST			4	ELI 103
Microprocessors or	ELT 122	F/S				ELT 121
Computer Hardware and Support	CSC 233	F/S			4	Coreq: CSC 141
Mathematics Elective*	1				က	
Semester 3						
Instrumentation and Control Technology	ELM 251	щ			4	ELT 104, ELT 121
Networking Technologies	CSC 234	F/S			4	Coreq: CSC 141
English Composition & Literature II	ENG 102	F/S/SU			က	ENG 101
Laboratory Science Elective**					4	energy distribution of the control o
Semester 4						
Robotics and Automated Systems	ELM 256	S			4	ELT 104, ELT 121
Introduction to Programmable Logic Controllers	ELM 257	F/S			-	ELT 121
Cooperative Work Experience & Seminar	ELM 299	F/S/SU			3-6	Approval of Program Coordinator
Laboratory Science Elective**	1				4	
Social Science Elective***	ı				3	
Total credits required					62-65	
						SACRETARIA SALAMAN SALAMAN AND AND AND AND AND AND AND AND AND A

Students should note that many required courses have ENG and/or MAT prerequisites

ELECTROMECHANICAL TECHNOLOGY - CAREER OPTION - Associate in Science (Program Code: EPCA) - PROPOSED

Semester 1	Offered	Plan to Take	Grade	Credits	Prerequisites
Electronics ELT 103	F/S			4	ENG 100 or approp place score, MAT 099
Digital Computer Circuits	F/S			4	ENG 100 or approp place score, MAT 099
terature I ENG 1	F/S/SU			က	ENG 100 or approp place score
Mathematics Elective*				က	
Semester 2					
Windows Client Operating Systems CSC 141	F/S/SU			4	The state of the s
	F/S			4	ELT 103
Embedded Microcontrollers	F/S			4	ELT 103, ELT 121
				က	
Semester 3					
Instrumentation and Control Technology	LL_			ব	ELT 104, ELT 130
Networking Technologies CSC 234	F/S			4	Coreq: CSC 141
erature II ENG	F/S/SU			က	ENG 101
Laboratory Science Elective"				4	
Semester 4					
Robotics and Automated Systems	တ			4	ELT 104, ELT 121
Introduction to Programmable Logic Controllers	F/S			4	ELT 121
ELM	F/S/SU			3-6	ELT 104, ELT 130
Laboratory Science Elective**				4	
Social Science Elective***				က	₁ ,
Total credits required				62-65	

Students should note that many required courses have ENG and/or MAT prerequisites
 The Electromechanical Technology Program was developed in partnership with local and national representatives of the semiconductor manufacturing industry.
 Recommended Mathematics electives: MAT 100 College Algebra, MAT 122 Statistics
 ** Recommended Lab Science electives: SCI 107 Science of Technology: Vision and Light, SCI 108 Science of Technology: Hearing and Sound, PHY 101 Physics I (requires MAT 124 as a co-requisite), PHY 102 Physics II
 ** Recommended Social Science Elective: PSY 118 Psychology of Interpersonal Relations

ELECTROMECHANICAL TECHNOLOGY - TRANSFER OPTION - Associate in Science (Program Code: EPTR) - CURRENT

Course Title Cou	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
Semester 1		The second secon	The state of the s	ed topological action of the control		
ent Operating Systems	CSC 141	F/S/SU			7	
	ELT 103	F/S			. 4	ENG 100 or appropriate score MAT 000
	T 121	F/S			4	FNG 100 or appropriate score, MAT 000
	G 101	F/S/SU			· (r)	FNG 100 or appropriate score
	T 123	F/S/SU			, m	MAT100 or appropriate score
Semester 2					: :	
	ELT 122	F/S			The state of the s	新聞 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
ardware and Support	C 233	F/S	*		4	Corea: CSC 141
	T 104	F/S			4	EI T 103
le II	G 102	F/S/SU			· ന	ENG 101
	T 124	F/S/SU			m	MAT 123
ntrol Technology	M 251	ட			4	ELT 104 ELT 121
ng Technologies	CSC 234	F/S			4	Coreq: CSC 141
	Y 101	ш			4	Coreg-MAT 124
Social Science Elective*					8	
ifer 4 men and a second second						
	ELM 256	S			4	ELT 104. ELT 121
on to Programmable Logic Controllers	M 257	F/S			4	ELT 121
	Y 102	တ			4	PHY 101
Liberal Arts Elective**					3	
lotal credits required					62	

Students should note that many required courses have ENG and/or MAT prerequisites
 The Electromechanical Technology Program was developed in partnership with local and national representatives of the semiconductor manufacturing industry.

^{*}Recommended Social Science Elective: PSY 118 Psychology of Interpersonal Relations

^{**} Recommended Liberal Arts Elective: SPH 101 Speech Communication Skills

ELECTROMECHANICAL TECHNOLOGY - TRANSFER OPTION - Associate in Science (Program Code: EPTR) - PROPOSED

	CONTENT OF A TOTAL GOOD SHELL THE PROPERTY OF STREET OF THE PROPERTY OF THE PR		And the Control of th	A TOTAL TO THE STATE OF THE PROPERTY OF THE PR		
Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
Semester 1						
ent Operating Systems	CSC 141	F/S/SU			4	on the formation for the common probability of a substance of the common section of the
	ELT 103	F/S	-		4	ENG 100 or approp place score, MAT 099
	ELT 121	F/S			4	ENG 100 or approp place score, MAT 099
	ENG 101	F/S/SU			က	ENG 100 or approp place score
	MAT 123	F/S/SU			m	MAT100 or approp place score
mester 2				100000000000000000000000000000000000000		
Embedded Microcontrollers	ELT 130	F/S			4	ELT 103, ELT 121
Electronics II	ELT 104	F/S			4	ELT 103
ire II	ENG 102	F/S/SU			က	ENG 101
:	MAT 124	F/S/SU			3	MAT 123
mester 3						・ 「
Instrumentation and Control Technology	ELM 251	L			4	ELT 104, ELT 130
Networking Technologies	CSC 234	F/S		-	4	Coreq: CSC 141
	PHY 101	ш.			4	Corea-MAT 124
					ĸ	
Semester 4						· · · · · · · · · · · · · · · · · · ·
Robotics and Automated Systems	ELM 256	S			4	ELT 104, ELT 121
Introduction to Programmable Logic Controllers	ELM 257	F/S			4	ELT 121
	PHY 102	S			4	PHY 101
Liberal Arts Elective**	-				က	
Total credits required					62	

*Recommended Social Science Elective: PSY 118 Psychology of Interpersonal Relations

Students should note that many required courses have ENG and/or MAT prerequisites
 The Electromechanical Technology Program was developed in partnership with local and national representatives of the semiconductor manufacturing industry.

^{**} Recommended Liberal Arts Elective: SPH 101 Speech Communication Skills

NEW COURSE PROPOSAL

1. Course Number and Name: HVC 106 Comfort Heating Systems

2.	Originator: Robert Recko	Ι	Date: 10.23.12
3.	Division Dean: Kathy Rentsch	Date: 10	.23.12
4.	Brief Description of the Proposal:		
Ori	eate new course, HVC 106 Comfort Heating Systems. This ginally HVC 103 Air Conditioning Systems addressed bottent to be covered in one 5-credit course.		
5.	Effective Date: Fall 2013		
	Recommended by the Business & Technology Divisionments:	n I	Date: 11.15.12
7.	AA Leadership Team: Not Recommended:	m D	Date: 11/28/12
	commended: Not Recommended: nments:		-
Rec	VP/Academic Affairs:		Pate: 1/28/12
Cor	nments:		, ,
9.	Learning Council:	D	Pate: 12/1/12
	ommended: Not Recommended:		·
App	VP/Academic Affairs: Not Approved: nments:	D	pate! 1/12

NEW COURSE PROPOSAL

Heating, Ventilation, and Air Conditioning/Business	& Technology Division			
Course Number: HVC 106				
Course Name:				
Comfort Heating Systems				
Prerequisites and/or corequisites (confer with affecte	d department coordinator):			
Prerequisite: Enrollment limited to HVC majors only Corequisite: HVC 101	,			
CIP code (check with IRaP Office): 47.0201				
Effective Term/year: Fall 2013				
Give a rationale for the new course. Be sure to indicate whether this course replaces another course.				
This course will focus specifically on heating. Origin both heating and cooling, but there is too much conterefocuses the HVAC Certificate in preparation for deprogram in a related area.	ent to be covered in one 5-credit course. This change			
Is the course content similar to other courses now off If yes, attach a statement for the coordinator of the do See "rationale."				
Please indicate if this course will serve as any of theElectivex_ Discipline specific (name the discipline) Heatinx_ Program specific (name the program) HVAC C Multiple perspective (confer with the Liberal Ar	ng, Ventilation, and Air Conditioning Pertificate ts Coordinator)			
Is this course required for a program? If yes, submit Program Proposal.	a separate Program Revision Proposal or New			
Yes				
Expected enrollment per term: 20	Expected enrollment per year: 20			

Will any of the following be required: No
Additional staff Additional space Additional equipment
Provide a rationale for any needs indicated above and include approximate cost of equipment.
Library print and non-print resources in support of this course: \$500
Course Materials
Course number: HVC 106
Course name: Comfort Heating Systems
Credits: 4
Lecture Hours: 3 Lab hours: 3 Clinic Hours:
General course description and prerequisites (as it will appear in the catalog):
HVC 106 Comfort Heat Systems 4 credits This course is a study of mechanical energy systems that use gas, oil, and electricity for comfort heating applications. An emphasis on energy efficiency and awareness of energy costs is inherent in the content. Hands-on laboratories cover the installation and use of electrical controls, system evaluation, mechanical and electrical troubleshooting of residential and light commercial applications. This course includes a laboratory component. Prerequisite: Enrollment limited to HVC majors only Corequisite: HVC 101
All required texts and paperbacks, including information on publisher and edition used (provide a suggested text): Whitman/Johnson. Refrigeration & Air Conditioning Technology. Delmar; ISBN-13: 978-1-4283-1936-3; ISBN-10: 1-4283-1936-0
Instructional Objectives (list):
Through a combination of lectures, demonstrations, weekly assignments and student projects, students:
 Demonstrate safe lab practices; Demonstrate knowledge of fuel and energy values to make cost comparisons Apply knowledge of piping and fabrication knowledge and skills to heating systems Apply the knowledge of control circuit logic to heating system operation and safety control Demonstrate knowledge of energy saving strategies and design methods Apply knowledge of fuel gas properties and mechanisms for application to gas heating appliances Apply knowledge of fuel oil properties and mechanisms for application to oil heating appliances Apply knowledge of air and hydronic heating components and methods to heating systems installations Apply knowledge of air and hydronic heating systems to diagnose heating systems problems Demonstrate methods of performing procedures that allows equipment to operate at peak energy efficiency
Teaching procedures: (provide suggested teaching methodology):
A blend of lectures, demonstrations, weekly assignments, and student projects are utilized to aid student success.

- 1. Whiteboard instruction with PowerPoint slides
- 2. In-lab hands-on projects and demonstrations
- 3. Supplementary handouts as needed
- 4. Question and answer sessions
- 5. Weekly homework and laboratory assignments
- 6. Online Learning Management System

Course topics and/or assignments and/or required and/or supplemental reading (provide a list of suggested course topics):

Course Topics

Application and Materials for Mechanical Heating Systems

Copper Tubing

Plastic Pipe

Soldering and Brazing

Steel Pipe

Installation Methods

Safety

Text: Unit Seven: Tubing and Piping

Energy Systems, Energy Usage and Energy Conservation

Energy Units

Fuels: Oil, Gas and Electric

Energy Efficiency and Fuel Cost Comparisons

Text: Units 30 Electric Heat, 31 Gas Heat, Unit 32 Oil Heat

Electric Heat

Forced Air and Hydronic Heating Equipment Design Control of Electric Heat Safety

Text: Unit 30 Electric Heat

Gas Heat

Forced Air Furnaces

Fuel Gas Composition and Gas Safety

Regulators and Gas valves

Combustion Systems

Limits, Safety and Flame Safety Devices

Two Stage and Modulating Heat

Venting and Gas Piping

Combustion Efficiency

Electric and Mechanical Troubleshooting

Text: Unit 31 Gas Heat

Oil Heat

Composition of Fuel Oils Fuel Oil Combustion

Oil Safety Oil Burners Oil Controls - Operating and Safety

Heat Delivery Systems

Oil Systems Installation

Oil Efficiency and The "Tune Up" process

Oil Service

MA Fuel Oil Code

Text: Unit 32 Oil Heat

Hydronic Heat

Methods of Heat Transfer

Basic Hydronic System

Hydronic System Components

High Temperature, Low Temperature and Radiant Systems

Piping Configurations

Domestic Hot Water

Hydronic Control Systems

Text: Unit 33 Hydronic Heat

Indoor Air Quality

Control of the Indoor Environment Causes and prevention of Indoor Air Pollution Ventilation, Filtration and Humidification IAQ Strategies

Text: Unit 33 Indoor Air Quality

Comfort and Psychrometrics

Defining Comfort

Relationship between Air and Humidity

Dry Bulb, Wet Bulb and Dew Point

The Psychrometric Chart

The Psychrometric Chart as a Diagnostic Tool

Text: Unit 35 Comfort and Psychrometrics

Air Distribution and Balance

Basic Sheet Metal Materials and Methods

Basic Air Distribution System

Air Measurement Tools

Duct Designs

Determining Air Quantities

Air Balancing

Text: Unit 37 Distribution and Balance

Combination Forced Air Heating and Cooling Systems

Integration of Electric, Oil, Gas and Electric Air Conditioning Examples of strategies for Total Comfort Systems

Text: Unit 42, Heating Systems with Electric Air Conditioning

Other information:

• Suggested basis for student grading and criteria for evaluating student performance Final grades for this course will be based on the following:

Exam 1 (Midterm): 10% Exam 2: (End of term) 10% Final Exam: 30%

Eleven Quizzes: 20% (all worth the same)
Lab Projects: 30% (all worth the same)

Final course grade will follow the QCC grading system

Suggested attendance policy

Attendance Policy

Attendance is extremely important in this program. The course expectation for attendance mirrors that of the HVAC/R industry. There are also licensing requirements that mandate student hours. After three absences the student will be notified in writing by the instructor about the absences. Students are required to confer with the instructor about what work needs to be made up. It is the responsibility of the student not only make up all work missed but to be sure that all required work is completed on time.

Suggested plagiarism statement

Plagiarism

Submitted assignments are expected to be the product of the student's individual and original effort. Any work deemed by the instructor as plagiarized will not be accepted and the student may subject to further discipline as per the QCC Student Handbook.

• Suggested assessment methodologies

Please submit a syllabus for this new course to your dean.

List the Student Learning Outcomes for this course in the table below. Recommendations for writing SLOs can be found in the *General Information for Academic Affairs Proposals* document that is available on the QCC's Intranet under Frequently Used Forms (Academic Governance Forms).

COURSE STUDENT LEARNING OUTCOMES FOR: Comfort Heating Systems HVC 106
Upon completion of the course, students will be able to:
1 Demonstrate safe lab practices;
2 Demonstrate knowledge of fuel and energy values to make cost comparisons
3 Apply knowledge of piping and fabrication knowledge and skills to heating systems
4 Apply the knowledge of control circuit logic to heating system operation and safety control
5 Demonstrate knowledge of energy saving strategies and design methods
6 Apply knowledge of fuel gas properties and mechanisms for application to gas heating appliances
7 Apply knowledge of fuel oil properties and mechanisms for application to oil heating appliances
8 Students apply knowledge of air and hydronic heating components and methods to heating systems
installations
9 Students apply knowledge of air and hydronic heating systems to diagnose heating systems problems
Demonstrate methods of performing procedures that allows equipment to operate at peak energy efficiency

How does the course support general education? Using the chart below, indicate the degree or level of connection between the course and outcome as indicated here.

I – Introductory/Background – There is an indirect relationship between the course and the outcome. The outcome itself is not the focus of the course but at least one element of the course serves as a building block to the

achievement of the final outcome. For example, course elements may provide the knowledge, skills or attitudes necessary for the ultimate achievement of the outcome.

M – Intermediate/Transitional - There is more of a direct relationship between the course and the outcome than Introductory. A mixture of course elements supports the final achievement of the outcome, but the final integration of knowledge, skills and attitudes necessary for its achievement is not accomplished in this course. For example, knowledge, skills and/or attitudes (at least 2 of the 3) required for achievement of the outcome may be the focus of the course or course element, but the integration of all three is not.

E – Emphasized – There is a direct relationship between the course and the outcome. At least one element of the course focuses specifically on the complex integration of knowledge, skills and attitudes necessary to perform the outcome.

CONNECTION OF HVC 106 Comfort Heating Systems TO GENERAL EDUCATION	I,M,E
STUDENT LEARNING OUTCOMES	
Communication Skills: Students will write and speak effectively.	I
Information Literacy: Students will locate, evaluate and apply reliable and appropriate information.	Е
Quantitative Reasoning: Students will apply the concepts and methods of mathematics to solve problems.	Е
Scientific Reasoning: Students will relate scientific methods of inquiry to the acquisition of knowledge.	Е
Technical Literacy: Students will utilize computer an emerging technologies effectively.	Е
Aesthetics: Students will appreciate the variety of human experiences as expressed through the arts.	I
Multiple Perspectives: Students will demonstrate knowledge and appreciation of diverse cultures.	I
Ethics: Students will develop an awareness of personal obligations and responsibilities in one's community of influence.	I
Impact of Technology: Students will reflect on the impact of scientific and technological advances on the individual, society and the environment.	Е
Civic Literacy: Students will demonstrate awareness of the responsibilities of local, national and international citizenship.	М

If the course is required in a program or it is an elective in a program, please indicate how the course contributes to the Program Student Learning Outcomes. List the Program Student Learning Outcomes and indicate the degree or level of connection between the course and outcome as I, M, or E. Please delete this table if it is not applicable.

CONNECTION OF HVC 106 Comfort Heating Systems to PROGRAM STUDENT LEARNING OUTCOMES FOR HVAC program		
		I,M,E
1	Solder, Braze, and Flare copper tubing.	Е
2	Safely wire and install electrical circuits	Е
3	Use electrical meters to make electrical measurements	Е
4	Understand and interpret wiring schematics	Е
5	Troubleshoot electrical problems	Е
6	Evacuate, charge and recover refrigerant from Air Conditioning and Refrigeration systems	E
7	Troubleshoot Air Conditioning and Refrigeration systems	Е
8	Troubleshoot Heating systems	Е

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE

NEW COURSE PROPOSAL

1. Course Number and Name: HVC 107 Comfort Cooling Systems

2.	Originator: Robert Recko		Date: 10.23.12
3.	Division Dean: Kathy Rentsch	ı	Date: 10.23.12
4.	Brief Description of the Prop	osal:	
Ori	eate new course, HVC 107 Com- ginally HVC 103 Air Condition tent to be covered in one 5-cred	ing Systems addressed both heati	e will focus specifically on cooling. Ing and cooling, but there is too muc
5.	Effective Date: Fall 2013		
	Recommended by the Busine mments:	ss & Technology Division	Date: 11.15.12
7.	AA Leadership Team:	I in Brown	Date://2 8/12
	commended:	Not Recommended:	
8.	VP/Academic Affairs:	Gore	Date:
	commended:	Not Recommended:	
	Learning Council:	mar	Date: 12/11/12
	commended: mments:	Not Recommended:	
10.	VP/Academic Affairs:	Toug	Date: 12/11/12
	proved:	Not Approved:	·

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE

NEW COURSE PROPOSAL

Course Discipline/Division: Heating, Ventilation, and Air Conditioning/Business	s & Technology Division
Course Number: HVC 107	
Course Name:	
Comfort Cooling Systems	
Prerequisites and/or corequisites (confer with affecte Prerequisite: HVC 101; Enrollment limited to HVC	
CIP code (check with IRaP Office): 47.0201	
Effective Term/year: Fall 2013	
Give a rationale for the new course. Be sure to indicate This course will focus specifically on cooling. Origin both heating and cooling, but there is too much conterefocuses the HVAC Certificate in preparation for deprogram in a related area.	nally HVC 103 Air Conditioning Systems addressed ent to be covered in one 5-credit course. This change
Is the course content similar to other courses now off. If yes, attach a statement for the coordinator of the de See "rationale."	
Please indicate if this course will serve as any of the Electivex_ Discipline specific (name the discipline) Heatirx_ Program specific (name the program) HVAC C Multiple perspective (confer with the Liberal Ar	ng, Ventilation, and Air Conditioning Certificate
Is this course required for a program? If yes, submit Program Proposal.	a separate Program Revision Proposal or New
Yes	
Expected enrollment per term: 20	Expected enrollment per year: 20

Will any of the following be required: No				
Additional staff Additional space Additional equipment				
Provide a rationale for any needs indicated above and include approximate cost of equipment.				
Library print and non-print resources in support of this course: \$500				
Course Materials				
Course number: HVC 107				
Course name: Comfort Cooling systems				
Credits: 4				
Lecture Hours: 3 Lab hours: 3 Clinic Hours:				
General course description and prerequisites (as it will appear in the catalog):				
HVC 107 Comfort Cooling Systems 4 credits				
This course is a study of mechanical cooling equipment used in comfort cooling, heat pump,				
and other indoor environmental applications. Hands-on laboratories cover the installation and use of				
electrical controls, system evaluation, and mechanical and electrical troubleshooting of residential and				
light commercial applications. Strategies for energy efficiency maintenance procedures are matched to				
appropriate equipment. This course includes a laboratory component.				
Prerequisite: HVC 101; Enrollment limited to HVC majors only				
All required texts and paperbacks, including information on publisher and edition used (provide a				
suggested text):				
Whitman/Johnson. Refrigeration & Air Conditioning Technology. Delmar; ISBN-13: 978-1-4283-1936-				
3;				
ISBN-10: 1-4283-1936-0				
Instructional Objectives (list):				
Through a combination of lectures, demonstrations, weekly assignments and student projects, students:				
1. Demonstrate safe lab practices				
2. Apply knowledge of refrigeration mechanisms to air conditioning applications				
3. Apply industry standards in selecting and constructing materials used in air conditioning installations				
4. Demonstrate the knowledge of control circuit design				
5. Identify normal system temperatures and pressures for diagnosis of system problems				
6. Apply knowledge of refrigeration mechanisms to air to air heat pump applications				
7. Identify normal system temperatures and pressures for diagnosis of heat pump problems				
8. Apply knowledge of fuel gas properties and mechanisms for application to gas heating appliances				
9. Demonstrate knowledge of identifying and evaluating system efficiency				
10. Demonstrate methods of performing procedures that allows equipment to operate at peak energy				
efficiency				
Teaching procedures: (provide suggested teaching methodology):				
1. Whiteboard instruction with PowerPoint slides				
2. In-lab hands-on projects and demonstrations				
3. Supplementary handouts as needed				
4. Question and answer sessions				
5. Weekly homework and laboratory assignments				
6. Online Learning Management System				
Course topics and/or assignments and/or required and/or supplemental reading (provide a list of suggested				

course topics):

Course Topics

Refrigeration Mechanisms for Comfort Cooling

Building Heat Gain and Unit Sizing
Evaporative Cooling
Applying Refrigeration Systems for Comfort Cooling
Cooling Cycle Components for Air Conditioning
Design Conditions
Compressor Design and Application
High Efficiency Design

Text: Unit 36, Refrigeration Applied to Air Conditioning

<u>Installation of Comfort Cooling Systems</u>

Air Flow Materials Specifications
Piping Materials Specifications
Electrical Installation – NEC/MA Elect Code
Unit Start-Up

Text: Unit 38, Installation

Control of Comfort Cooling Equipment

Low Voltage Controls
Operating and Safety Controls
Electronic Controls
Control Strategies for Energy Efficiency

Text: Unit 39, Controls

Typical Operating Conditions

Establishing a Base line for Determining Operational Standards
Humidity Standards
Equipment Grades and Specifications
Refrigerant Controls and Efficiency
Design Factors that affect System Efficiency
Motor Characteristics Under Differing Conditions
Refrigerant Temperature and Pressure Under Differing Conditions

Text, Unit 40 Typical Operating Conditions

Air Source Heat Pumps

Reverse Cycle Refrigeration
Applying Heat Pumps for Efficiency
Heat Pump Cycle Components
Balance Points
Auxiliary Heat
Heat Pump Controls
Heat Pump Troubleshooting

Text: Unit 43 Heat Pumps

Geothermal Heat Pumps

Using Geothermal Energy to Power the Heat Pump Cycle

Cycle and Piping Diagrams

Using Geothermal for Energy Efficiency

Text: Unit 44, Geothermal Heat Pumps

Troubleshooting and Diagnostic Procedures

Diagnostic Logic

Refrigerant Charging Strategies

Troubleshooting the Refrigerant Cycle

Diagnostic Tools and Aides

Electrical Troubleshooting

Service Procedures for Energy Efficiency

Text: Unit 41, Troubleshooting

Other information:

• Suggested basis for student grading and criteria for evaluating student performance Final grades for this course will be based on the following:

Exam 1 (Midterm):

Exam 2: (End of term) 10% Final Exam: 30%

Eleven Quizzes: 20% (all worth the same)
Lab Projects: 30% (all worth the same)

Final course grade will follow the QCC grading system

Suggested attendance policy

Attendance Policy

Attendance is extremely important in this program. The course expectation for attendance mirrors that of the HVAC/R industry. There are also licensing requirements that mandate student hours. After three absences the student will be notified in writing by the instructor about the absences. Students are required to confer with the instructor about what work needs to be made up. It is the responsibility of the student not only make up all work missed but to be sure that all required work is completed on time.

10%

Suggested plagiarism statement

Plagiarism

Submitted assignments are expected to be the product of the student's individual and original effort. Any work deemed by the instructor as plagiarized will not be accepted and the student may subject to further discipline as per the QCC Student Handbook.

Suggested assessment methodologies

Please submit a syllabus for this new course to your dean.

List the Student Learning Outcomes for this course in the table below. Recommendations for writing SLOs can be found in the *General Information for Academic Affairs Proposals* document that is available on the QCC's Intranet under Frequently Used Forms (Academic Governance Forms).

COU	OURSE STUDENT LEARNING OUTCOMES FOR HVC 107 — Comfort Cooling Systems	
Upon completion of the course, students will be able to:		
1	Demonstrate safe lab practices	
2	Apply knowledge of refrigeration mechanisms to air conditioning applications	
3	Apply industry standards in selecting and constructing materials used in air conditioning installations	
4	Demonstrate the knowledge of control circuit design	
5	Identify normal system temperatures and pressures for diagnosis of system problems	
6	Apply knowledge of refrigeration mechanisms to air to air heat pump applications	
7	Identify normal system temperatures and pressures for diagnosis of heat pump problems	
8	Apply knowledge of fuel gas properties and mechanisms for application to gas heating appliances	
9	Demonstrate knowledge of identifying and evaluating system efficiency	
10	Demonstrate methods of performing procedures that allows equipment to operate at peak energy efficiency	

How does the course support general education? Using the chart below, indicate the degree or level of connection between the course and outcome as indicated here.

I – Introductory/Background – There is an indirect relationship between the course and the outcome. The outcome itself is not the focus of the course but at least one element of the course serves as a building block to the achievement of the final outcome. For example, course elements may provide the knowledge, skills or attitudes necessary for the ultimate achievement of the outcome.

M – Intermediate/Transitional - There is more of a direct relationship between the course and the outcome than Introductory. A mixture of course elements supports the final achievement of the outcome, but the final integration of knowledge, skills and attitudes necessary for its achievement is not accomplished in this course. For example, knowledge, skills and/or attitudes (at least 2 of the 3) required for achievement of the outcome may be the focus of the course or course element, but the integration of all three is not.

E – Emphasized – There is a direct relationship between the course and the outcome. At least one element of the course focuses specifically on the complex integration of knowledge, skills and attitudes necessary to perform the outcome.

CONNECTION OF HVC 107 – Comfort Cooling Systems TO GENERAL EDUCATION	I,M,E
STUDENT LEARNING OUTCOMES	
Communication Skills: Students will write and speak effectively.	I
Information Literacy: Students will locate, evaluate and apply reliable and appropriate information.	Е
Quantitative Reasoning: Students will apply the concepts and methods of mathematics to solve	Е
problems.	
Scientific Reasoning: Students will relate scientific methods of inquiry to the acquisition of	Е
knowledge.	
Technical Literacy: Students will utilize computer an emerging technologies effectively.	Е
Aesthetics: Students will appreciate the variety of human experiences as expressed through the arts.	I
Multiple Perspectives: Students will demonstrate knowledge and appreciation of diverse cultures.	I
Ethics: Students will develop an awareness of personal obligations and responsibilities in one's	I
community of influence.	
Impact of Technology: Students will reflect on the impact of scientific and technological advances	Е
on the individual, society and the environment.	
Civic Literacy: Students will demonstrate awareness of the responsibilities of local, national and	M
international citizenship.	

If the course is required in a program or it is an elective in a program, please indicate how the course contributes to the Program Student Learning Outcomes. List the Program Student Learning Outcomes and indicate the degree or level of connection between the course and outcome as I, M, or E. Please delete this table if it is not applicable.

CONNECTION OF HVC 107 – Comfort Cooling Systems to PROGRAM STUDENT LEARNING OUTCOMES FOR HVAC program		
		I,M,E
1	Solder, Braze, and Flare copper tubing	É
2	Safely wire and install electrical circuits	E
3	Use electrical meters to make electrical measurements	E
4	Understand and interpret wiring schematics	E
5	Troubleshoot electrical problems	E
6	Evacuate, charge and recover refrigerant from Air Conditioning and Refrigeration systems	E
7	Troubleshoot Air Conditioning and Refrigeration systems	E
8	Troubleshoot Heating systems	E

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

1	1. Frogram Name: Heating Ventilation Air Conditioning Certificate	
2	2. Originator: Robert Recko Date: 10.23.12	
3.	3. Division Dean: Kathy Rentsch Date: 10.23.12	
4.	4. Brief Description of the Proposal:	
	 Replace HVC 103 Air Conditioning Systems (Semester 1) with HVC 106 Comford (Semester 1) and HVC 107 Comfort Cooling Systems (Semester 2). Remove Elective from Semester 1. Add Program note: "Students are strongly encouraged to take HVC 101, 102, and 107, 104, and 105 together." 	
5.	5. Effective Date: Fall 2013	
6.	6. Recommended by the Business & Technology Division Date: 11.15.12	
	Comments:	
	7. AA Leadership Team: A man Brown Date: 11/2. Recommended: Not Recommended: Comments:	811 <u>1</u>
ð.	8. VP/Academic Affairs: Date: Recommended: Not Recommended:	
9.	9. Learning Council: Recommended: Comments: Date:	/12
	10. VP/Academic Affairs: Date: /2/W Approved: Not Approved: Comments:	1/2

QUINSIGAMOND COMMUNITY COLLEGE

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

Program: Heating Ventilation Air Conditioning

Division: Business & Technology

Degree type: Certificate

Provide a detailed list of the proposed changes to the program.

- 1. Replace HVC 103 Air Conditioning Systems (Semester 1) with HVC 106 Comfort Heating Systems (Semester 1) and HVC 107 Comfort Cooling Systems (Semester 2).
- 2. Remove Elective from Semester 1.
- 3. Add Program note: "Students are strongly encouraged to take HVC 101, 102, and 106 together; and HVC 107, 104, and 105 together."

Attachments:

- X Current program grid
- X Proposed program grid

Submit separate proposals for any new courses or revised courses in the program. Attached

Provide a rationale for the proposed changes.

Originally HVC 103 Air Conditioning Systems addressed both heating and cooling, but there is too much content to be covered in one 5-credit course. This change refocuses the HFAC Certificate in preparation for development and introduction of an Associate Degree program in a related area.

Do any of the proposed changes affect the program goals, the program student learning outcomes, or the course mapping of the General Education Learning Outcomes? If so please provide the revisions. No

Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments.

Department(s) Affected: n/a

Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. n/a

For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? n/a

If yes please provide a rationale.

Will any of the following be required:

Additional staff No Additional space No Additional equipment No Provide a rationale for any needs indicated and include approximate cost of equipment.

HEATING VENTILATION AIR CONDITIONING CERTIFICATE (Program Code: HVAC) CURRENT

Stand on the burney of the control of the Analysis of the Control	acceptation of the second seco	Meaning that the second		The state of the s	(0.1	
Course Title	Course #	Offered	Plan to	Grade	Credits	Cradic Praramisitas
er er estadistigen de de tres mande proprocessor para de fre en estadamente de tres de estadamente en estados e	Company of the Compan		lake		Cina	Colchan
Semester 1				And the state of t		
Introduction to Microcomputer Applications	CIS 111	F/S/SU			က	
Elective*	*****				· m	
Basic Refrigeration Systems and Heat Theory	HVC 101	比			4	Enrollment limited to HVC Majors only
Basic Electricity	HVC 102	ш			4	Enrollment limited to HVC majors only
Semester 2					-	
Air Conditioning Systems	HVC 103	S			S	HVC 101: Enrollment limited to HVC majors only
Mass. Refrigeration Code	HVC 104	တ			4	HVC 101: Enrollment limited to HVC majors only
Mass. Electrical Code	HVC 105	S			4	HVC 102: Enrollment limited to HVC maiors only
Total Credits Required					27	

HEATING VENTILATION AIR CONDITIONING CERTIFICATE (Program Code: HVAC) PROPOSED

AMERICAN SERVICES AND	ether Michigan Control of Control				,	
Course Title	Course #	Offered	Plan to Take	Grade	Credits	Credits Prerequisites
Semester 1	And in the contract of the con	and the fall is any face of the fall is the fall of th		Artes in the Section of the section is the		
Introduction to Microcomputer Applications	CIS 111	F/S/SU			က	
Basic Refrigeration Systems and Heat Theory	HVC 101	Ц.			4	Enrollment limited to HVC Majors only
Basic Electricity	HVC 102	ш			4	Enrollment limited to HVC majors only
Comfort Heating Systems	HVC 106	ш			4	Corea: HVC 101: Furoliment limited to HVC majors only
Semester 2						
Comfort Cooling Systems	HVC 107	S			4	Enrollment limited to HVC maiors only
Mass. Refrigeration Code	HVC 104	S			4	HVC 101: Furoilment limited to HVC maiors only
Mass. Electrical Code	HVC 105	S			4	HVC 102: Enrollment limited to HVC maiors only
Total Credits Required					27	(iii) and far

Program Note: Students are strongly encouraged to take HVC 101, 102, and 106 together; and HVC 107, 104, and 105 together.

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. Course Number and Name: SUR 115 Asepsis	
2. Originator: Deborah Coleman	Date: November 7, 2012
3. Division Dean: Jane E. June	Date: November 15, 2012
Brief Description of the Proposal: Move SUR 115 from semester and remove corequisite.	Fall semester to Summer
4. Effective Date: Summer 2013	
5. Recommended by the Healthcare Division. Comment:	Date: November 15, 2012
6. AA Leadership Team:	
7. VP/Academic Affairs: Recommended: Not Recommended: Comments:	Date:
8. Learning Council:	•
	Date: 12/11/12
Comments:	

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

Type of Revision:					
Description Prerequisite X_Corequisite Number Name #credits					
Elective TypeX_ other (explain) change in semester					
Course Discipline or Department: Surgical Division: Healthcare					
Technology					
Current Course Number: SUR 115					
Current Course Name: Asepsis					
Current Course Description (as it appears in the college catalog):					
SUR 115 Asepsis 2 credits This course covers the principles and practices of surgical asepsis that must be maintained in the clinical setting. Included are the study of					
microscopic life forms, the relationship of microbes to disease and illness, the principles and techniques of disinfection, sterilization, antisepsis,					
and the development of the "surgical conscience".					
Corequisites: SUR 101, SUR 111. F					
Proposed Description (include all proposed changes):					
SUR 115 Asepsis 2 credits					
This course covers the principles and practices of surgical asepsis that must be maintained in the clinical setting. Included are the study of					
microscopic life forms, the relationship of microbes to disease and illness, the principles and techniques of disinfection, sterilization, antisensis					
and the development of the "surgical conscience". Prerequisites: Enrollment limited to Surgical Technology majors only.					
Rationale for the change:					
Nationale for the change.					
In order to be compliant with the new commission of the state of the s					
In order to be compliant with the new curriculum additional material will be added to other Fall					
courses. Therefore by moving SUR 115 to the summer it will free up time to add additional required material in the Fall. Remove corequisite SUR 101 and SUR 111					
required material in the Fall. Remove corequisite SUR 101 and SUR 111.					
Provide a description of any charge in source					
Provide a description of any change in course content.					
Does the course revision affect another department? Please confer with the coordinator of the					
affected department.					
Affected department(s)					
If this change affects a program grid, please submit a current and proposed program grid for each					
and proposed program grid for each					
program affected					
Please submit a syllabus to your dean with all of the revisions included.					

1. Course Number and Na	me: SUR 101 Perioperative I	ssues
2. Originator: Deborah C	oleman	Date: November 7, 2012
3. Division Dean: Jane E.	June	Date: November 15, 2012
4. Brief Description of the description change, cont	Proposal: Reduce the credits tent and pre/co-requisite chan	s from 5 cr. to 3 cr., course age.
5. Effective Date: Fall 201	3	
6. Recommended by the Honorement:	ealthcare Division.	Date: November 15, 2012
7. AA Leadership Team: _	A in Brown	Date: 1//28/12
Recommended:Comments:	Not Recommended:	
8. VP/Academic Affairs:		Date:
Recommended:	Not Recommended:	
9. Learning Council:	Janh	Date: 12/11/12
Recommended:Comments:	Not Recommended:	
10. VP/Academic Affairs:		Date:
Approved:	Not Approved:	-
Comments:		

Type of Revision:X_ Description _X_ Prerequisite _X_Corequisite Number Name _X_#credits			
Elective Type other (explain)			
Course Discipline or Department: Surgical Division: Healthcare Technology			
Current Course Number: SUR 101			
Current Course Name: Perioperative Issues			
Current Course Description (as it appears in the college catalog): SUR 101 Perioperative Issues 5 credits This course provides knowledge in the areas of patient care directly associated with the surgical experience. Included are an in-depth overview of the hospital, the operating room and its equipment, and the individual roles of the surgical team; principles of patient safety: identification, transportation, and positioning; medical terminology, and, surgical pharmacology. Prerequisites: BIO 100 or BIO 140. F			
Proposed Description (include all proposed changes): SUR 101 Perioperative Issues 3 credits This course provides knowledge in the areas of patient care directly associated with the surgical experience. Included are an indepth overview of the hospital, the operating room and its equipment, and the individual roles of the surgical team; principles of patient safety: identification, transportation, and positioning; and, surgical pharmacology. Prerequisites: BIO 100 or BIO 140, SUR 115 Co-requisite: SUR 111 F			
Rationale for the change: In order to be compliant with the new curriculum additional material will be added to other courses. Therefore by moving the medical terminology to the summer semester students will be better prepared for the Fall and promote increased learning. ALH 102 Introduction to Medical Terminology would then be required in 1 st semester.			
Provide a description of any change in course content.			
The medical terminology would be removed from the course.			
Does the course revision affect another department? Please confer with the coordinator of the affected department. Affected department(s)			
If this change affects a program grid, please submit a current and proposed program grid for each program affected			
Please submit a syllabus to your dean with all of the revisions included.			

1. Course Number and Nam	ne: SUR 111 Operating Room	Techni	iques
2. Originator: Deborah Col	eman	Date:	November 7, 2012
3. Division Dean: Jane E. J	une	Date:	November 15, 2012
4. Brief Description of the F change. Change co-requi	Proposal: Add 1 credit with desiste SUR 115 to prerequisite S	escriptio SUR 115	on and content
5. Effective Date: Fall 2013			
6. Recommended by the Heat Comment:	althcare Division.	Date:	November 15, 2012
7. AA Leadership Team: Recommended: Comments:	Not Recommended:	Date: _	11/38/12
8. VP/Academic Affairs: Recommended: Comments:	Not Recommended:	Date: _	11/20/12
9. Learning Council:	- Jan Ja	⊵Date: _	12/11/12
Recommended:	Not Recommended:		/
10. VP/Academic Affairs:	Not Approved:	Date: _	12/11/h
Comments:			

Type of Revision:			
X Description _X_ Prerequisite _X_Corequisite Number Name _X_ #credits			
Elective Type other (explain)			
Course Discipline or Department: Surgical Division: Healthcare			
Technology			
Current Course Number: SUR 111			
Current Course Name: Operating Room Techniques			
Current Course Description (as it appears in the college catalog):			
SUR 111 Operating Room Techniques 4 credits This course introduces techniques and procedures utilized during the surgical experience. Topics covered include scrubbing, gowning, and			
gloving; and the establishment of the sterile field with its armamentarium of sutures, instruments, and supplies. The laboratory component			
allows the student to observe and demonstrate the principles and procedures taught in the classroom in a non-patient contact environment.			
Corequisites: SUR 101, SUR 115. F Proposed Description (include all proposed changes):			
SUR 111 Operating Room Techniques 5 credits			
This course introduces techniques and procedures utilized during the surgical experience. Topics covered include scrubbing gowning and			
gloving, and the establishment of the sterile field with its armamentarium of sutures, instruments, supplies and equipment. The course includes			
an in depth discussion of laparoscopic equipment and supplies, laser, and emergency preparedness. The laboratory component allows the student to observe and demonstrate the principles and procedures taught in the classroom in a non-patient contact environment.			
Prerequistes: SUR 115, ALH 102			
Corequisites: SUR 101 F			
Rationale for the change: The accrediting agency has changed the core curriculum. Additional			
didactic content to be added equivalent to 15 hours per semester. SUR 115 moved to Semester 1			
so will serve as prerequisite instead of co-requisite.			
Dravida a description of any change in covers contact			
Provide a description of any change in course content.			
There has been an increased number of symplical instruments consistent and			
There has been an increased number of supplies, instruments, equipment and emergency preparedness added.			
preparedness added.			
Does the course revision affect another department? Please confer with the coordinator of the			
affected department. No			
Affected department(s)			
· · · · · · · · · · · · · · · · · · ·			
If this change affects a program grid, please submit a current and proposed program grid for each			
program affected			
Please submit a syllabus to your dean with all of the revisions included.			
y and the fortistens metadog.			

1. Course Number and Name: SUR 121 Surgical Pro Obstetrics/Gynecology and Orthopedic	cedures I: General,
2. Originator: Debbie Coleman	Date: November 7, 2012
3. Division Dean: Jane E. June	Date: November 15, 2012
4. Brief Description of the Proposal: Course name chadescription change, credit change, pre/corequisite cl	ange, content change, course hange.
5. Effective Date: Fall 2013	
6. Recommended by the Healthcare Division. Comment:	Date: November 15, 2012
7. AA Leadership Team: 1 im Burun	Date: 11/2 P/12
7. AA Leadership Team: Recommended: Not Recommended: Comments:	<u> </u>
8. VP/Academic Affairs:	Date:
Comments:	
9. Academic Affairs Committee:	Pate: 12/1/12
Recommended: Not Recommended: Comments:	<u> </u>
10. VP/Academic Affairs:	Date: _/2/11//2
Approved: Not Approved:	
Comments:	

Type of Revision: _X_ Description _X_ Prerequisite _X_ Corequisite Number _X_ Name _X_ #credits Elective Type other (explain)			
Course Discipline or Department: Surgical Division: Healthcare Technology			
Current Course Number: SUR 121			
Current Course Name: Surgical Procedures I: General, Obstetrics/Gynecology and Orthopedic			
Current Course Description (as it appears in the college catalog):			
SUR 121 Surgical Procedures I: General, Obstetrics/Gynecology and Orthopedic 3 credits This course explores the diagnostic and surgical interventions of general, OB/GYN, and minor orthopedic surgery. Ethical, legal, and moral values relating to the individual patient as well as the operating room procedures are included. Prerequisites: BIO 140. F			
Proposed Description (include all proposed changes):			
SUR 121 Surgical Procedures I This course explores the diagnostic and surgical interventions of general, OB/GYN, orthopedic, EENT, dental/oral/maxillofacial, plastic/reconstructive and GU. Additionally this course covers laparoscopic and robotic procedures for each specialty. Ethical, legal and moral values relating to the individual patient as well as the operating room procedures are included. Prerequisites: BIO 100 or BIO 140, SUR 115 F Co-requisite: SUR 111			
Rationale for the change: Currently the content is offered in two consecutive courses within the same semester. This is confusing to students and challenging to schedule. Content is combined and expanded.			
For change in the number of credits, provide a description of the change in course content. Combined SUR 121 and SUR 221 content which presently totals 6 credits. Added two credits in order to cover laparoscopic and robotic procedures and the numerous procedures in each specialty that our accrediting agency requires be taught. Robotic and laparoscopic surgery utilitize high tech equipment that takes additional time to teach.			
Does the course revision affect another department? Please confer with the coordinator of the affected department. Affected department(s)			
If this change affects a program grid, please submit a current and proposed program grid for each program affected			

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. Course Number and Name: SUR 199 Clinical	Externship I
2. Originator: Deborah Coleman	Date: November 7, 2012
3. Division Dean: Jane E. June	Date: November 15, 2012
4. Brief Description of the Proposal: Course name	ne change and pre/corequisite change
5. Effective Date: Fall 2013	•
6. Recommended by the Healthcare Division. Comment:	Date: November 15, 2012
7. AA Leadership Team: im Bur	Date: 11/2 +/12
Recommended: Not Recommended Comments:	
8. VP/Academic Affairs: Recommended: Not Recommended	Date: //28//2
Comments: 9. Learning Council: Recommended: Not Recommended Comments:	Date: 12/11/12
10. VP/Academic Affairs:	Date:/ 1//2
Approved: Not Approved:	·
Comments:	

Type of Revision: Description _X_ Prerequisit	te _X_Corequisite Number		
X Name#credits Elective Type			
Course Discipline or Department: Surgical Divi	sion: Healthcare		
Technology			
Current Course Number: SUR 199			
Current Course Name: Clinical Externship I			
Current Course Description (as it appears in the college catalog):			
SUR 199 Clinical Externship I 4 credits Students are assigned to surgical settings within the greater Worcester area. Clinical experience provides students with supervised			
applications of the theory, principles, and procedures taught in the classroom. S			
operating room team. This experience takes place in selected area hospitals and clinics and focuses on minimally complex surgical cases.			
Prerequisites: BIO 100 or BIO 140. F			
Proposed Description (include all proposed changes): SUR 199 Clinical I 4 credits			
Students are assigned to surgical settings within the greater Worcester area. Cli	inical experience provides students with supervised		
applications of the theory, principles, and procedures taught in the classroom. S	Students experience patient contact as a member of the		
operating room team. This experience takes place in hospitals and clinics and for Prerequisites: SUR 101, SUR 111, SUR 121, SUR 230 S	ocuses on minimally complex surgical cases.		
Rationale for the change:			
Students must pass all previous classes before starting clinical.			
Students must puss an previous classes octore starting eminear.			
Provide a description of any change in course content.			
Does the course revision affect another department? Please confer with the coordinator of the			
affected department.			
Affected department(s)			
IC41: 1 - 1 CC - to a way word whose a wheat a c	nyment and muchaged muccuom anid for each		
If this change affects a program grid, please submit a current and proposed program grid for each			
program affected			
Please submit a syllabus to your dean with all of the revisions included.			
,			

1.	Ear/Nose/Throat, Dental/Oral/Maxillofacial, Plastic/R Urinary	
2.	Originator: Debbie Coleman	Date: November 7, 2012
3.	Division Dean: Jane E. June	Date: November 15, 2012
4.	Brief Description of the Proposal: Name change, desc change, pre/corequisite change and move from 2 nd sen	ription change, content nester to 3 rd semester.
5.	Effective Date: Fall 2013	
	Recommended by the Healthcare Division mment:	Date: November 15, 2012
7.	AA Leadership Team: Kronn	Date: 11/2 F / 12
Re	commended: Not Recommended: mments:	
	VP/Academic Affairs: Not Recommended:	Date:
	mments:	<u> </u>
9.	Academic Affairs Committee:	Date: 12/11/12
	commended: Not Recommended:	· · · · · · · · · · · · · · · · · · ·
10.	VP/Academic Affairs:	_ Date:
Арј	proved: Not Approved:	-
Co	mments:	

Type of Revision:			
X Description X Prerequisite X Corequisite Number X Name #credits			
Elective Type other (explain)			
Course Discipline or Department: Surgical Division: Healthcare			
Technology			
Current Course Number: SUR 221			
Current Course Name: Surgical Procedures II: Ophthalmology, Ear/Nose/Throat, Dental/Oral/Maxillofacial,			
Plastic/Reconstructive & Genito-Urinary			
Current Course Description (as it appears in the college catalog):			
SUR 221 Surgical Procedures II: Ophthalmology, Ear/Nose/Throat,			
Dental/Oral/Maxillofacial, Plastic/Reconstructive & Genito-Urinary 3 credits			
This course explores the more complex diagnostic and surgical interventions of ophthalmology, ear, nose, and throat, dental/oral/maxillofacial,			
plastic/reconstructive and genito-urinary surgery. This course is scheduled for the second half of the first semester.			
Corequisite: SUR 121. F			
Proposed Description (include all proposed changes):			
SUR 221 Surgical Procedures II 3 credits			
SUR 221 Surgical Procedures II This course explores the diagnostic and surgical interventions of specialized surgeries including thoracic,			
neurosurgery, peripheral and cardiovascular surgeries.			
The area of the same of the sa			
Prerequisite: SUR 121. F			
Prerequisite: SUR 121. F			
Prerequisite: SUR 121. F Rationale for the change:			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify.			
Prerequisite: SUR 121. F Rationale for the change:			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify. Description changed to reflect the content from SUR 225 since SUR 225 was eliminated.			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify.			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify. Description changed to reflect the content from SUR 225 since SUR 225 was eliminated.			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify. Description changed to reflect the content from SUR 225 since SUR 225 was eliminated.			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify. Description changed to reflect the content from SUR 225 since SUR 225 was eliminated.			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify. Description changed to reflect the content from SUR 225 since SUR 225 was eliminated.			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify. Description changed to reflect the content from SUR 225 since SUR 225 was eliminated.			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify. Description changed to reflect the content from SUR 225 since SUR 225 was eliminated. For change in the number of credits, provide a description of the change in course content. Does the course revision affect another department? Please confer with the coordinator of the			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify. Description changed to reflect the content from SUR 225 since SUR 225 was eliminated. For change in the number of credits, provide a description of the change in course content. Does the course revision affect another department? Please confer with the coordinator of the affected department.			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify. Description changed to reflect the content from SUR 225 since SUR 225 was eliminated. For change in the number of credits, provide a description of the change in course content. Does the course revision affect another department? Please confer with the coordinator of the			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify. Description changed to reflect the content from SUR 225 since SUR 225 was eliminated. For change in the number of credits, provide a description of the change in course content. Does the course revision affect another department? Please confer with the coordinator of the affected department. Affected department(s)			
Prerequisite: SUR 121. F Rationale for the change: The content from SUR 221 was added to SUR 121. SUR 221 name changed to simplify. Description changed to reflect the content from SUR 225 since SUR 225 was eliminated. For change in the number of credits, provide a description of the change in course content. Does the course revision affect another department? Please confer with the coordinator of the affected department.			

1.	Course Number and Name: SUR 225 Advanced Surgi Neurosurgery, Peripheral & Cardiovascular	cal Procedures; Thoracic,
2.	Originator: Deborah Coleman	Date: November 7, 2012
3.	Division Dean: Jane E. June	Date: November 15, 2012
4.	Brief Description of the Proposal: Remove from curric	ulum.
5.	Effective Date: Fall 2013	
	Recommended by the Healthcare Division. mment:	Date: November 15, 2012
7.	AA Leadership Team: Jim Brann	Date:
	commended:Not Recommended:	
8.	VP/Academic Affairs:	Date:
	commended: Not Recommended: mments:	<u> </u>
9.	Learning Council:	Date: \[\2/11/12
	commended: Not Recommended: mments:	
10.	VP/Academic Affairs:	Date: ////
Ap	proved: Not Approved:	
Co	mments:	

Type of Revision:		
Description Prerequisite Corequisite Number Name #credits		
Elective Type X other (explain) - Remove from curriculum		
Course Discipline or Department: Surgical Division: Healthcare		
Technology		
Current Course Number: SUR 225		
Current Course Name: Advanced Surgical Procedures: Thoracic, Neurosurgery, Peripheral &		
Cardiovascular		
Current Course Description (as it appears in the college catalog):		
SUR 225 Advanced Surgical Procedures: Thoracic,		
Neurosurgery, Peripheral & Cardiovascular 3 credits This source explores the disposition and exploiting professional devices including the control of the c		
This course explores the diagnostic and surgical interventions of specialized surgeries including thoracic, neurosurgery, peripheral, and cardiovascular surgeries. Because of the nature of the surgical procedures, this course requires unique scheduling during the second half of		
the second semester.		
Prerequisite: SUR 221		
Corequisite: SUR 299. S		
Proposed Description (include all proposed changes):		
Rationale for the change:		
Content will be covered in SUR 221.		
Provide a description of any change in course content.		
Does the course revision affect another department? Please confer with the coordinator of the		
affected department.		
Affected department(s)		
If this change affects a program grid, please submit a current and proposed program grid for each		
program affected		
Please submit a syllabus to your dean with all of the revisions included.		

1. Course Number and Name: SUR 290 Clinical Externship II			
2. Originator: Deborah Coleman	Date: November 7, 2012		
3. Division Dean: Jane E. June	Date: November 15, 2012		
4. Brief Description of the Proposal: Course name chang course description change.	ge, pre/corequisite change,		
5. Effective Date: Fall 2013			
6. Recommended by the Healthcare Division. Comment:	Date: November 15, 2012		
7. AA Leadership Team: June Bunner	Date: 11/2/11		
Recommended: Not Recommended: Comments:			
8. VP/Academic Affairs: Not Recommended:	, , , -		
Comments:			
9. Learning Council:	I		
Recommended: Not Recommended:			
10. VP/Academic Affairs:	Date: 12/11/12		
Approved: Not Approved:	-		
Comments:			

Type of Revision: X_ DescriptionX Prerequisite Corequisite NumberX Name #credits Elective Type other (explain)
C D' : 1' D. dan de Consissi Division, Health
Course Discipline or Department: Surgical Division: Healthcare Tech
Current Course Number: SUR 290
Current Course Name: Clinical Externship II
Current Course Description (as it appears in the college catalog): SUR 290 Clinical Externship II 6 credits This course involves the practical application of the skills, knowledge, and abilities developed in SUR 221 with a specific focus on moderately complex surgical cases, including if possible but not limited to opthamology, ears/nose/throat, dental/oral/ maxillofacial, plastic/reconstructive and genito-urinary. This clinical experience requires appropriate case scheduling. Corequisite: SUR 221. S
Proposed Description (include all proposed changes): SUR 290 Clinical II 6 credits This course involves the practical application of the skills, knowledge, and abilities developed in SUR 121 with a specific focus on moderately complex surgical cases, such as opthamology, ears/nose/throat, dental/oral/ maxillofacial, plastic/reconstructive and genito-urinary. This clinical experience requires appropriate case scheduling. Prerequisite: SUR 199. S
Rationale for the change: SUR 121 and SUR 221 combine to make the new SUR 121. Revise prerequisite to reflect previous clinical course.
Provide a description of any change in course content.
Does the course revision affect another department? Please confer with the coordinator of the affected department. Affected department(s)
If this change affects a program grid, please submit a current and proposed program grid for each program affected
Please submit a syllabus to your dean with all of the revisions included.

1. Course Number and Name: SUR 299 Advanced Clinic	cal Externship
2. Originator: Deborah Coleman	Date: November 7, 2012
3. Division Dean: Jane E. June	Date: November 15, 2012
4. Brief Description of the Proposal: Course name chang SUR 221 to SUR 290 and corequisite removal.	e, prerequisite change from
5. Effective Date: Fall 2013	
6. Recommended by the Healthcare Division Comment:	Date: November 15, 2012
7. AA Leadership Team: Jun Bunn	Date:
Recommended: Not Recommended:	
8. VP/Academic Affairs:	Date:
Recommended: Not Recommended: Comments:	
9. Learning Council:	Date: > /11//2
Recommended: Not Recommended: Comments:	
10. VP/Academic Affairs:	Date:
Approved: Not Approved:	
Comments:	

Type of Revision: Description X Prerec	
Name #credits Elective Type or	ther (explain)
Course Discipline or Department: Surgical	Division: Healthcare
Tech	
Current Course Number: SUR 299	
Current Course Name: Advanced Clinical Extern	nship
Current Course Description (as it appears in the	college catalog):
SUR 299 Advanced Clinical Externship	6 credits
This course involves the practical application of the skills, knowledge, are	
the operating room team. This clinical experience focuses on the more	complex surgical procedures
Prerequisite: SUR 221	
Corequisite: SUR 225. S	
·	
Proposed Description (include all proposed chan	ges):
SUR 299 Clinical III	6 credits
This course involves the practical application of the skills, knowledge, ar	nd abilities taught in the classroom via patient contact as a member of
the operating room team. This clinical experience focuses on more com	plex surgical procedures.
Prerequisite: SUR 290 S	
Troroquisitor Contact	•
Rationale for the change:	
Revise prerequisite to reflect the previous clinica	l course. SUR 225 removed from curriculum.
I I	
Provide a description of any change in course con	ntent.
Trovide a description of any enamed in control to	. Itoliti
Does the course revision affect another departme	nt? Places confer with the coordinator of the
affected department.	int? Flease conner with the coordinator of the
Affected department(s)	
TO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
If this change affects a program grid, please subm	nit a current and proposed program grid for each
program affected	
Please submit a syllabus to your dean with all of	the revisions included.
•	

2012-2013

QUINSIGAMOND COMMUNITY COLLEGE

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

1.	Program Name: Surgical Technology	
2.	Originator: Deborah Coleman	Date: November 7, 2012
3.	Division Dean: Jane E. June	Date: November 15, 2012
4.	Brief Description of the Proposal: The Association of Score curriculum. Many items have been added or expandecome compliant with the new core curriculum and princrease the program by 4 credits.	nded in the new curriculum. In order to
5.	Effective Date: Fall 2013	
6.	Recommended by the Healthcare Division. Comments:	Date: November 15, 2012
7.	AA Leadership Team: Not Recommended:	n Date:
8.	VP/Academic Affairs: Recommended: Comments: Not Recommended:	Date:
9.	Recommended: Not Recommended: Comments:	Date: 12/11/62
10.	VP/Academic Affairs: Approved: Not Approved:	Date:/2/11//2

2012-2013

QUINSIGAMOND COMMUNITY COLLEGE

DEGREE PROGRAM OR CERTIFICATE REVISION PROPOSAL

	Program:
	Surgical Technology
	Division:
	Health Care
	Degree type:
	Certificate
	Provide a detailed list of the proposed changes to the program.
-	1. ALH 102 added (1 st semester) to curriculum
ı	2. SUR 115 remove corequisite, moved from 2 nd semester to 1 st semester
	3. SUR 101 pre/corequisite change, credit change decrease from 5 to 3, content and course
	description change
	4. SUR 111 pre/corequisite change, credit change increase from 4 to 5, content and course
l	description change
	5. SUR 121 pre/corequisite change, credit increase from 6 to 8, content and course description
	change, combine SUR 121 and SUR 221 and name change
١	6. SUR 199 pre/corequisite change and name change
	7. SUR 221 pre/corequisite change, move from 2 nd to 3 rd semester, content and course description
	change and name change,
	8. SUR 225 remove from curriculum
l	9. SUR 290 pre/corequisite change, course description change and name change
ļ	10. SUR 299 pre/corequisite change and name change
	Attachments:
	Current program grid
l	Proposed program grid
ŀ	
	Submit separate proposals for any new courses or revised courses in the program.
ŀ	D '1 (' 1 C 4 1 - 1 1 - 1
l	Provide a rationale for the proposed changes.
l	
ľ	Do any of the proposed changes affect the program goals, the program student learning outcomes,
l	or the course mapping of the General Education Learning Outcomes? If so please provide the
	revisions.
l	
Γ	Do any of the proposed changes affect another department? Examples include the deletion or
	addition of program courses that are offered by other departments. Please confer with the
	coordinators of affected departments.
	Department(s) Affected:
L	
	Do any of the proposed changes affect articulation agreements? Consult with the Transfer
	Coordinator.
L	
	For an associate degree program, are there any changes in the number of general education credits
	that could affect MassTransfer?
L	If yes please provide a rationale.
	Will any of the following be required:
	Additional staff Additional space Additional equipment
ı	Provide a rationale for any needs indicated and include approximate cost of equipment.

SURGICAL TECHNOLOGY - Certificate (Program Code: ST) - CURRENT

Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
Semester 1 (Summer 1 or 2)		Sharmer and the state of the st		Constitution of the second second	Control of the second s	
Introduction to the Human Body	BIO 140	F/S/SU			4	ENG 100
Semester 2						
Perioperative Issues	SUR 101	Щ			5	BIO 140
Operating Room Techniques	SUR 111	ட			4	Corea-SUR 101, SUR 115
Asepsis	SUR 115	Щ			2	Coreq-SUR 101, SUR 111
Surgical Procedures I: General, Obstetrics/ Gynecology, & Orthopedic	SUR 121	Щ			ო	BIO 140
Surgical Procedures II: Ophthalmology, Ear/ Nose/ Throat, Dental/ Oral/Maxillo Facial, Plastic/Reconstructive & Genito-Urinary	SUR 221	ட			ო	Coreq-SUR 121
Ethics	SUR 230	ட				
Semester 3						
Clinical externship I	SUR 199	S			4	BIO 140
Advanced Surgical Procedures: Thoracic, Neurosurgery, Peripheral & Cardiovascular	SUR 225	S			က	SUR 221, Coreq-SUR 299
Clinical Externship II	SUR 290	တ			9	SUR 221
Advanced Clinical Externship	SUR 299	S			9	SUR 221, Coreq-SUR 225
						,
		100		1.01		
Total credits required					41	
	·					

Sertificate:

al Technology

Program:

cal Technology prepares graduates to as surgical technicians and to take the sional certificate exam.

- mission Requirements: High School Diploma or GED (refer to page 9) Please see admission requirements on
 - rogram pages and on page 13-15. Attend a Health Information Session
- e see Admission Process in the program uction.

lext Step:

professional certification exam, pursue mal education in health related field or he workforce.

am Coordinator:

ah Coleman 508.854.2734 dcoleman@qcc.mass.edu

am Notes:

Iditional information see program rction on page 185.

SORI/DRUG TEST:

red of all accepted students prior to ing clinical experiences.

iical Performance Standards:

o application to this program, please the Technical Performance Standards ements on pages 16-19.

SURGICAL TECHNOLOGY - Certificate (Program Code: ST) - PROPOSED

Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
Semester 1 (Summer 1 or 2)						
Asepsis	SUR 115	S			2	Enrollment limited to Surgical Technology majors only
Principles of Human Biology or Introduction to the Human Body	BIO 100 BIO 140	F/S/SU			4	ENG 100 or approp place score
Introduction to Medical Terminology	ALH 102	F/S/SU			က	Coreq- ENG 100 or approp place score
Semester 2	The state of the s					
Perioperative Issues	SUR 101	щ			က	BIO 100 or BIO 140, SUR 115 Coreq-SUR 111
Operating Room Techniques	SUR 111	ட			5	ALH 102, SUR 115 Coreq-SUR 101
Surgical Procedures I	SUR 121	ட			∞	BIO 100 or BIO 140, SUR 115 Corea- SUR 111
Ethics	SUR 230	ᄔ			~	-
Semester 3						
Clinical 1	SUR 199	တ			4	SUR 101, SUR 111, SUR 121, SUR 230
Surgical Procedures II	SUR 221	S			က	SUR 121
Clinical II	SUR 290	S			9	SUR 199
Clinical III	SUR 299	S			9	SUR 290
Total credits required					45	

Certificate:

ical Technology

Program:

s surgical technicians and to take the essional certificate exam. ical Technology prepares graduates to

nission Requirements:

- High School Diploma or GED (refer to page 9)
- Please see admission requirements on program pages and on page 13-15. Attend a Health Information Session
- ise see Admission Process in the program duction.

 Next Step:
 or professional certification exam, pursue
 itional education in health related field or r the workforce.

gram Coordinator:

orah Coleman 508.854.2734 dcoleman@qcc.mass.edu

gram Notes:

additional information see program duction on page 185.

RI/SORI/DRUG TEST:

uired of all accepted students prior to nning clinical experiences.

hnical Performance Standards:

r to application to this program, please we the Technical Performance Standards irements on pages 16-19.

1.	Course Number and Name: NUR 100 Paramedic to AD	N Bridge
2.	Originator: Ellen Vangel-Brousseau	Date: November 1, 2012
3.	Division Dean: Jane E. June	Date: November 15, 2012
	Brief Description of the Proposal: Change in course de Paramedic to ADN Bridge course	scription for NUR 100
4.	Effective Date: Fall 2013	
5.	Recommended by the Healthcare Division. Comment:	Date: November 15, 2012
6.	AA Leadership Team: June Bunn	Date:
Re	commended: Not Recommended: mments:	
Re	VP/Academic Affairs: Not Recommended: mments:	Date:
Rec	Learning Council:	Date: [3/1//2
Co	mments:	, ,
	VP/Academic Affairs: Not Approved:	Date:
Co	mments:	

Type of Revision:
X Description Prerequisite Corequisite Number Name #credits
Elective Type other (explain)
Course Discipline or Department: Advanced Division: Healthcare
Placement Evening
Current Course Number: NUR 100
Current Course Name: Paramedic to ADN Bridge
Current Course Description (as it appears in the college catalog):
NUR 100 Paramedic to ADN Bridge 1 credit
This one credit course focuses on curriculum topics that are essential for those students who hold a Paramedic certification in the state of Massachusetts and who are seeking advanced placement into the QCC Associate of Science Degree in the Nurse Education Evening
Massachusetts and who are seeking advanced placement into the QCC Associate of Science Degree in the Nurse Education Evening Program. Topics include: scope of practice, holistic philosophy of nursing practice, ethical and legal issues, grief/loss, activity and exercise,
intro to aging, skin integrity, nutrition and feed, stress/coping and principles of medication administration. Clinical lab content includes:
Hygiene/bed bath and massage, changing an occupied bed, transfer, range of joint motion and feeding a patient. This course also includes 2
evenings in the clinical setting practicing skills previously mentioned. Successful completion of this one credit course with a C or better enable student to enter NUR 101 a one credit Advanced Placement Nursing I course.
Pre-requisites: Paramedic Certification in the state of Massachusetts. Has met admission requirements for the
Associate Degree in Nurse Education Program which includes completion of BIO 111, BIO 112, PSY 101, ENG 101. F
Proposed Description (include all proposed changes):
NUR 100 Paramedic to ADN Bridge 1 credit
This one credit course focuses on curriculum topics that are essential for those students who hold a Paramedic certification in
the state of Massachusetts and who are seeking Advanced Placement into the QCC Associate of Science Degree Nurse Education Evening Program. Topics include: Foundations of Nursing Practice, Nursing Theory and Evidenced Based Practice,
Scope of Practice, Legal, Ethical and Advocacy Issues, Roles basic to nursing care, role transition, actions basic to nursing care
and promoting healthy psychosocial responses. Introduction to the nursing process is also discussed. Clinical lab content
includes basic nursing skills practice and competency. This course also includes clinical practice of basic skills in the long term
care setting. Successful completion of this one credit course with a C or better enable students to enter the NUR 101 Advanced
Placement Nursing I course.
Pre-requisites: Paramedic Certification in the state of Massachusetts, BIO 111, BIO 112, PSY 101, ENG 101. F
Rationale for the change:
More clearly represents curriculum and lab topics
Provide a description of any change in course content.
Provide a description of any change in course content.
Does the course revision affect another department? Please confer with the coordinator of the
affected department. NO
Affected department(s)
If this change affects a program grid, please submit a current and proposed program grid for each
program affected
Please submit a syllabus to your dean with all of the revisions included.

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE COURSE REVISION PROPOSAL

1.	Course Number and Name: NU	R 101 Advanced Placer	ment Nur	rsing I
2.	Originator: Ellen Vangel-Brouss	seau	Date: N	November 1, 2012
3.	Division Dean: Jane E. June		Date: N	November 15, 2012
	ief Description of the Proposal: (vanced Placement Nursing I	Change in course descr	iption fo	r NUR 101
4.	Effective Date: Fall 2013			
Co	Recommended by the Healthcard			ovember 15, 2012
6.	AA Leadership Team:	in Bryn	_Date:	11/25/12
Re	commended: Not i	Recommended:		
Re	VP/Academic Affairs:	· /		11/20/12
			_	
8.	Learning Council:		Date:	
	commended: Not I mments:	Recommended:		
9.	VP/Academic Affairs:	Mong .	Date:	12/1/1
Ap	proved: Not	Approved:		,
Co	mments:			

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE COURSE REVISION PROPOSAL

Type of Revision:
X Description Prerequisite Corequisite Number Name #credits
Elective Type other (explain)
Course Discipline or Department: Advanced Division: Healthcare
Placement Evening
Current Course Number: NUR 101
Current Course Name: Advanced Placement Nursing I
Current Course Description (as it appears in the college catalog):
NUR 101 Advanced Placement Nursing I 1 credit
Nursing 101 is a one credit course designed for all qualified Licensed Practical Nurses seeking advanced placement into (NUR 105). The
course focuses on curriculum topics that are essential for the first semester Associate Degree nursing student. Topics include the philosophy and objectives of associate degree nursing education and of the Quinsigamond Community College Nurse Education Program; the nursing
process, with emphasis on deriving nursing diagnoses, decision making, critical thinking and priority setting; Orem's Theory of Self care; and
Erickson Theory of Human Development. The course also covers therapeutic communication techniques, multicultural factors affecting nursing
practice, teaching/learning, informatics, health promotion and complementary alternative medicine. The clinical component includes practice and return demonstration of physical assessment techniques in the college nursing laboratory setting using fellow nursing students and Vital
SIM technology.
Prerequisites: BIO 112, NUR 100 or admission to LPN to ADN program, PSY 101.
Corequisites: NUR 103 (credentialed) and NUR 104 (credentialed).
Restriction: This course is restricted to those students who have met admission requirements for the Associate Degree in the Aussing program and hold a current Program and hold a curr
in the Nursing program and hold a current Practical Nursing licensure from an approved program. F Proposed Description (include all proposed changes):
NUR 101 Advanced Placement Nursing I 1 credit
This one credit course is designed for all qualified License Practical Nursing and Paramedics
who are seeking advanced placement into the Evening Associate of Science Degree Program,
NUR 105 course. The course focuses on curriculum topics that are essential for the first
semester Associate Degree nursing student. Topics include: Nursing philosophy of the profession and of the QCC Associate of Science degree Nurse Education Program, nursing
process application, decision making, critical thinking and priority setting, Orem's Theory of
Self Care and Erickson Theory of Human Development. The course also reinforces roles basic
to nursing care, health promotion and complementary alternative medicine, physical assessment
and fluid and electrolytes. The clinical component includes practice and competency of all lab
modules completed by the Fundamentals of Nursing NUR 104 students including asepsis, wound
care, and other assigned modules. Successful completion of this one credit course with a C or
better enables students to credential for NUR 103 and NUR 104.
Prerequisites: BIO 111, BIO 112, NUR 100, ENG 101, PSY 101. Corequisites: NUR 103 (credentialed) and NUR 104 (credentialed).
Restriction: This course is restricted to those students who have met admission requirements for the Associate Degree
in the Nursing program and hold a current Practical Nursing licensure from an approved program. F
Rationale for the change:
Need to add Paramedics to Course Description plus make changes to accurately reflect current
curriculum.
Provide a description of any change in course content.
Does the course revision affect another department? Please confer with the coordinator of the
affected denartment NO

Affected department(s)

If this change affects a program grid, please submit a current and proposed program grid for each program affected

Please submit a syllabus to your dean with all of the revisions included.

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE NEW DEGREE PROGRAM OR NEW CERTIFICATE **PROPOSAL**

1. Program Name: Hea	lthcare Certificate Emergenc	y Medical Technician	ı	
2. Originator: Jane E. J	une	Date: October 19,	, 2012	
3. Division Dean: Jane 1	E. June	Date: November	15, 2012	
4. Brief Description of th	ne Proposal: Career ladder in	iitiative as part of the	DOL grant.	
5. Effective Date: Fall 2	013			
6. Recommended by the	Healthcare Division.	Date: Nove	mber 15, 2012	
Comment:				
	Jim Bum		128/12	
Recommended: Comments:	_ Not Recommended:			
8. VP/Academic Affairs: Recommended: Comments:		Date:/	/28/12	
9. Learning Council: Recommended: Comments:		Date:	3/11/12	
10. VP/Academic Affairs:(_	Tores	Date:	12/1/2	
Approved:	Not Approved:			
Comments:				
			COP	
		Pa	ichet sent	ot TB
ng Council - December 11, 2012	P109	×	COP rehet sent for B.	1/8/13

FOR NEW PROGRAM/CE	RTIFICATE OR PROGRAM/CERTIFICATE CLOSURE O	NLY
President:	Date:	
Approved:	Not Approved:	
Board of Trustees:	Date:	
Approved:	Not Approved:	

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE NEW DEGREE PROGRAM OR NEW CERTIFICATE PROPOSAL

Program: Emergency Medical Technician

Division: Healthcare

Degree type: Certificate

CIP code for the degree program or certificate (check with IRaP Office): 51.0904

Attachments:

Proposed program grid

Submit separate proposals for any new courses or revised courses in the program.

Provide a rationale for the proposed new program including a narrative for each of the following:

- How the need for this new program or certificate was determined Career ladder and Department of Labor grant
- How the program was designed Input within the Healthcare Division and Academic Affairs Leadership Team
- Wage analysis where appropriate; consult with IRaP office
- How the new program or certificate was reviewed, approved, or developed in conjunction
 with an advisory board or other external agency Department of Labor Process Team,
 Department of Labor Program Team and Academic Affairs Leadership Team
- Demonstrated regional employer interest in hiring graduates Yes

List the program goals.

To secure employment in Emergency Medical Services.

To continue with education through a career ladder.

Does any aspect of the proposed program affect another department? Please confer with the coordinators of affected departments. No Affected department(s):

For an associate degree program, does the proposed program meet the general education credit requirement for MassTransfer?

If no, please provide a rationale.

Does the program or certificate qualify for financial aid? Check with the Director of Financial Aid and fill out the Gainful Employment Form as needed.

Will any of the following be	required:		
Additional staff _X	Additional space X	Additional equipment X	
Provide a rationale for any n	eeds indicated and include	approximate cost of equipment.	
G			
Start-up collection of library	resources in support of thi	s program: \$2,500	

List the Program Student Learning Outcomes in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

I – Introductory/Background – There is an indirect relationship between the course and the outcome. The outcome itself is not the focus of the course but at least one element of the course serves as a building block to the achievement of the final outcome. For example, course elements may provide the knowledge, skills or attitudes necessary for the ultimate achievement of the outcome.

M — Intermediate/Transitional - There is more of a direct relationship between the course and the outcome than Introductory. A mixture of course elements supports the final achievement of the outcome, but the final integration of knowledge, skills and attitudes necessary for its achievement is not accomplished in this course. For example, knowledge, skills and/or attitudes (at least 2 of the 3) required for achievement of the outcome may be the focus of the course or course element, but the integration of all three is not.

E-Emphasized – There is a direct relationship between the course and the outcome. At least one element of the course focuses specifically on the complex integration of knowledge, skills and attitudes necessary to perform the outcome.

PRO	OGRAM STUDENT LEARNING OUTCOMES FOR Healthcare	Supporting	I, M, E
Cert	ificate Emergency Medical Technician	course(s)	, , , , , ,
1	Students will write effectively.	ENG 100	I
2	Students will gain an understanding of basic microcomputer applications.	CIS 111	I
3	Student will understand the health professions.	ALH 101	I
4	Students will have a basic understanding of basic structure and function of the human body.	BIO 100	I
5	Students will understand and demonstrate skills specific to emergency situations.	EMT 101	I
6			
7			
8	,		
9			
10			

For a degree program, indicate the courses that fulfill the General Education Student Learning Outcomes.

GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR	Supporting	I,M,E
Healthcare Certificate Emergency Medical Technician	course(s)	
Communication Skills: Students will write and speak effectively.		
	ENG 100	I
Information Literacy: Students will locate, evaluate and apply reliable and		
appropriate information.	ENG 100	I

Quantitative Reasoning: Students will apply the concepts and methods of		
mathematics to solve problems.		
Scientific Reasoning: Students will relate scientific methods of inquiry to the		
acquisition of knowledge.	EMT 101	I
Technical Literacy: Students will utilize computer an emerging technologies		
effectively.	CIS 111	I
Aesthetics: Students will appreciate the variety of human experiences as		
expressed through the arts.		
Multiple Perspectives: Students will demonstrate knowledge and		
appreciation of diverse cultures.	EMT 101	I
Ethics: Students will develop an awareness of personal obligations and		
responsibilities in one's community of influence.	EMT 101	I
Impact of Technology: Students will reflect on the impact of scientific and		
technological advances on the individual, society and the environment.		
Civic Literacy: Students will demonstrate awareness of the responsibilities		
of local, national and international citizenship.		

Learning Council - December 11, 2012

Healthcare Certificate Emergency Medical Technician

		-				
Course Title	Course #	Offered P	Plan to Cale	Grade Credits	Crecilis	Prerequisites
		Company of the Compan	Annual Control	CONTROL OF STREET STREET STREET	The same of the sa	ne production of the second
Introduction to the Haulth Descentant	The state of the s					
moderation to the freath Professions	ALH 101	F/S/SU			٣	ENG 091 and ENG 096 or appropriate placement score
Introduction to English Composition*	ENG 100	F/S/SU			3	ENG 091 and ENG 096 or appropriate placement score
Introduction to Medical Terminology	ALH 102	F/S/SU			3	Coreq - ENG 100 or appropriate placement score
Introduction to Microcomputer Applications	CIS 1111	F/S/SU			3	
Principles of Human Biology	BIO 100	F/S/U			4	ENG 100 or appropriate placement score
Basic Emergency Medical Technology	EMT 101	F/S/U			7	
Total credits required					23	

If students complete the Health Certificate, maintain a GPA of 3.0 and meet the admission requirements of a Healthcare program (see Programs of Study listing on pages 51 and 52) they will be guaranteed admission on a space available basis.

*If student meets the ENG 100 based on a placement score, PSY 101 can be substituted.

NEW DEGREE PROGRAM OR NEW CERTIFICATE PROPOSAL

1. Program Name: Healthcan	re Certificate Nursing Ass	sistant	
2. Originator: Jane E. June		Date: October 19, 2012	
3. Dívision Dean: Jane E. Jur	ie	Date: November 15, 2012	2
4. Brief Description of the Pr	oposal: Career ladder ini	tiative as part of the DOL g	grant.
5. Effective Date: Fall 2013			
6. Recommended by the Heal	theare Division.	Date: November 1	.5, 2012
Comment:			
7. AA Leadership Team:	Jun Brn	Date:	112
Recommended:	Not Recommended:		
8. VP/Academic Affairs:	Morey	Date:	8/12
Recommended:	Not Recommended:		
9. Learning Council:	Ja Va	Date: 13/11/	12
Recommended:Comments:	Not Recommended:		
10. VP/Academic Affairs:	Jordy .	Date:	/2
Approved:	Not Approved:		
Comments:			

FOR NEW PROGRAM/CER	I IFICATE OR PROGRAM/CERTIFICATE CLOSURE ONL	Y
President:	Date:	
Approved:	Not Approved:	
Board of Trustees:	Date:	
Approved:	Not Approved:	

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE NEW DEGREE PROGRAM OR NEW CERTIFICATE PROPOSAL

Program: Nursing Assistant
Division: Healthcare
Degree type: Certificate
CIP code for the degree program or certificate (check with IRaP Office): 51.3901
Attachments: Proposed program grid
Submit separate proposals for any new courses or revised courses in the program.
 Provide a rationale for the proposed new program including a narrative for each of the following: How the need for this new program or certificate was determined – Career ladder and Department of Labor grant How the program was designed – Input within the Healthcare Division and Academic Affairs Leadership Team Wage analysis where appropriate; consult with IRaP office How the new program or certificate was reviewed, approved, or developed in conjunction with an advisory board or other external agency – Department of Labor Process Team, Department of Labor Program Team and Academic Affairs Leadership Team Demonstrated regional employer interest in hiring graduates - Yes
List the program goals.
To secure employment in a Hospital or Long Term Care Facility.
To continue with education through a career ladder.
Does any aspect of the proposed program affect another department? Please confer with the coordinators of affected departments. No Affected department(s):
For an associate degree program, does the proposed program meet the general education credit requirement for MassTransfer?
f no, please provide a rationale.
Does the program or certificate qualify for financial aid? Check with the Director of Financial Aid and fill out the Gainful Employment Form as needed.
Will any of the following be required: Additional staff _X_
tart-up collection of library resources in support of this program: \$2,500

List the Program Student Learning Outcomes in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

I – Introductory/Background – There is an indirect relationship between the course and the outcome. The outcome itself is not the focus of the course but at least one element of the course serves as a building block to the achievement of the final outcome. For example, course elements may provide the knowledge, skills or attitudes necessary for the ultimate achievement of the outcome.

M – Intermediate/Transitional - There is more of a direct relationship between the course and the outcome than Introductory. A mixture of course elements supports the final achievement of the outcome, but the final integration of knowledge, skills and attitudes necessary for its achievement is not accomplished in this course. For example, knowledge, skills and/or attitudes (at least 2 of the 3) required for achievement of the outcome may be the focus of the course or course element, but the integration of all three is not.

E – Emphasized – There is a direct relationship between the course and the outcome. At least one element of the course focuses specifically on the complex integration of knowledge, skills and attitudes necessary to perform the outcome.

PRO	GRAM STUDENT LEARNING OUTCOMES FOR Healthcare Certificate –	Supporting	I, M, E
Nurs	ing Assistant	course(s)	
1	Students will write effectively.	ENG 100	I
2	Students will gain an understanding of basic microcomputer applications.	CIS 111	I
3	Student will understand the health professions.	ALH 101	I
4	Students will have a basic understanding of basic structure and function of the human body.	BIO 100	I
5	Students will understand and demonstrate skills specific to Nursing Assistant protocols.	ALH 131 ALH 132	I
6			
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For a degree program, indicate the courses that fulfill the General Education Student Learning Outcomes.

GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR Healthcare Certificate – Nursing Assistant	Supporting course(s)	I,M,E
Communication Skills: Students will write and speak effectively.	Course(s)	
	ENG 100	I
Information Literacy: Students will locate, evaluate and apply reliable and		
appropriate information.	ENG 100	I
Quantitative Reasoning: Students will apply the concepts and methods of		
mathematics to solve problems.		
Scientific Reasoning: Students will relate scientific methods of inquiry to the acquisition of knowledge.	ALH 131	Ī
	ALH 132	
Technical Literacy: Students will utilize computer an emerging technologies effectively.	CIS 111	T
Aesthetics: Students will appreciate the variety of human experiences as expressed		1
through the arts.		
Multiple Perspectives: Students will demonstrate knowledge and appreciation of	ALH 131	I

diverse cultures.	ALH 132	I T
Ethics: Students will develop an awareness of personal obligations and responsibilities in one's community of influence.	ALH 131	
	ALH 132	. 1
Impact of Technology: Students will reflect on the impact of scientific and		
technological advances on the individual, society and the environment		
Civic Literacy: Students will demonstrate awareness of the responsibilities of local, national and international citizenship.		

Learning Council - December 11, 2012

Healthcare Certificate Nursing Assistant

Service from a part of the Comment of the remainment of the comment of the commen	A El Recht (Antique) particul (Canada) Principal de la company	A STATE OF THE PERSON NAMED OF THE PERSON NAME				
Course Title	Course	Offered	Plan to	Gradu Gradin		
AND THE PROPERTY OF THE PROPER	#	Commercial cardinal (Collection)	Take	on and	netilis	Prerequisites
Introduction to the Health Professions	ALH 101	F/S/SU			æ	ENG 091 and ENG 096 or appropriate placement score
Introduction to English Composition*	ENG 100	F/S/SU			3	ENG 091 and ENG 096 or appropriate placement score
Introduction to Medical Terminology	ALH 102	F/S/SU			ж	Coreq- ENG 100 or appropriate placement score
Introduction to Microcomputer Applications	CIS 111	F/S/SU			м	
Principles of Human Biology	BIO 100	F/S/U			4	ENG 100 or appropriate placement score
Introductory Nursing Assistant	ALH 131	F/S/U			۸.	ENG 091 and ENG 096 or appropriate placement score
Advanced Nursing Assistant	ALH 132	F/S/U			7	ALH 131
	<u>' </u>					
Total credits required					23	
	The second and the second seco				}	

If students complete the Health Certificate, maintain a GPA of 3.0 and meet the admission requirements of a Healthcare program (see Programs of Study listing on pages 51 and 52) they will be guaranteed admission on a space available basis.

*If student meets the ENG 100 based on a placement score, PSY 101 can be substituted.

NEW DEGREE PROGRAM OR NEW CERTIFICATE PROPOSAL

1. Progr	ram Name: Healthcare Certificate Pharmacy T	'echnici:	an
2. Origi	nator: Jane E. June	Date:	October 19, 2012
3. Divisi	on Dean: Jane E. June	Date:	November 15, 2012
4. Brief	Description of the Proposal: Career ladder ini	tiative a	as part of the DOL grant.
5. Effect	ive Date: Fall 2013		
6. Recon	nmended by the Healthcare Division.		Date: November 15, 2012
Comment	:		
7. AA Le	eadership Team:	m_	Date: // / 2 F / / 7
Recomments	nded: Not Recommended: s:		
8. VP/Ac	ademic Affairs:	<u> </u>	Date:
Recomments	nded: Not Recommended: s:		
9. Learni	ng Council:	_T	Date: 13/11/12
Recommer Comments			
10. VP/Ac2	ademic Affairs:	7	Date: /////
Approved	: Not Approved:		
Comment	÷e•		

FOR NEW PROGRAM/CERTIFICATE OR PROGRAM/CERTIFICATE CLOSURE ONLY President: ______ Date: _____ Approved: _____ Not Approved: _____ Approved: _____ Not Approved: _____

2012-2013 QUINSIGAMOND COMMUNITY COLLEGE NEW DEGREE PROGRAM OR NEW CERTIFICATE PROPOSAL.

Program: Pharmacy Technician
Division: Healthcare
Degree type: Certificate
CIP code for the degree program or certificate (check with IRaP Office): 51.0805
Attachments:
Proposed program grid
Submit separate proposals for any new courses or revised courses in the program.
Provide a rationale for the proposed new program including a narrative for each of the following How the need for this new program or certificate was determined- Career ladder and Department of Labor grant
How the program was designed – Input within the Healthcare Division and Academic Affairs Leadership Team
Wage analysis where appropriate; consult with IRaP office.
 How the new program or certificate was reviewed, approved, or developed in conjunction with an advisory board or other external agency – Department of Labor Process Team, Department of Labor Program Team and Academic Affairs Leadership Team Demonstrated regional employer interest in hiring graduates - Yes
List the program goals.
To secure employment in a Pharmacy.
To continue with education through a career ladder.
Does any aspect of the proposed program affect another department? Please confer with the coordinators of affected departments. No Affected department(s):
For an associate degree program, does the proposed program meet the general education credit requirement for MassTransfer?
If no, please provide a rationale.
Does the program or certificate qualify for financial aid? Check with the Director of Financial Aid and fill out the Gainful Employment Form as needed.
Will any of the following be required:
Additional staff X Additional space X Additional equipment X Provide a rationale for any needs indicated and include approximate cost of equipment.
Start-up collection of library resources in support of this program: \$2,500

List the Program Student Learning Outcomes in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

I – Introductory/Background – There is an indirect relationship between the course and the outcome. The outcome itself is not the focus of the course but at least one element of the course serves as a building block to the achievement of the final outcome. For example, course elements may provide the knowledge, skills or attitudes necessary for the ultimate achievement of the outcome.

M – Intermediate/Transitional - There is more of a direct relationship between the course and the outcome than Introductory. A mixture of course elements supports the final achievement of the outcome, but the final integration of knowledge, skills and attitudes necessary for its achievement is not accomplished in this course. For example, knowledge, skills and/or attitudes (at least 2 of the 3) required for achievement of the outcome may be the focus of the course or course element, but the integration of all three is not.

E – Emphasized – There is a direct relationship between the course and the outcome. At least one element of the course focuses specifically on the complex integration of knowledge, skills and attitudes necessary to perform the outcome.

PRO	OGRAM STUDENT LEARNING OUTCOMES FOR Pharmacy	Supporting	I, M, E
Tec	hnician	course(s)	, , , , ,
1	Students will write effectively.	ENG 100	I
2	Students will gain an understanding of basic microcomputer applications.	CIS 111	Ī
3	Student will understand the health professions.	ALH 101	I
4	Students will have a basic understanding of basic structure and function of the human body.	BIO 100	Ī
5	Students will understand and demonstrate skills specific to pharmacy protocols.	ALH 137 ALH 138	I
6		711511 150	
7			
8			
9			
10			

For a degree program, indicate the courses that fulfill the General Education Student Learning Outcomes.

GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR	Supporting	I,M,E
Pharmacy Technician	course(s)	
Communication Skills: Students will write and speak effectively.		
	ENG 100	I
Information Literacy: Students will locate, evaluate and apply reliable and		
appropriate information.	ENG 100	I
Quantitative Reasoning: Students will apply the concepts and methods of		
mathematics to solve problems.		
Scientific Reasoning: Students will relate scientific methods of inquiry to the	ALH 137	
acquisition of knowledge.	ALH 138	T
Technical Literacy: Students will utilize computer an emerging technologies		1 .
effectively.	CIS 111	T
Aesthetics: Students will appreciate the variety of human experiences as		
expressed through the arts.		
Multiple Perspectives: Students will demonstrate knowledge and	ALH 137	
appreciation of diverse cultures.	ALH 138	Ī

Ethics: Students will develop an awareness of personal obligations and	ALH 137	
responsibilities in one's community of influence.	ALH 138	ī
Impact of Technology: Students will reflect on the impact of scientific and		
technological advances on the individual, society and the environment.		
Civic Literacy: Students will demonstrate awareness of the responsibilities		
of local, national and international citizenship.		

Learning Council - December 11, 2012

Healthcare Certificate Pharmacy Technician

				A Property of the Party of the		
Course Title	Course #	Offered	Plan to Take	Grade Credits	Credits	Prerequisites
				S TOTAL CONTRACTOR OF THE STATE	To the second and second agreement	
Introduction to the Health Professions	ALH 101	F/S/SU			ĸ	ENG 091 and ENG 096 or appropriate placement score
Introduction to English Composition*	ENG 100	F/S/SU			3	ENG 091 and ENG 096 or appropriate placement score
Introduction to Medical Terminology	ALH 102	F/S/SU			٣	Coreq - ENG 100 or appropriate placement score
Introduction to Microcomputer Applications	CIS 111	F/S/SU			æ	
Principles of Human Biology	BIO 100	F/S/U			4	ENG 100 or appropriate placement score
Pharmacy Technician	ALH 137	F/S/U			Э	MAT090; ENG 091 and ENG 096 or appropriate placement score
Pharmacy Technician Clinical Co-Operative Externship	ALH 138				. 9	ALH 137
Total credits required					25	

If students complete the Health Certificate, maintain a GPA of 3.0 and meet the admission requirements of a Healthcare program (see Programs of Study listing on pages 51 and 52) they will be guaranteed admission on a space available basis.

^{*}If student meets the ENG 100 based on a placement score, PSY 101 can be substituted.

NEW DEGREE PROGRAM OR NEW CERTIFICATE PROPOSAL

1. Program Name: Healthcare Cert	ificate Phlebotomy/EKG	Technician
2. Originator: Jane E. June	Date	: October 19, 2012
3. Division Dean: Jane E. June	Date	November 15, 2012
4. Brief Description of the Proposal:	Career ladder initiative	as part of the DOL grant.
5. Effective Date: Fall 2013		
6. Recommended by the Healthcare	Division.	Date: November 15, 2012
Comment:		
7. AA Leadership Team:	in Brown	Date:
Recommended: Not Comments:	Recommended:	<u> </u>
8. VP/Academic Affairs: Recommended: Not Comments:	Recommended:	
Comments:	į	,
9. Learning Council:	2	Date: 12/11/12
Recommended: Not Comments:	Recommended:	
10. VP/Academic Affairs:	Trey	_Date:
Approved: Not	Approved:	
Comments:		

FOR NEW PROGRAM/CER	FIFICATE OR PROGRAM/CERTIFICATE CLOSURE ONL	Y
President:	Date:	
Approved:	Not Approved:	
Board of Trustees:	Date:	
Approved:	Not Approved:	

NEW DEGREE PROGRAM OR NEW CERTIFICATE PROPOSAL

Program: Phlebotomy/EKG Technician
Division: Healthcare
Degree type: Certificate
CIP code for the degree program or certificate (check with IRaP Office): 51.1009
Attachments: Proposed program grid
Submit separate proposals for any new courses or revised courses in the program.
 Provide a rationale for the proposed new program including a narrative for each of the following: How the need for this new program or certificate was determined – Career ladder and Department of Labor grant How the program was designed – Input within the Healthcare Division and Academic Affairs Leadership Team Wage analysis where appropriate: consult with IPaP office.
 Wage analysis where appropriate; consult with IRaP office How the new program or certificate was reviewed, approved, or developed in conjunction with an advisory board or other external agency – Department of Labor Process Team, Department of Labor Program Team and Academic Affairs Leadership Team Demonstrated regional employer interest in hiring graduates - Yes
List the program goals.
To secure employment in a Hospital or Long Term Care facility.
To continue with education through a career ladder.
Does any aspect of the proposed program affect another department? Please confer with the coordinators of affected departments. No Affected department(s):
For an associate degree program, does the proposed program meet the general education credit requirement for MassTransfer?
If no, please provide a rationale.
Does the program or certificate qualify for financial aid? Check with the Director of Financial Aid and fill out the Gainful Employment Form as needed.
Will any of the following be required: Additional staff _X _ Additional space _X _ Additional equipment _X _ Provide a rationale for any needs indicated and include approximate cost of equipment.
Start-up collection of library resources in support of this program: \$2,500

List the Program Student Learning Outcomes in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

I – Introductory/Background – There is an indirect relationship between the course and the outcome. The outcome itself is not the focus of the course but at least one element of the course serves as a building block to the achievement of the final outcome. For example, course elements may provide the knowledge, skills or attitudes necessary for the ultimate achievement of the outcome.

M – Intermediate/Transitional - There is more of a direct relationship between the course and the outcome than Introductory. A mixture of course elements supports the final achievement of the outcome, but the final integration of knowledge, skills and attitudes necessary for its achievement is not accomplished in this course. For example, knowledge, skills and/or attitudes (at least 2 of the 3) required for achievement of the outcome may be the focus of the course or course element, but the integration of all three is not.

E – Emphasized – There is a direct relationship between the course and the outcome. At least one element of the course focuses specifically on the complex integration of knowledge, skills and attitudes necessary to perform the outcome.

PRO	GRAM STUDENT LEARNING OUTCOMES FOR Phlebotomy/EKG	Supporting	I, M, E
Tech	nician	course(s)	, , , , , ,
1	Students will write effectively.	ENG 100	I
2	Students will gain an understanding of basic microcomputer applications.	CIS 111	I
3	Student will understand the health professions.	ALH 101	I
4	Students will have a basic understanding of basic structure and function of the human body.	BIO 100	I
5	Students will understand and demonstrate skills specific to Phlebotomy/EKG Technician protocols.	ALH 134 ALH 136	I
6			
7			
8			
9			
10			

For a degree program, indicate the courses that fulfill the General Education Student Learning Outcomes.

GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR	Supporting	I,M,E
Phlebotomy/EKG Technician	course(s)	, -,,-
Communication Skills: Students will write and speak effectively.		
	ENG 100	I
Information Literacy: Students will locate, evaluate and apply reliable and		
appropriate information.	ENG 100	I
Quantitative Reasoning: Students will apply the concepts and methods of		
mathematics to solve problems.		
Scientific Reasoning: Students will relate scientific methods of inquiry to the	ALH 134	ī
acquisition of knowledge.	ALH 136	Ī
Technical Literacy: Students will utilize computer an emerging technologies		
effectively.	CIS 111	I
Aesthetics: Students will appreciate the variety of human experiences as expressed		
through the arts.		
Multiple Perspectives: Students will demonstrate knowledge and appreciation of	ALH 134	T
diverse cultures.	ALH 136	Ī

Ethics: Students will develop an awareness of personal obligations and	ALH 134	
responsibilities in one's community of influence.	ALH 136	Ī
Impact of Technology: Students will reflect on the impact of scientific and		
technological advances on the individual, society and the environment.		
Civic Literacy: Students will demonstrate awareness of the responsibilities of		
local, national and international citizenship.		

Learning Council - December 11, 2012

Healthcare Certificate Phlebotomy/EKG Technician

Course Title	Course	Offered Plan to		Grado Gradia	Charlila	
The distance of the second control of the se	#		Take	or mac	cump	Prerequisites
			77.70			
Introduction to the Health Professions	ALH 101	F/S/SU			. m	ENG 091 and ENG 096 or annountiate placement according
Introduction to English Composition*	ENG 100	F/S/SU				ENG 091 and ENG 096 or appropriate placement score
Introduction to Medical Terminology	ALH 102	F/S/SU			Ę,	Coreq - ENG 100 or appropriate placement secure
Introduction to Microcomputer Applications	CIS 111	F/S/SU			ю	
Principles of Human Biology	BIO 100	F/S/U			4	ENG 100 or appropriate placement score
Phlebotomy/EKG Technician	ALH 134	F/S/U			ю	ENG 091 and ENG 096 or appropriate, placement
Phlebotomy/EKG Technician Clinical Co-Operative Externship	ALH 136				9	ALH 134
Total credits required					7,6	
If students connete the Health Contifered		elektromodije Gregore registje understande pe			2	

If students complete the Health Certificate, maintain a GPA of 3.0 and meet the admission requirements of a Healthcare program (see Programs of Study listing on pages 51 and 52) they will be guaranteed admission on a space available basis.

*If student meets the ENG 100 based on a placement score, PSY 101 can be substituted.

COURSE REVISION PROPOSAL

1.	Course Number and Name : BIO 105 Princ	iples of Ecology
2.	Originator: Maggie Crowell Murray	Date: November 15, 2013
3.	Division Dean: Nancy Schoenfeld	Date: November 15, 2013
4.	Brief Description of the Proposal:	
	Update the catalog description to better refl prerequisites.	lect the current curriculum and to adjust math and English
5.	Effective Date: Fall 2013	
6.	Recommended by the Science of Comment:	Division Date: 11/15/10-
7.		mmended:
8.	VP/Academic Affairs: Recommended: Comments:	Date: 11/28/17
9.	Recommended: 12 / Not Record Comments: 10 bled by 2	mmended: 13 vote Prerequisites ceccept course descriptions of any Date:
	Triendly Amendor: 17 VP/Academic Affairs: Not Appro Comments:	

2012-2013

QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

Type of Revision:
X_ Description X PrerequisiteCorequisite Number Name #credits
Elective Type other (explain)
Course Discipline or Department: Natural Sciences Division: Human Services and Science
Current Course Number: BIO 105
Current Course Name: Principles of Ecology
Current Course Description (as it appears in the college catalog):
BIO 105 Principles of Ecology 4 Credits
This course examines the fundamental concepts of ecology. Topics include ecosystem formation within
the context of habitat, population, community, biodiversity, evolution, global change and conservation.
The laboratory component emphasizes the basic concepts of field research.
Prerequisite: MAT 095 with a "C" or better on the MAT 095 departmental final exam or appropriate
placement score. Corequisite ENG 101 F/S/SU
Proposed Description (include all proposed changes):
Troposed Boson (monde an proposed enanges).
BIO 105 Principles of Ecology 4 Credits
This course examines the fundamental concepts of ecology. Topics include ecosystem formation within
the context of habitat, population, community, biodiversity, evolution, sustainability and global change.
The laboratory component focuses on the collection and interpretation of data based on computer
simulations of renowned ecological field studies.
Prerequisites: ENG 100 or appropriate placement score and MAT 090 with a "C" or better on the MAT
090 departmental final exam or appropriate placement score F/S/SU
Rationale for the change:
Rationale for the change:
The proposed changes primarily update the course to its current curriculum. BIO 105 Principles of
Ecology is currently taught completely online. The laboratories use Simbiotic mathematical models to
simulate data collected in well-known ecological studies such as Isle Royale and The Exclusion Principle.
Since the course is online the laboratory focus is no longer on working "in the field". The course requires
a basic understanding of graphs and graphing. All of the required mathematical principles are taught in
the class as part of the curriculum. As a result, MAT 090 should be a sufficient prerequisite. The
corequisite of ENG 101 is changed to a prerequisite of ENG 100 primarily because these are synonymous
in the current QCC registration set-up.
Provide a description of any change in course content.
Does the course revision affect another department? Please confer with the coordinator of the affected
department.
Affected department(s) Math
If this change affects a program grid, please submit a current and proposed program grid for each program
affected
Please submit a syllabus to your dean with all of the revisions included.

NEW COURSE PROPOSAL

1	. Course Number a	and Name: HUS 244 Human Services Practic	um II
2	Originator:	Jeffrey Clements	Date: November 15, 2012
3.	Division Dean:	Nancy Schoenfeld	Date: November 15, 2012
4.	This is a new cour	of the Proposal: se, HUS 244 Human Services Practicum II, w vice Associate Degree that was approved 8 M	which is part of the curriculum revision ay 2012.
5.	Effective Date: Sp	ring 2014	
6.	Recommended by Comments:	the Science + HS Division	Date: 11/15/12-
7.	AA Leadership Te Recommended: Comments:	am: Not Recommended:	Date:
8.	VP/Academic Affa Recommended: Comments:		Date:
9.	Learning Council: Recommended:	Not Recommended:	Date: 12/11/12
10.	VP/Academic Affai Approved:	Not Approved:	Date: 10/11/12

NEW COURSE PROPOSAL

	Course Discipline/Division:	
Human Services; Human Services and Science di	vision	
Course Number:		
HUS 244		
Course Name:		
Human Services Practicum II		
Prerequisites and/or corequisites (confer with affected	ed department coordinator):	
HUS 243 Practicum I prerequisite		
CIP code (check with IRaP Office):		
44.0000		
Effective Term/year:		
Spring 2014		
	ndicate whether this course replaces another course.	
	es Practicum II, which is part of the curriculum	
revision of the Human Service Associate Degi	ee that was approved 8 May 2012.	
Is the course content similar to other courses now of		
If yes, attach a statement for the coordinator of the d	epartment offering the similar course.	
Please indicate if this course will serve as any of the following types of electives		
Elective		
X Discipline specific (name the discipline) Human Services		
X Program specific (name the program) Human Se	rvices	
Multiple perspective (confer with the Liberal Ar		
	ts Coordinator)	
Is this course required for a program? If yes, submit	ts Coordinator) a separate Program Revision Proposal or New	
	ts Coordinator) a separate Program Revision Proposal or New	
Is this course required for a program? If yes, submit	ts Coordinator) a separate Program Revision Proposal or New	
Is this course required for a program? If yes, submit	ts Coordinator) a separate Program Revision Proposal or New	
Is this course required for a program? If yes, submit	ts Coordinator) a separate Program Revision Proposal or New	
Is this course required for a program? If yes, submit Program Proposal. Yes. Already approved 8 May 2	ts Coordinator) a separate Program Revision Proposal or New 012	
Is this course required for a program? If yes, submit	ts Coordinator) a separate Program Revision Proposal or New	
Is this course required for a program? If yes, submit Program Proposal. Yes. Already approved 8 May 2 Expected enrollment per term: 30	ts Coordinator) a separate Program Revision Proposal or New 012	
Is this course required for a program? If yes, submit Program Proposal. Yes. Already approved 8 May 2	ts Coordinator) a separate Program Revision Proposal or New 012	
Is this course required for a program? If yes, submit Program Proposal. Yes. Already approved 8 May 2 Expected enrollment per term: 30 Will any of the following be required:	a separate Program Revision Proposal or New 012 Expected enrollment per year: 30	
Is this course required for a program? If yes, submit Program Proposal. Yes. Already approved 8 May 2 Expected enrollment per term: 30	a separate Program Revision Proposal or New 012 Expected enrollment per year: 30	
Is this course required for a program? If yes, submit Program Proposal. Yes. Already approved 8 May 2 Expected enrollment per term: 30 Will any of the following be required: Additional staff Additional space	a separate Program Revision Proposal or New 012 Expected enrollment per year: 30 Additional equipment	
Is this course required for a program? If yes, submit Program Proposal. Yes. Already approved 8 May 2 Expected enrollment per term: 30 Will any of the following be required:	a separate Program Revision Proposal or New 012 Expected enrollment per year: 30 Additional equipment	
Is this course required for a program? If yes, submit Program Proposal. Yes. Already approved 8 May 2 Expected enrollment per term: 30 Will any of the following be required: Additional staff Additional space	a separate Program Revision Proposal or New 012 Expected enrollment per year: 30 Additional equipment	
Is this course required for a program? If yes, submit Program Proposal. Yes. Already approved 8 May 2 Expected enrollment per term: 30 Will any of the following be required: Additional staff Additional space	a separate Program Revision Proposal or New 012 Expected enrollment per year: 30 Additional equipment	
Is this course required for a program? If yes, submit Program Proposal. Yes. Already approved 8 May 2 Expected enrollment per term: 30 Will any of the following be required: Additional staff Additional space	a separate Program Revision Proposal or New 012 Expected enrollment per year: 30 Additional equipment I include approximate cost of equipment.	

Course Materials

m II	
Lab hours:	Clinic Hours: 130

General course description and prerequisites (as it will appear in the catalog):

HUS 244 Human Services Practicum II - 4 credits

This course provides a continuation of the technical competency and skills building through 130 hours of directed, professionally supervised individual and group work in a human service agency. Students demonstrate sensitivity to diverse populations and proficiency in developing, interpreting, implementing, and documenting helping interventions. Students understand the appropriate use of supportive services, group facilitation, conflict resolution, and system change strategies; and use appropriate written and verbal communication skills to document their work.

Prerequisites: HUS 243; Spring

All required texts and paperbacks, including information on publisher and edition used (provide a suggested text): Baird, Brian, N. (2011). The internship, practicum, and field placement handbook: A guide for the helping profession. Pearson, New Jersey

Instructional Objectives (list): This course is designed to prepare the students educationally, experientially, and cognitively for work as a Human Service Provider. The students will be prepared to provide direct and/or supportive care to consumers; to empower clients, to navigate and network the human service systems as well as maintaining self-care and support systems for themselves. They will also gain knowledge about educational and career opportunities for self-growth.

Teaching procedures: (provide suggested teaching methodology): Teaching procedures will include but not be limited to the facilitation of class discussion and process of experiential learning in field placement, written assignment to evaluate and document competency skills, small group work, student presentations, guest speakers, case presentations and role-playing.

Course topics and/or assignments and/or required and/or supplemental reading (provide a list of suggested course topics): Confidentiality; Crisis management/intervention; Communication; Self-care; Documentation; Boundaries; research/reading; peer topic discussions; Service delivery; Networking; Participant empowerment; Program/employee/student development

Other information:

COURSE REQUIREMENTS

1	1.	Student Evaluation Practicum Site Supervisor	40%
١	2.	Seminar Participation	30%
		Competency Evaluation	
		Monthly evaluations (site)	

- 1. Each student will be <u>evaluated by her/his site supervisor</u> at the end of the semester. Based on the feedback from the evaluation form a final grade for the placement performance will count as 40% of the student's total grade for the course. The instructor will conduct site visit(s) as a part of the students overall evaluation process.
- 2. <u>Seminar attendance is required and expected</u>. Due to the nature of the seminar involvement in dialogue, practicum discussion and the learning experience <u>attendance is required</u>. Evaluating seminar participation can be somewhat subjective; therefore it is up to each student to take the initiative to be sure that the instructor knows the students' perspectives and experience in being a "practitioner" in the field.
- 3. <u>Competency Evaluation</u>: The student will self-evaluate their skill and competency using the National Skills Standards for Direct Support Practitioners. The student will be given the assignment on the first day of class and be expected to work on the evaluation throughout the semester.
- 4. <u>Monthly evaluations:</u> The student is responsible for providing the site supervisor with a monthly evaluation form that will be submitted to the Practicum Instructor which comprises 10% of the final course grade.

m. Plagiarism

(p. 236 Student Handbook 2011-2012)

Our purpose in the classroom is to seek the truth; this work requires trust and honesty between teacher and student. If we are not honest about what we know and don't know, our learning will always be impaired. Because our teaching and learning depends on this honest communication, we expect all students to understand what plagiarism is and why it is unacceptable. Plagiarism means taking someone else's ideas or words and presenting them as one's own. The offense can take many forms including cheating on a test, passing in a paper taken from the Internet or from another student, or failing to properly use and credit sources in an essay. Sometimes the issue is subtle, involving getting too much help on an assignment from someone else. In every instance, plagiarism means cheating both oneself and the owner of the source. Since the cheating sabotages a student's learning experience, consequences range from no credit for the assignment to failure for the course and possible expulsion from the college.

Please submit a syllabus for this new course to your dean.

List the Student Learning Outcomes for this course in the table below. Recommendations for writing SLOs can be found in the *General Information for Academic Affairs Proposals* document that is available on the QCC's Intranet under Frequently Used Forms (Academic Governance Forms).

COU	COURSE STUDENT LEARNING OUTCOMES FOR HUS 244 Practicum II		
Upon	completion of the course, students will be able to:		
1	Document 130 hours of supervised placement hours.		
2	Demonstrate and document the professional principles of sound counseling/interviewing skills with attention to comprehensive listening skills.		
3	Identify and document a minimum of 3-5 formal and informal collaterals in the Human Service delivery system within the students practicum site.		
4	Assess their level of competency through journaling and completion of a capstone core competency project based on the 12 National Community Support Skill Standards.		
5 .	Complete an individualized professional portfolio.		
6	Document awareness of state and federal mandates applicable to their practicum placement and at the local, regional, national, and global level.		
7	Apply ethical and legal standards in providing services and maintaining client documentation.		
8	Demonstrate multicultural competency in both oral and written communication.		

How does the course support general education? Using the chart below, indicate the degree or level of connection between the course and outcome as indicated here.

I – Introductory/Background – There is an indirect relationship between the course and the outcome. The outcome itself is not the focus of the course but at least one element of the course serves as a building block to the achievement of the final outcome. For example, course elements may provide the knowledge, skills or attitudes necessary for the ultimate achievement of the outcome.

M – Intermediate/Transitional – There is more of a direct relationship between the course and the outcome than Introductory. A mixture of course elements supports the final achievement of the outcome, but the final integration of knowledge, skills and attitudes necessary for its achievement is not accomplished in this course. For example, knowledge, skills and/or attitudes (at least 2 of the 3) required for achievement of the outcome may be the focus of the course or course element, but the integration of all three is not.

E – Emphasized – There is a direct relationship between the course and the outcome. At least one element of the course focuses specifically on the complex integration of knowledge, skills and attitudes necessary to perform the outcome.

CONNECTION OF HUS 244 TO GENERAL EDUCATION STUDENT LEARNING	I,M,E
OUTCOMES	
Communication Skills: Students will write and speak effectively.	E
Information Literacy: Students will locate, evaluate and apply reliable and appropriate information.	E
Quantitative Reasoning: Students will apply the concepts and methods of mathematics to solve problems.	Ι
Scientific Reasoning: Students will relate scientific methods of inquiry to the acquisition of knowledge.	M
Technical Literacy: Students will utilize computer an emerging technologies effectively.	M
Aesthetics: Students will appreciate the variety of human experiences as expressed through the arts.	I
Multiple Perspectives: Students will demonstrate knowledge and appreciation of diverse cultures.	E
Ethics: Students will develop an awareness of personal obligations and responsibilities in one's community of influence.	E
Impact of Technology: Students will reflect on the impact of scientific and technological advances on the individual, society and the environment.	M
Civic Literacy: Students will demonstrate awareness of the responsibilities of local, national and international citizenship.	E

If the course is required in a program or it is an elective in a program, please indicate how the course contributes to the Program Student Learning Outcomes. List the Program Student Learning Outcomes and indicate the degree or level of connection between the course and outcome as I, M, or E. Please delete this table if it is not applicable.

CON	NECTION OF HUS 244 to PROGRAM STUDENT LEARNING OUTCOMES FOR Human S	ervices
1	Understand the past, present and future of human services.	I
2	Demonstrate the ability to effectively perform empathic listening, observation and interactional skills with individuals, groups, families and community.	E
3	Conduct intakes interview and provide a basic assessments of human need.	E
4	Apply core interpersonal skills within the helping relationship.	E
5	Be prepared for group facilitation and participation.	E
6	Utilize knowledge of formal and informal networks in the human services delivery system	E
7	Apply fundamental legal and ethical standards in providing client services and maintaining participant records.	E
8	Advocate for participants needs utilizing a strength-based culturally competent dynamic.	E
9	Conduct 250 hours of fieldwork in a human services agency/organization.	E
10	Identify, explain and apply the 12 National Community Support Skill Standards for human service delivery.	E
11	Be eligible to sit for the Human Services-Board Certified Practitioner (HS-BCP) Exam.	E

HUMAN SERVICES — Associate in Science (Program Code: HA)

Seter 1 ENG 101 F/S/SU 3 Services HUS 121 F/S/SU 3 rip: Human Services HUS 121 F/S/SU 3 logy PSY 101 F/S/SU 3 ster 2 ENG 102 F/S/SU 3 literature II ENG 102 F/S/SU 3 ster 2 HUS 125 F/S/SU 3 ling ster 3 HUS 221 F/S/SU 3 ster 3 HUS 221 F/S/SU 3 n Skills HUS 221 F/S/SU 3 n Skills HUS 221 F/S/SU 3 n Skills HUS 243 F 4 ster 4 HUS 244 S 4 cum I HUS 244 S 4 cum II HUS 244 S 4 ster 4 HUS 244 S 4	Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
Composition & Literature I ENG 101 F/S/SU 3 Jion to Human Services HUS 121 F/S/SU 3 Jion to Human Services HUS 121 F/S/SU 3 Jion to Psychology PSY 101 F/S/SU 3 Semester 2 ENG 102 F/S/SU 3 Somposition & Literature II GRT 101 F/S/SU 3 Jon to Aging HUS 125 F/S/SU 3 Jon to Aging HUS 141 F/S/SU 3 Jon to Courseling PSY 231 F/S/SU 3 Acompetence for Human Services HUS 231 F/S/SU 3 Beenster & Ethics in Human Services HUS 231 F/S/SU 3 Jon to Courseling PSY 273 F/S/SU 3 Semester 4 HUS 244 S 4 Semester 4 HUS 244 <td>Semester 1</td> <td></td> <td></td> <td>One of the party o</td> <td>A CONTRACTOR OF THE CONTRACTOR</td> <td></td> <td></td>	Semester 1			One of the party o	A CONTRACTOR OF THE CONTRACTOR		
tion to Human Services HUS 101 F/S/SU 3 sing Relationship: Human Services HUS 121 F/S/SU 3 sing Relationship: Human Services Semester 2 3 Semester 2 ENG 102 F/S/SU 3 Somposition & Literature II ENG 102 F/S/SU 3 Somposition & Literature II GRT 101 F/S/SU 3 ion to Aging rocess for Human Services HUS 125 F/S/SU 3 Somester 3 HUS 231 F/S/SU 3 Competence for Human Services HUS 231 F/S/SU 3 Competence for Human Services HUS 231 F/S/SU 3 Competence for Human Services HUS 231 F/S/SU 3 Semester 4 HUS 244 F 4 Services Practicum II HUS 244 S 4 Semester 4 HUS 244 S 4 Semester 4 HUS 244 S 4 Semester 4 HUS 244 S 3 At Elective At Elective<	English Composition & Literature I	ENG 101	F/S/SU			က	ENG 100 or approp place score
Fight Figh	Introduction to Human Services	HUS 101	F/S/SU			က	ENG 100 or approp place score
ion to Psychology PSY 101 F/S/SU 3 cory Sociology (Principles) SOC 101 F/S/SU 3 Semester 2 ENG 102 F/S/SU 3 Composition & Literature II ENG 102 F/S/SU 3 Tocoss for Human Services of Human Services of Human Services of Human Services PSY 231 F/S/SU 3 Semester 3 HUS 221 F/S/SU 3 Competence for Human Services HUS 231 F/S/SU 4 Semester 3 HUS 243 F 4 Services Practicum II HUS 244 S 4 A Services Practicum II HUS 244 S 4 A Services Practicum II A Services Practicum II A Services III A Services III A Services Practicum II	The Helping Relationship: Human Services Delivery	HUS 121	F/S/SU			က	ENG 100 or approp place score
Composition & Literature II ENG 102 F/S/SU 3 Composition & Literature II ENG 102 F/S/SU 3 Composition & Literature II ENG 102 F/S/SU 3 Ion to Aging rocess for Human Services HUS 125 F/S/SU 3 iity Service: Delivering Human HUS 141 F/S/SU 3 ion to Counseling Semester 3 PSY 231 F/S/SU 3 Competence for Human Services HUS 221 F/S/SU 3 Competence for Human Services HUS 231 F/S/SU 3 Sommunication Skills HUS 243 F 4 Services Practicum II HUS 244 S 4 Services Practicum II HUS 244 S 4 Anterior Science Elective	Introduction to Psychology	PSY 101	F/S/SU			က	Coreq-ENG 100 or approp place score
Semester 2 ENG 102 F/S/SU 3 Ion to Aging ion to Aging coess for Human Services for Human Service. Delivering Human HUS 125 F/S/SU 3 Inty Service: Delivering Human Services for Human Service of Competence for Human Service HUS 231 F/S/SU 3 Competence for Human Services HUS 231 F/S/SU 3 Semester & Ethics in Human Services Practicum I HUS 244 S 4 Semester 4 HUS 244 S 4 Services Practicum II HUS 244 S 4 A services Practicum II	Introductory Sociology (Principles)	SOC 101	F/S/SU			က	Coreq-ENG 100 or approp place
Composition & Literature II ENG 102 F/S/SU 3 ion to Aging FORT 101 F/S/SU 3 rocess for Human Services HUS 125 F/S/SU 3 inty Service: Delivering Human HUS 141 F/S/SU 3 ion to Counseling PSY 231 F/S/SU 3 Semester 3 HUS 221 F/S/SU 3 Competence for Human Services HUS 231 F/S/SU 3 I Dependency PSY 273 F/S/SU 3 Services Practicum I HUS 243 F/S/SU 4 Services Practicum II HUS 244 S 4 Services Practicum II HUS 244 S 4 Services Practicum II HUS 244 S 4 Its Elective	Semester 2						
ion to Aging rocess for Human Services HUS 125 HUS 141 F/S/SU HUS 141 F/S/SU into Counseling Semester 3 Competence for Human Services HUS 221 F/S/SU Competence for Human Services HUS 231 F/S/SU Competence for Human Services HUS 231 F/S/SU Semester 4 HUS 244 Services Practicum I HUS 244 Services Practicum II Services Prac	English Composition & Literature II	ENG 102	F/S/SU			က	ENG 101
rocess for Human Services HUS 125 F/S/SU 3 lify Service: Delivering Human HUS 141 F/S/SU 3 son to Counseling PSY 231 F/S 3 competence for Human Service HUS 221 F/S/SU 3 ncepts & Ethics in Human Services HUS 231 F/S/SU 3 ncepts & Ethics in Human Services HUS 231 F/S/SU 3 Sommunication Skills F/S/SU 3 Services Practicum I HUS 243 F 4 Semester 4 S 4 Services Practicum II HUS 244 S 4 Services Practicum II HUS 244 S 4 arts Elective	Introduction to Aging	GRT 101	F/S/SU			က	ENG 100 or approp place score
ity Service: Delivering Human HUS 141 F/S/SU Semester 3 Competence for Human Service HUS 221 F/S/SU Competence for Human Services HUS 231 F/S/SU Sommunication Skills Services Practicum I Services Practicum II HUS 244 S Try Elective HUS 244 S Try Elective HUS 244 S Try Elective	Group Process for Human Services	HUS 125	F/S/SU	1		က	HUS 101, HUS 121
ion to Counseling PSY 231 F/S 3 Semester 3 Competence for Human Service HUS 221 F/S/SU 3 Competence for Human Services HUS 231 F/S/SU 3 I Dependency PSY 273 F/S/SU 3 Communication Skills SPH 101 F/S/SU 3 Services Practicum I HUS 243 F 4 Semester 4 HUS 244 S 4 Services Practicum II HUS 244 S 4 Its Elective	Community Service: Delivering Human Services	HUS 141	F/S/SU			က	ENG 100 or approp place score, HUS 101, HUS 121
Semester 3 Semester 3 Competence for Human Services HUS 221 F/S/SU 3 Incepts & Ethics in Human Services HUS 231 F/S/SU 3 I Dependency PSY 273 F/S/SU 3 Sommunication Skills PH 101 F/S/SU 3 Services Practicum I HUS 243 F 4 Services Practicum II HUS 244 S 4 Services Practicum II 3 Its Elective 3 atics or Science Elective 3	Introduction to Counseling	PSY 231	F/S			က	PSY 101
Competence for Human Service HUS 221 F/S/SU 3 Incepts & Ethics in Human Services HUS 231 F/S/SU 3 Incepts & Ethics in Human Services HUS 231 F/S/SU 3 Incepts & Ethics in Human Services PSY 273 F/S/SU 3 Sommunication Skills HUS 243 F 4 Services Practicum I HUS 244 S 4 Services Practicum II HUS 244 S 4 Services Practicum II 3 Its Elective 3 Its Elective 3 3-4	Semester 3						
HUS 231 F/S/SU 3 Dependency PSY 273 F/S/SU 3 Dependency PSY 273 F/S/SU 3 Services Practicum HUS 243 F 4 Semester 4 HUS 244 S 4 Services Practicum I HUS 244 S 3 Trs Elective HUS 245 S 3 Trs Elective HUS 245 S 3 Trs Elective HUS 245 S S 5 Trs Elective HUS 245 S S 5 Trs Elective HUS 245 S S S Trs Elective HUS 245 S S S S Trs Elective HUS 245 S S S S S Trs Elective HUS 245 S S S S S S S S S	Cultural Competence for Human Service Workers	HUS 221	F/S/SU			က	ENG 100 or approp place score, HUS 101, SOC 101
Dependency	Legal Concepts & Ethics in Human Services	HUS 231	F/S/SU			3	HUS 101, HUS 121, HUS 141
Communication Skills SPH 101 F/S/SU 3 Services Practicum I HUS 243 F 4 Semester 4 HUS 244 S 4 Services Practicum II HUS 244 S 4 Its Elective 3 3 attics or Science Elective 3 3 Attics or Science Elective 3 3	Chemical Dependency	PSY 273	F/S/SU			m	PSY 101
Services Practicum I HUS 243 F 4 Semester 4 HUS 244 S 4 Services Practicum II HUS 244 S 4 Its Elective 3 3 Its Elective 3 3 Its Sor Science Elective 3 3	Speech Communication Skills	SPH 101	F/S/SU			m	Pre/Coreq ENG 101
Semester 4 HUS 244 S 4 Services Practicum II	Human Services Practicum I	HUS 243	Ъ.			4	HUS 101, HUS 141, PSY 231
bervices Practicum II	Semester 4						
rts Elective 3 41	Human Services Practicum II	HUS 244	S			4	HUS 243
rts Elective	Elective	1				က	
e Elective	Elective	-				m	
e Elective	Liberal Arts Elective					ო	
	Mathematics or Science Elective					3-4	
Total credits required 62-63	Total credits required					62-63	

More information on transfer is available on pages 22-23 or at rsework is designed to prepare students to n core knowledge and competencies for an r-level human service worker. ation alternatives. These credits can be ed to the Associate Degree or the tudent has prior or current experience in This program has transfer articulation an services, academic credit may be ned from several Experience-Based (refer to page 9) QCC English assessment test and Must place into ENG 100 or higher. www.gcc.mass.edu/transfer Former joint admissions program jkennedy@qcc.mass.edu High School Diploma or GED nission Requirements: Jram Coordinator: Kennedy 508.854.2744 ciate of Science Iram Notes: Next Step: agreements Program: Degree:

Note: A CORI (Criminal Offender Record Information) SORI (Sexual Offenders Record Information) check is required for student Practicum
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Technical Performance Standards:
There are no specific Technical Performance
Standards defined for this program.