


MEMORANDUM

TO: QCC Family

FROM: Dr. James M. Keane
Vice President of Academic Affairs

DATE: February 12, 2020

RE: EMERGENCY APPROVAL – Academic Matters



Academic Affairs
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Emergency approval has been given to the Academic Matters brought to the December 10, 2019 meeting of the Learning Council. These matters and any additional items included in this approval will be brought to the March 2020 meeting of the Learning Council.

1. Course Revision Proposal – CIS 112 Advanced Microcomputer Applications
 - a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):

CIS 112 Advanced Microcomputer Applications
This course builds on the foundations acquired in CIS 111. Students learn complex spreadsheet and database processing through the use of realistic business situations. For spreadsheet, topics will include financial functions, amortization schedules, connecting multiple worksheets and workbooks, sorting, querying tables, Pivot Tables, importing data, as well as data cleansing utilizing VBA. For database, topics will include report and form creation, learn multiple-table form techniques, learn advance report generation techniques, add combo boxes and command buttons to forms, creation of multiple page form, and form navigation using macros. This course is the second of two in a series to assist students in preparation of the Microsoft Office Specialist (MOS) certification exam.
Credits: 3
Prerequisite: CIS 111, Placement into college level English, MAT 095 with a grade of “C” or higher or appropriate placement score
Semester Offered: F/S/SU
2. Course Revision Proposal – CIS 121 Introduction to Programming with C++
 - a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):

CIS 121 Introduction to Programming with C++
This course focuses on the basic concept of programming, utilization of the executable codes, and implementation of these codes in problem solving. Students learn the concept of solving problems through the design and implementation of algorithmic solutions using the C++ programming language. Topics include the programming process, structured programming techniques, and basic logic formations. Practical business applications are emphasized throughout the course. Microsoft frameworks and Visual Studio will be emphasized.
Credits: 3
Prerequisite: Placement into college level English, MAT 095 with a grade of “C” or higher or appropriate placement score
Corequisite: CIS 111 or CIS 115
Semester Offered: F/S
3. Course Revision Proposal – CIS 134 Web page Development I
 - a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):

CIS 134 Web Page Development I
This course focuses on designing Web sites using HTML5/XHTML and CSS3 along with development tools such as Notepad++. Topics include creating links, image maps, using grid-based layout for laying out pages, positioning elements, applying CSS for graphic design, flexbox for mobile web pages, media queries, tables, client-side forms, and insertion of audio and video files. Validation of web pages using transitional DTD, strict DTD will also be discussed. Students will work on individual assignments to create web pages/sites.
Credits: 3

Prerequisite: Placement into college level English, MAT 095 with a grade of “C” or higher or appropriate placement score

Corequisite: CIS 111

Semester Offered: F/S

4. Course Revision Proposal – CIS 141 Introduction to Data Communication and Networks
 - a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):

CIS 141 Introduction to Data Communication & Networks
This course examines business data communications. Students learn fundamental communication concepts, communication networks, and communications hardware and software. Students study the information in a non-technical format designed to provide an understanding of data communication systems needed in today’s business environment.
Credits: 3
Prerequisite: Placement into college level English, MAT 095 with a grade of “C” or higher or appropriate placement score
Corequisite: CIS 111
Semester Offered: F/S/SU

5. Course Revision Proposal – CIS 223 .Net Programming I
 - a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):

CIS 223 .NET Programming I
In this course, students who already have been exposed to programming and critical thinking are introduced to Microsoft .NET architecture, Visual Studio IDE and object-oriented programming with .NET. The course emphasizes building stand-alone desktop projects with graphical user interfaces using WinForm components. Students are taught how to apply the principles of programming and problem solving within an object-based design and event-driven paradigm. Among other skills, the student learns basic interface design, using common libraries and features of the common language runtime.
Credits: 3
Prerequisite: CIS 111, CIS 121
Semester Offered: F/S

6. Course Revision Proposal – CIS 225 Programming with C++ II
 - a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):

CIS 225 Programming with C++ II
This course is a continuation of CIS 121 and covers advanced topics, including recursive programming, storage techniques, pointer and dynamic variables, arrays, manipulation of data (searching, sorting, etc.), file processing, linked lists, stacks and queues. The course emphasizes structured programming through the use of algorithm analysis. Students explore higher-level problem solving through user-defined functions and classes, and learn how to write programs and demonstrate proficiency in the C++ language. Advanced Visual Studio features are utilized for building Application solutions.
Credits: 3
Prerequisite: CIS 121
Semester Offered: S

7. Course Revision Proposal – CIS 226 Introduction to Java
 - a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):

CIS 226 Introduction to Java
This course explores the fundamentals of visual object-oriented programming using the Java language. Students learn how to design, write, and compile Java programs through lectures, hands-on programming assignments, and projects. The emphasis is on problem solving through algorithmic analysis. Topics include Java applications and applets, control structures, methods and classes, arrays, searches, and fundamental data types.
Credits: 3
Prerequisite: CIS 121
Semester Offered: F

8. Course Revision Proposal – CIS 227 Java II
 - a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):

CIS 227 Java II
This course is a continuation of CIS 226 and focuses on higher-level visual object-oriented programming using the Java language. Students learn to design, write, and execute Java applications and applets using graphic user interface (GUI)

components through lectures, hands-on programming exercises, and projects. Other topics include exception handling, classes and methods, objects and inheritance, and problem solving through the use of algorithmic analysis.

Credits: 3

Prerequisite: CIS 226

Semester Offered: S

9. Course Revision Proposal – CIS 228 SQL Programming

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

CIS 228 SQL Programming

This course introduces students to the fundamentals and functions of Structured Query Language (SQL), including relational database, table creation, updating, and manipulation concepts. Using a live data base, students learn SQL basics and then move on to the more sophisticated and challenging aspects of SQL. Students get in-depth knowledge of the language through extensive use of Internet-based, industry-standard SQL programming and certification testing engines. Upon completion of this course, students have the skills and competencies required to program in SQL and the background necessary to continue to intermediate and advanced courses in PL/SQL and database administration.

Credits: 3

Prerequisite: CIS 105 or CIS 111, Placement into college level English, MAT 095 with a grade of “C” or higher or appropriate placement score

Semester Offered: F/S

10. Course Revision Proposal – CIS 229 PL/SQL Programming

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

CIS 229 PL/SQL Programming

This is an intermediate course in the use of Relational Database Management Systems Procedural Language, PL/SQL. The course focuses on the concepts, design and components of relational database PL/SQL programming Language, including creating record, types, defining transactions, the basics of SQL in PL/SQL and datatypes. The student will also manipulate RDBMS including functions related to multiple tables, compound and complex queries, exporting and importing tables, sub-queries, and reporting.

Credits: 3

Prerequisite: CIS 228

Semester Offered: F/S

11. Course Revision Proposal – CIS 230 Mobile Apps Development

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

CIS 230 Mobile Apps Development

This course introduces application development for mobile devices such as Android, Windows, and web. Students program professional apps, using standard IDE (Integrated Development Environment) platforms commonly used professionally, through lectures, hands-on programming assignments, and individual and group projects.

Credits: 3

Prerequisite: CIS 226

Semester Offered: S

12. Course Revision Proposal – CIS 232 .NET Programming II

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

CIS 232 .NET Programming II

This course emphasizes in-depth programming skills and extends the student’s knowledge of Microsoft .NET and Microsoft IDE Visual Studio. The course emphasizes the use of SQL and ADO.NET for the creation of stand-alone and distributed database applications to solve common business problems. The course exposes students to n-tier and database application design, advanced error handling, and the production of flexible business reports. Advanced Visual Studio features are utilized for building Application solutions.

Credits: 3

Prerequisite: CIS 223

Semester Offered: F/S

13. Course Revision Proposal – CIS 234 Web Page Development II

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

CIS 234 Web Page Development II

This course focuses on creating interactive Web sites using the latest version of XHTML, DHTML and JavaScript. Students write code for form validation, page animation, image and text rollovers, pull-down menus, slide shows, create expandable and collapsible outlines, and mouse and keyboard events to create interactive and dynamic web sites. Students also learn to code for W3CDOM. Concepts of e-commerce are discussed.

Credits: 3

Prerequisite: CIS 121, CIS 134

Semester Offered: F/S

14. Course Revision Proposal – CIS 241 Systems Analysis & Design

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

CIS 241 Systems Analysis & Design

This course introduces the student to the major design methodologies such as SDLC, RAD, Object and Agile. This course provides practical experience in feasibility studies, data gathering, analysis, and design of a business information system. Students study the various techniques that can be utilized, conduct a feasibility study, learn valid data collection processes, analyze existing systems, and design new information systems.

Credits: 3

Prerequisite: CIS 121 or CIS 223 or CIS 226

Semester Offered: F/S

15. Course Revision Proposal – CIS 243 Database management Application Development

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

CIS 243 Database Management Application Development

This course focuses on in-depth database management utilizing current database applications. Microsoft's Access is utilized to help reinforce relational database application concepts. Students learn the concepts of distributed database systems, query optimization, concurrency control, and deductive database and object-oriented database systems through lecture and hands-on activities. Topics include structural design, testing and debugging techniques, security, and backup and restart procedures. Students design and construct a complete database system.

Credits: 3

Prerequisite: CIS 105 or CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or appropriate placement score

Semester Offered: F/S

16. Course Revision Proposal – CIS 246 .NET Programming III

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

CIS 246 .NET Programming III

This course introduces students who are already familiar with HTML, Visual Basic, and database concepts to creating N-tier Web applications using .NET technologies such as: Active Server pages and ActiveX data objectives. Microsoft's Active Server Pages (ASP) technology allows the Internet developer to create browser-independent, dynamic Web pages by combining programmatic code with the three-tier client-server Web applications.

Credits: 3

Prerequisite: CIS 134, CIS 232

Semester Offered: S

17. Course Revision Proposal – CIS 247 Database Administration

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

CIS 247 Database Administration

This course focuses on how to fine tune a selected relational database (RDB), such as SQL SERVER/ORACLE. Topics include RDB architectural components; RDB administration tools; RDB instances; creating an RDB database; constructing Data Dictionary views; maintaining the control file; maintaining the Redo Log File; managing table spaces and data files; understanding relationships and impacts on the storage structure; managing tables, indexes and segments; maintaining data integrity; managing users, profiles, privileges, and roles; understanding and using database auditing options; using National Language Support.

Credits: 3

Prerequisite: CIS 228 or CIS 244

Semester Offered: S

18. Course Revision Proposal – CIS 299 Computer Information Systems Cooperative Education

a. Effective date: Fall 2020

- b. Course description (as it will appear in catalog):

CIS 299 Cooperative Work Experience & Seminar

This course provides students with an opportunity to learn about various approaches for career and employment. Students learn to create a portfolio, which includes resume, list of skills, and a sample of the completed project from a previous class. Students also learn to write a forwarding letter, elevator speech, interviewing skills, thank-you letter after an interview, business etiquette, as well as ethics. Using the job description, the student and the faculty will develop a learning agreement specifying learning goals. Students will complete 150 hours for a non-paid position and 225 hours for a paid position. Co-op placement assistance will be provided by career placement services and the faculty; however the student will be responsible for obtaining a co-op placement.

Credits: 3

Prerequisite: CIS 241, CPS 298, Approval of Program Coordinator

Semester Offered: S

19. New Course Proposal – CIS 251 Quality Assurance Foundations

- a. Effective date: Fall 2020

- b. Course description (as it will appear in catalog):

CIS 251 Quality Assurance Foundations

This course is one of three in a series developed to introduce students to the importance of user-oriented programming development. This course focuses on software testing concepts. Topics include fundamentals of testing, testing throughout SDLC process, static testing, and dynamic testing. Testing techniques such as Black-box and White-box, management of testing, and testing tools are also covered. At the end of the course, students prepare to sit for ISTQB’s 2018 Foundation Level Exam.

Credits: 1

Prerequisite: CIS 121

Semester Offered: S

20. New Course Proposal – CIS 252 Information Architecture/User Interface Foundations

- a. Effective date: Fall 2020

- b. Course description (as it will appear in catalog):

CIS 252 Information Architecture/User Interface Foundations

This course provides fundamental methodologies for information systems user interface design requirements. Students will learn to plan and design navigation pathways for the information to flow easily and logically for the user. The focus will be on applying UI techniques that will meet the organizational information system’s goals and user’s requirements. The seven habits of Information Systems Interface Designers will be discussed, including understanding the business, maximum graphical effectiveness in information systems, think like a user, use of models and prototypes, focus on usability, invite feedback, and documentation.

Credits: 1

Prerequisite: CIS 121, CIS 134

Semester Offered: S

21. New Course Proposal – CIS 253 Security Techniques in Programming

- a. Effective date: Fall 2020

- b. Course description (as it will appear in catalog):

CIS 253 Security Techniques in Programming

This course provides fundamental process and methodologies for creating secure software. Students are introduced to a variety of different software threats and vulnerabilities. Focus is placed on incorporating various techniques in the beginning of the Software Development Life Cycle.

Credits: 1

Prerequisite: CIS 121, CIS 134

Semester Offered: S

22. Certificate Revision Proposal – Applications Specialist Certificate (CAS)

- a. Effective date: Fall 2020

- b. Program grid (as it will appear in catalog):

Applications Specialist Certificate (Program Code: CAS)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|---------|---------|---------------|---|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: CAS). |
| Introduction to Information Technology | CIS 105 | F/S/SU | 3 | | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | Register for and successfully complete all courses to graduate in |

| | | | | | |
|---|--------------------|---------------|--------------|---|---|
| Introduction to Programming with C++ | CIS 121 | F/S | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 111 or CIS 115 | two semesters. Meet with a QCC Career Services Representative and attend Workshops. See www.QCC.edu/career-services . |
| Web Page Development I | CIS 134 | F/S | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 111 | |
| | | | Total | 12 | |
| Semester 2 | | | | | |
| Financial Accounting I | ACC 101 | F/S/SU | 3 | Placement into college level English, MAT 090 with a grade of "C" or higher or approp place score | Meet with a Career Services Representative for Job Search Assistance services. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Business Law I or E-Business Law & Ethics | BSL 101 BSL 103 | F/S/SU F/S | 3 | Coreq: CIS 111 | |
| Advanced Microcomputer Applications | CIS 112 | F/S/SU | 3 | CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Introduction to Data Communication & Networks or Networking Technologies | CIS 141 CSC 234 | F/S/SU | 3-4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 111 Coreq: CSC 141 | |
| SQL Programming | CIS 228 | F/S | 3 | CIS 105 or CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| | | | Total | 15-16 | |
| Total Credits Required | | | | 27-28 | |

23. Degree Revision Proposal – CIS - Applications Specialist Option (CIAS)

- a. Effective date: Fall 2020
- b. Program grid (as it will appear in catalog):

Computer Information Systems - Applications Specialist Option - Associate in Science (Program Code: CIAS)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|--------------------|---------------|--------------|---|---|
| Semester 1 | | | | | |
| Financial Accounting I | ACC 101 | F/S/SU | 3 | Placement into college level English, MAT 090 with a grade of "C" or higher or approp place score | Apply and get accepted to this program (Program Code: CIAS). Register for and successfully complete all courses to graduate in four semesters. |
| Business Law I or E-Business Law & Ethics | BSL 101 BSL 103 | F/S/SU F/S | 3 | Coreq: CIS 111 | |
| Introduction to Information Technology | CIS 105 | F/S/SU | 3 | | Complete CIS 105, CIS 111, and ENG 101. |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | Complete prerequisite(s) for MAT 123. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| | | | Total | 15 | |
| Semester 2 | | | | | |
| Advanced Microcomputer Applications | CIS 112 | F/S/SU | 3 | CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | Meet with a QCC Career Services Representative and attend Workshops. See www.QCC.edu/career-services . |
| Introduction to Programming with C++ | CIS 121 | F/S | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 111 or CIS 115 | |
| Introduction to Data Communication & Networks or Networking Technologies | CIS 141 CSC 234 | F/S/SU | 3-4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 111 Coreq: CSC 141 | Complete CIS 121, ENG 102, and MAT 123. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| College Mathematics I: Pre-Calculus | MAT 123 | F/S/SU | 3 | MAT 100 or approp place score | |
| | | | Total | 15-16 | |
| Semester 3 | | | | | |
| Web Page Development I | CIS 134 | F/S | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 111 | Meet with Program Coordinator to discuss readiness for CIS 299. Meet with a Career Services Representative for Job Search Assistance services. |
| Systems Analysis & Design | CIS 241 | F/S | 3 | CIS 121 or CIS 223 or CIS 226 | |
| Database Management Application Development | CIS 243 | F/S | 3 | CIS 105 or CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | |
| Technical and Workplace Writing | ENG 205 | F/S/SU | 3 | ENG 102, Computer Literacy | |

| | | | | | | |
|---|---------|--------------|--------------|---|--|--|
| Psychology of Interpersonal Relations or | PSY 118 | F/S | 3 | Placement into college level English | Submit an Intent to Graduate Form, located on <i>The Q</i> . | |
| Human Relations in Organizations | PSY 158 | F/S/SU | | | | |
| | | Total | 15 | | | |
| Semester 4 | | | | | | |
| SQL Programming | CIS 228 | F/S | 3 | CIS 105 or CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | | |
| Quality Assurance Foundations | CIS 251 | S | 1 | CIS 121 | | |
| Information Architecture/User Interface Foundations | CIS 252 | S | 1 | CIS 121, CIS 134 | | |
| Security Techniques in Programming | CIS 253 | S | 1 | CIS 121, CIS 134 | | |
| Cooperative Work Experience & Seminar | CIS 299 | S | 3 | CIS 241, CPS 298, Approval of Program Coordinator | | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | | |
| | | Total | 15 | | | |
| Total Credits Required | | | 60-61 | | | |

24. Certificate Revision Proposal – CIS - Database Certificate (DB)

- a. Effective date: Fall 2020
- b. Program grid (as it will appear in catalog):

Database Certificate (Program Code: DB)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|--------------|--|---|
| Semester 1 | | | | | |
| Introduction to Information Technology | CIS 105 | F/S/SU | 3 | | Apply and get accepted to this program (Program Code: DB). |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Introduction to Programming with C++ | CIS 121 | F/S | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 111 or CIS 115 | Register for and successfully complete all courses to graduate in two semesters. Meet with a QCC Career Services Representative and attend Workshops. See www.QCC.edu/career-services . |
| Introduction to Data Communication & Networks or | CIS 141 | F/S/SU | 3-4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 111 | |
| Networking Technologies | CSC 234 | | | | |
| | | Total | 12-13 | | |
| Semester 2 | | | | | |
| .NET Programming I | CIS 223 | F/S | 3 | CIS 111, CIS 121 | Meet with a Career Services Representative for Job Search Assistance services. |
| SQL Programming | CIS 228 | F/S | 3 | CIS 105 or CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Database Management Application Development | CIS 243 | F/S | 3 | CIS 105 or CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Database Management Concepts | CIS 244 | S | 3 | CIS 105 or CIS 111 or CIS 115 | |
| Internet Communications | HUM 142 | F/S/SU | 3 | Placement into college level English, Computer Literacy | |
| | | Total | 15 | | |
| Total Credits Required | | | 27-28 | | |

25. Degree Revision Proposal – CIS - Database Option (CIDB)

- a. Effective date: Fall 2020
- b. Program grid (as it will appear in catalog):

Computer Information Systems - Database Option - Associate in Science (Program Code: CIDB)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|---------|---------|---------------|---|
| Semester 1 | | | | | |
| Introduction to Information Technology | CIS 105 | F/S/SU | 3 | | Apply and get accepted to this program (Program Code: CIDB). |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| | | | | | Register for and successfully complete all courses to graduate in |

| | | | | | |
|---|---------|--------------|--------------|--|---|
| Introduction to Programming with C++ | CIS 121 | F/S | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 111 or CIS 115 | five semesters. Complete CIS 111, CIS 121, ENG 101, and MAT 123. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| College Mathematics I: Pre-Calculus | MAT 123 | F/S/SU | 3 | MAT 100 or approp place score | |
| | | Total | 15 | | |
| Semester 2 | | | | | |
| .NET Programming I | CIS 223 | F/S | 3 | CIS 111, CIS 121 | Meet with a QCC Career Services Representative and attend Workshops. See www.QCC.edu/career-services . Complete CIS 223, CIS 228, CIS 244, and ENG 102. |
| SQL Programming | CIS 228 | F/S | 3 | CIS 105 or CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Database Management Concepts | CIS 244 | S | 3 | CIS 105 or CIS 111 or CIS 115 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| | | Total | 15 | | |
| Semester 3 (Summer) | | | | | |
| Introduction to Data Communication & Networks or | CIS 141 | F/S/SU | 3-4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 111 | |
| Networking Technologies | CSC 234 | | | Coreq: CSC 141 | |
| Internet Communications | HUM 142 | F/S/SU | 3 | Placement into college level English, Computer Literacy | |
| | | Total | 6-7 | | |
| Semester 4 | | | | | |
| PL/SQL Programming | CIS 229 | F/S | 3 | CIS 228 | Meet with Program Coordinator to discuss readiness for CIS 299. |
| .NET Programming II | CIS 232 | F/S | 3 | CIS 223 | |
| Systems Analysis & Design | CIS 241 | F/S | 3 | CIS 121 or CIS 223 or CIS 226 | Meet with a Career Services Representative for Job Search Assistance services. |
| Database Management Application Development | CIS 243 | F/S | 3 | CIS 105 or CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | |
| Technical and Workplace Writing | ENG 205 | F/S/SU | 3 | ENG 102, Computer Literacy | |
| | | Total | 15 | | |
| Semester 5 | | | | | |
| Management of Data Analytics | CIS 206 | F/S | 3 | CIS 111, MAT 122 | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Database Administration | CIS 247 | S | 3 | CIS 228 or CIS 244 | |
| Cooperative Work Experience & Seminar | CIS 299 | S | 3 | CIS 241, CPS 298, Approval of Program Coordinator | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 12 | | |
| Total Credits Required | | | 63-64 | | |

26. Course Revision Proposal – HUM 142 Internet Communications

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

HUM 142 Internet Communications

This course examines humans' relationship to cyberspace by focusing on ethical issues in the content and development of internet communication tools. Students create an online portfolio of assignments and evaluate sources on topics including internet history and access, web authoring, privacy and security, online learning, and censorship.

Credits: 3

Prerequisite: Placement into college level English, Computer Literacy

Semester Offered: F/S/SU

27. Informational – Additional Healthcare Electives

- a. Add BIO 232, CIS 111 and PHY 103 as Healthcare Electives
- b. Healthcare Electives: Courses with the following designations are considered Healthcare Electives:

- Allied Health (ALH)
- Complementary Health (CHC)
- Dental Assisting (DAS)
- Dental Hygiene (DHY)
- Emergency Medical Technician (EMT)

- Medical Support Specialist (MSS)
- Nurse Education (NUR)
- Occupational Therapy (OTA)
- Paramedicine (MED)
- Practical Nursing Program (PNP)
- Public Health (PHA)
- Radiologic Technology (RDT)
- Respiratory Care (RCP)
- Surgical Technology (SUR)

The following specific courses are also considered Healthcare Electives:

- ASL 111
- BIO 221
- BIO 232
- BSS 112
- CIS 111
- CIS 212
- IDS 101
- IDS 215
- PHI 131
- PHY 103
- PSY 273
- SOC 211
- SPN 113

28. New Degree Program Option – Healthcare - Practical Nursing - Associate in Science (HCPN)

- Effective date: Fall 2020
- Program grid (as it will appear in catalog):

Healthcare - Practical Nursing - Associate in Science (Program Code: HCPN)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|---|--------------|-----------|---|---|
| Semester 1 (Summer) | | | | | Apply and get accepted to this program (Program Code: HCPN). Meet with Career Services Representative to credential up to 17 Healthcare Elective credits for current LPN certification. Contact QCC Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. |
| Upon successful completion of LP certificate, LPE certificate, or state Licensed Practical Nursing exam, 17 credits credentialed (17 credits can be transferred from regionally accredited college) | Transfer Courses: PNP 200 PNP 240 | | 17 | | |
| | | Total | 17 | | |
| Semester 2 (Fall) | | | | | Apply and get accepted to a nurse education program (Program Code: NUR, NUL); these high demand programs have waitlists. If considering transfer (LPN to BSN), meet with a QCC Transfer Services Advisor. See www.QCC.edu/transfer . Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 9 | | |
| Semester 3 (Spring) | | | | | Monitor status on waitlist for selected nurse education program. Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. Complete BIO 111 with a grade of "C" or higher. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or HS AP Biology, Coreq: ENG 101 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| | | Total | 10 | | |
| Semester 4 (Fall) | | | | | Monitor status on waitlist for selected nurse education program. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |

| | | | | | |
|-------------------------------------|---------|--------------|-----------|--------------------------------------|--|
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| History Elective | --- | F/S/SU | 3 | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process. |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 5 (Spring) | | | | | |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | Monitor status on waitlist for selected nurse education program. |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Humanities Elective | --- | F/S/SU | 3 | | Continue with/complete the transfer application process for LPN to BSN. |
| Humanities Elective | --- | F/S/SU | 3 | | Complete BIO 232 with a grade of "C" or higher. |
| | | Total | 13 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Total Credits Required | | | 62 | | |

29. Degree Revision – General Studies - Pre-Nursing Option - Associate in Arts (GSNU)

- a. Effective date: Fall 2020
- b. Note: The BHE has approved this program's name change to Healthcare - Pre-Nursing Option - Associate in Science (HCNU)
- c. Program grid (as it will appear in catalog):

Healthcare - Pre-Nursing Option - Associate in Science (Program Code: HCNU)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|-------------------------------------|----------|--------------|--------------|---|---|
| Semester 1 | | | | | |
| General Biology: Core Concepts or | BIO 101 | F/S/SU | 3-4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | Apply and get accepted to this program (Program Code: HCNU). Contact QCC Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. |
| Introduction to Public Health | PHA 101 | | | Placement into college level English | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Complete BIO 101; or AP Biology, with AP Exam grade of "3" or higher, to count as BIO 101. |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101. |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101. |
| | | Total | 12-13 | | |
| Semester 2 | | | | | |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | Apply and get accepted to a nurse education program (Program Code: NUR, NUE, NUL, NUP); these high demand programs have waitlists. |
| Introductory Nursing Assistant | ALH 131 | | 5 | | |
| Advanced Nursing Assistant | ALH 132 | | 2 | ALH 131, Certificate of Completion from a state-approved nursing assistant training program or current C.N.A. Certificate | Take ALH 132 after ALH 131 in same semester, in addition to ALH 102 (note that Clinical Affiliate Health/ Immunization requirements needed for ALH 131). |
| | | Total | 10 | | |
| Semester 3 | | | | | |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or HS AP Biology, Coreq: ENG 101 | Monitor status on waitlist for selected nurse education program. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | Complete ENG 102; or AP English/ |

| | | | | | |
|-------------------------------------|---------|--------------|--------------|---|---|
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 102. |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 4 | | | | | Monitor status on waitlist for selected nurse education program. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| History Elective | --- | F/S/SU | 3 | | |
| Philosophy Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | Complete prerequisite(s) for MAT 122. |
| Semester 5 | | | | | Monitor status on waitlist for selected nurse education program. |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| Introduction to Global Health | PHA 102 | F/S/SU | 3 | Placement into college level English | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Total Credits Required | | | 61-62 | | |

30. Course Revision Proposal – ALH 134 Phlebotomy/EKG Technician

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

ALH 134 Phlebotomy/EKG Technician

This course provides an introduction to the theory, techniques and roles of a phlebotomist and electrocardiogram (EKG) technician. Students learn phlebotomy skills, including skin puncture, venipuncture, blood collection, and quality assurance. Additional topics include infection control, medical terminology, quality assurance, principles of venipuncture, specimen handling, basic hematology and basic anatomy of the venous system. Students learn the cardiovascular system as it relates to the performance of an EKG. Students gain knowledge in basic EKG tracing, rate, rhythm, common heart abnormalities and the use and function of the EKG machine.

Credits: 3

Prerequisite: Placement into college level English

Corequisite: ALH 136

Semester Offered: F/S/SU

31. New Certificate Proposal – Emergency Medical Technician - Direct Entry Certificate (EMWF)

- a. Effective date: Fall 2020
- b. Program grid (as it will appear in catalog):

Emergency Medical Technician - Direct Entry Certificate (Program Code: EMWF)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|------------------------------------|----------|---------|----------|---------------|--|
| Semester 1 (Summer) | | | | | |
| Basic Emergency Medical Technology | EMT 101 | F/S/SU | 7 | | Apply and get accepted to this program (Program Code: EMWF). Register for and successfully complete EMT 101 to graduate in one semester. Meet with a QCC Career Services Representative and attend Workshops. See www.QCC.edu/career-services . Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Total Credits Required | | | 7 | | |

32. New Certificate Proposal – Nursing Assistant - Direct Entry Certificate (NAWF)

- a. Effective date: Fall 2020
- b. Program grid (as it will appear in catalog):

Nursing Assistant - Direct Entry Certificate (Program Code: NAWF)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--------------------------------|----------|---------|----------|---|--|
| Semester 1 | | | | | |
| Introductory Nursing Assistant | ALH 131 | F/S/SU | 5 | Placement into college level English | Apply and get accepted to this program (Program Code: NAWF), in order to take ALH 131. Register for and successfully complete all courses to graduate in one semester. Take ALH 132 after ALH 131 in same semester (note that Clinical Affiliate Health/Immunization requirements needed for ALH 131). |
| Advanced Nursing Assistant | ALH 132 | F/S/SU | 2 | ALH 131, Certificate of Completion from a state-approved nursing assistant training program or current C.N.A. Certificate | Meet with a QCC Career Services Representative and attend Workshops. See www.QCC.edu/career-services . Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Total Credits Required | | | 7 | | |

33. New Certificate Proposal – Phlebotomy/EKG Technician - Direct Entry Certificate (PKWF)
- Effective date: Fall 2020
 - Program grid (as it will appear in catalog):

Phlebotomy/EKG Technician - Direct Entry Certificate (Program Code: PKWF)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|---------|----------|--|---|
| Semester 1 (Summer) | | | | | |
| Phlebotomy/EKG Technician | ALH 134 | F/S/SU | 3 | Placement into college level English, Coreq: ALH 136 | Apply and get accepted to this program (Program Code: PKWF), in order to take ALH 134 and ALH 136. Register for and successfully complete all courses to graduate in one semester. |
| Phlebotomy/EKG Technician Clinical Co-Operative Externship | ALH 136 | F/S/SU | 6 | Coreq: ALH 134 | Meet with a QCC Career Services Representative and attend Workshops. See www.QCC.edu/career-services . Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Total Credits Required | | | 9 | | |

34. New Certificate Proposal – Pharmacy Technician - Direct Entry Certificate (PTWF)
- Effective date: Fall 2020
 - Program grid (as it will appear in catalog):

Pharmacy Technician - Direct Entry Certificate (Program Code: PTWF)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|----------|---|---|
| Semester 1 | | | | | |
| Pharmacy Technician | ALH 137 | F | 3 | Placement into college level English, MAT 090 with a grade of "C" or higher or approp place score | Apply and get accepted to this program (Program Code: PTWF), in order to take ALH 137. Meet with a QCC Career Services Representative and attend Workshops. See www.QCC.edu/career-services . |
| | | Total | 3 | | |
| Semester 2 | | | | | |
| Pharmacy Technician Clinical Co-Operative Externship | ALH 138 | S | 6 | ALH 137 | Meet with a Career Services Representative for Job Search Assistance services. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| | | Total | 6 | | |
| Total Credits Required | | | 9 | | |

35. Course Revision Proposal – EMT 108 Introduction to Advanced Pre-Hospital Care
- Effective date: Fall 2020
 - Course description (as it will appear in catalog):

MED 110 Introduction to Paramedicine

This course provides paramedic students with the principles of advanced pre-hospital care and EMS operations under varying circumstances including operations and paramedic roles and responsibilities. There is an added emphasis on personal wellness and injury and illness prevention, the medical-legal aspects of emergency care and ethics, the Incident Command System, and managing resources at the emergency scene, particularly at scenes involving multiple ambulances and multiple agencies. Time is devoted to rescue operations, and an overview of hazardous material is presented. The student is made aware of their role in protecting the crime scene. An overview is provided in rural EMS, to raise awareness of the special circumstances that many providers face regarding distance, terrain, weather conditions, and EMS staffing.

Credits: 4

Corequisite: MED 120, MED 130

Semester Offered: F

36. Course Revision Proposal – EMT 110 Patient Assessment and Human Systems

- a. Effective date: Fall 2020
- b. Note: MED 120 is a merging of EMT 109, EMT 110, and EMT 112
- c. Course description (as it will appear in catalog):

MED 120 Pharmacology, Patient Assessment and Human Systems

This course covers the theory, skills, and terminology needed to perform physical assessment, including overview of basic anatomy and physiology, systematic assessment of the patient, the process of obtaining the patient's medical history, procedures in performing the physical examination and a concise method of recording the findings. This course covers the general principles of pharmacology, calculating drug doses and effects of drugs administered by paramedics in the treatment of patients in the clinical and field setting. This course provides a comprehensive laboratory experience designed to familiarize the student with the practical aspects of medical patient assessment, including primary and secondary survey. In addition, both drug dose calculations and medication administration are practiced.

Credits: 4

Corequisite: MED 110, MED 130

Semester Offered: F

37. Course Revision Proposal – EMT 114 Life Span and Healthcare Issues for Pre-Hospital Care

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

MED 130 Special Patient Populations for Paramedicine

This course provides an analysis of normal anatomy and physiology and the disease processes of the female reproductive system, life span development, geriatric patients, and those patients who are challenged. This course also views interventions for the chronic-care patient, and those who may be victims of abuse and neglect.

Credits: 4

Corequisite: MED 110, MED 120

Semester Offered: F

38. Course Revision Proposal – EMT 115 Advanced Pre-Hospital Care

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

MED 150 Advanced Paramedicine

The first half of this course focuses on pathophysiology common to all disease processes: shock, acid-base, and airway. The second half covers the pathophysiology of the pulmonary, nervous, gastrointestinal, and genitourinary systems. It reviews IV fluid administration and medical math, briefly reviews the anatomy and physiology of each topic covered, and uses a scenario-based approach to assessment and management.

Credits: 4

Prerequisite: MED 110, MED 120, MED 130

Corequisite: MED 160, MED 170, MED 180, MED 190

Semester Offered: S

39. Course Revision Proposal – EMT 116 Cardiology and Advanced Cardiac Life Support

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

MED 160 Cardiology and Advanced Cardiac Life Support

This course provides the student with the knowledge and skills needed to recognize and successfully manage cardiovascular emergencies encountered in the field. Following the standards of the American Heart Association, Massachusetts Statewide Treatment Protocols, and the National Registry of EMTs, Paramedic Psychomotor Competency Portfolio Skill Assess students learn cardiac anatomy and physiology, ECG recognition, and 12 lead ECG recognition and treatment. Extensive coverage is devoted to the pharmacological and electrical management techniques used in treating acute cardiac events,

including respiratory and cardiac arrest. The student has the opportunity to secure Advanced Cardiac Life Support certification for an additional fee.

Credits: 4

Prerequisite: MED 110, MED 120, MED 130

Corequisite: MED 150, MED 170, MED 180, MED 190

Semester Offered: S

40. Course Revision Proposal – EMT 117 Trauma

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

MED 170 Trauma

This course is intended to present to the paramedic student a comprehensive insight into traumatic injury to the human body, its causes, types and implications. The impact on trauma survival and the concept of well-developed regional trauma systems will be discussed. An emphasis will be placed upon the evaluation and management of both blunt and penetrating trauma in relationship to regional anatomy.

Credits: 3

Prerequisite: MED 110, MED 120, MED 130

Corequisite: MED 150, MED 160, MED 180, MED 190

Semester Offered: S

41. Course Revision Proposal – EMT 118 Neonatal and Pediatric Emergencies

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

MED 180 Neonatal and Pediatric Emergencies

This course provides the Paramedic student with a general understanding of the newborn and the newly born with overviews of structure and function of the cardiovascular and respiratory system. Neonatal resuscitation will be presented, along with neonatal assessment. In addition, this course provides the Paramedic student with a general understanding of the pediatric patient and the interaction that is necessary with their family members. Growth and development, anatomy and physiology review, pathophysiology, assessment and management of pediatric emergencies are stressed. The student has the opportunity to secure certifications in the Neonatal Resuscitation Program (NRP) and Pediatric Advanced Life Support (PALS) for an additional fee.

Credits: 2

Prerequisite: MED 110, MED 120, MED 130

Corequisite: MED 150, MED 160, MED 170, MED 190

Semester Offered: S

42. Course Revision Proposal – EMT 119 Topics in Advanced Life Support

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

MED 190 Topics in Advanced Paramedicine

This course includes the assessment and management of blood borne infectious diseases, respiratory infectious disease and their role in pandemics, toxicological emergencies, infectious diseases, endocrine emergencies, allergic reaction and anaphylaxis, and environmental emergencies.

Credits: 3

Prerequisite: MED 110, MED 120, MED 130

Corequisite: MED 150, MED 160, MED 170, MED 180

Semester Offered: S

43. Course Revision Proposal – EMT 200 Emergency Medical Response for Disasters and Developing Countries

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

MED 200 Emergency Medical Response for Disasters and Developing Countries

This course is intended to present to the paramedic and respiratory student a comprehensive insight into the rubrics of disaster pre-hospital emergency medical care, personal preparation for responding to such events, review of patient assessment and intervention, common developing countries' medical conditions, and an overview of responding to developing countries to assist with the country's own medical structure already in place. The impact on emergent and urgent care, views of triage (the most for the many), and long term prognosis and survivability are emphasized. Students must have a valid passport and be in good medical/emotional health to take part in this experience.

Credits: 3

Prerequisite: EMT 114 or MED 130 or RCP 141, Approval of Paramedic Program Coordinator

Semester Offered: F/S

44. Course Revision Proposal – EMT 202 Clinical Placement for the Paramedic

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

MED 210 Clinical Internship for the Paramedic

This course gives the student the opportunity to deliver optimum patient care at several clinical hospital sites, using a preceptor approach. Clinical rotations occur within the following departments: Intensive/Critical Care Unit, Emergency Department, Anesthesiology (Operating Room), Pediatric Emergency Department, Emergency Mental Health, Labor and Delivery, and other departments as needed. The student takes part in weekly simulation to meet accreditation standards as put forth in the National Registry of Emergency Medical Technician Paramedic Psychomotor Competency Portfolio requirements.

Credits: 7

Prerequisite: MED 150, MED 160, MED 170, MED 180, MED 190

Semester Offered: F

45. Course Revision Proposal – EMT 203 Field Placement for the Paramedic

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

MED 220 Field Internship for the Paramedic

This course gives the student the opportunity to deliver optimum patient care at multiple pre-hospital Advanced Life Support service sites, using a Paramedic preceptor approach with one Paramedic intern per ALS team per ambulance. The student has the opportunity to utilize and refine skills gained through the Paramedic Program in real time, testing student knowledge and ability to perform under pressure. Simulation occurs on a bi-weekly schedule to facilitate the completion of accreditation goals and objectives. This course capstone experience completes the student’s Paramedic training.

Credits: 5

Prerequisite: MED 210

Semester Offered: S

46. Certificate Revision Proposal – EMT Paramedic Certificate (PC)

- a. Effective date: Fall 2020
- b. Program grid (as it will appear in catalog):

EMT Paramedic Certificate (Program Code: PC)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|--|--|
| Semester 1 (Fall) | | | | | |
| Introduction to Paramedicine | MED 110 | F | 4 | Coreq: MED 120, MED 130 | Apply and get accepted to this program (Program Code: PC). Register for and successfully complete all courses to graduate in four semesters. Complete all courses with grades of “C” or higher. Meet with a QCC Career Services Representative and attend Workshops. See www.QCC.edu/career-services . |
| Pharmacology, Patient Assessment and Human Systems | MED 120 | F | 4 | Coreq: MED 110, MED 130 | |
| Special Patient Populations for Paramedicine | MED 130 | F | 4 | Coreq: MED 110, MED 120 | |
| | | Total | 12 | | |
| Semester 2 (Spring) | | | | | |
| Advanced Paramedicine | MED 150 | S | 4 | MED 110, MED 120, MED 130, Coreq: MED 160, MED 170, MED 180, MED 190 | Complete all courses with grades of “C” or higher. Meet with a Career Services Representative for Job Search Assistance services. |
| Cardiology and Advanced Cardiac Life Support | MED 160 | S | 4 | MED 110, MED 120, MED 130, Coreq: MED 150, MED 170, MED 180, MED 190 | |
| Trauma | MED 170 | S | 3 | MED 110, MED 120, MED 130, Coreq: MED 150, MED 160, MED 180, MED 190 | |
| Neonatal and Pediatric Emergencies | MED 180 | S | 2 | MED 110, MED 120, MED 130, Coreq: MED 150, MED 160, MED 170, MED 190 | |
| Topics In Paramedicine | MED 190 | S | 3 | MED 110, MED 120, MED 130, Coreq: MED 150, MED 160, MED 170, MED 180 | |
| | | Total | 16 | | |
| Semester 3 (Fall) | | | | | |
| Clinical Internship for the Paramedic | MED 210 | F | 7 | MED 150, MED 160, MED 170, MED 180, MED 190 | Complete all courses with grades of “C” or higher. |
| | | Total | 7 | | |
| Semester 4 (Spring) | | | | | |
| | | | | | Complete all courses with grades of |

| | | | | | |
|------------------------------------|---------|--------------|-----------|---------|--|
| Field Internship for the Paramedic | MED 220 | S | 5 | MED 210 | "C" or higher. |
| | | Total | 5 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Total Credits Required | | | 40 | | |

47. Degree Revision Proposal – Paramedic Technology (EM)

- a. Effective date: Fall 2020
- b. Program grid (as it will appear in catalog):

Paramedic Technology - Associate in Science (Program Code: EM)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|---|--------------|--------------|--------------------------------------|---|
| Semester 1 (Fall) | | | | | |
| Upon successful completion of state Paramedic written and practical exam or National Registry of Emergency Medical Technicians Paramedic written and practical exam, 24 credits credentialed (24 credits can be transferred from regionally accredited college) | Transfer Courses: MED 160 MED 170 MED 180 MED 190 MED 210 MED 220 | | 24 | | Apply and get accepted to this program (Program Code: EM). Meet with Career Services Representative to credential 24 credits for current Paramedic certification. Contact QCC Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. |
| | | Total | 24 | | |
| Semester 2 (Spring) | | | | | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101. |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| Lab Science Elective | --- | F/S/SU | 4 | | Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101. |
| Mathematics Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 3 (Fall) | | | | | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | Meet with a QCC Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Humanities Elective | --- | F/S/SU | 3 | | For the Science Elective, consider taking a Lab Science course if interested in pursuing other healthcare degrees. |
| Science Elective | --- | F/S/SU | 3-4 | | |
| | | Total | 12-13 | | |
| Semester 4 (Spring) | | | | | |
| Healthcare Elective | --- | F/S/SU | 3 | | Continue with/complete the transfer application process. |
| History Elective | --- | F/S/SU | 3 | | For the Healthcare Elective, MED 200 strongly recommended. |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| | | Total | 12 | | |
| Total Credits Required | | | 61-62 | | |

48. Course Revision Proposal – ALH 107 Medical Coding and Billing

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

ALH 107 Medical Coding and Billing

This course examines ICD-10CM coding, CPT-4 coding, insurance programs, Medicare, insurance claim forms, and legal issues. The course introduces the coding systems and recordkeeping used in medical facilities.

Credits: 3

Prerequisite: ALH 102, Placement into college level English

Semester Offered: F/S

49. Course Revision Proposal – ALH 151 Medical Office Administration I

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

ALH 151 Medical Office Administration I

This course introduces medical office procedures, including appointment scheduling, medical records creation and maintenance, phone communication, inventory of supplies, and computers in the medical office. Students become competent in the use of office equipment and the composing of different types of letters. The course introduces verbal and non-verbal methods of communication skills.

Credits: 3

Prerequisite: ALH 102, ENG 101, PSY 101
Semester Offered: F/S

50. Course Revision Proposal – ALH 152 Medical Office Administration II

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

ALH 152 Medical Office Administration II

This course examines legal relationships of physicians, staff and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent and bioethical issues. Emphasis is placed on legal terms, professional attitudes, and the principles and basic concepts of ethics and laws involved in providing medical care. Additionally, students acquire entry-level skills with the use of electronic medical record (EMR) software.

Credits: 3

Prerequisite: ALH 107, ALH 151, CPS 298, MSS 151

Semester Offered: F/S

51. Course Revision Proposals – MSS 151 Clinical Procedures I

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

MSS 151 Clinical Procedures I

This course covers introductory theory and techniques of medical assisting used to perform fundamental clinical assisting procedures. Topics include aseptic technique with infection control; measuring vital signs; preparing/maintaining treatment areas; interviewing techniques and recording of patient histories; preparing and assisting patients for procedures, electrocardiograms and monitoring test results.

Credits: 4

Prerequisite: ALH 102, ENG 101, PSY 101

Semester Offered: F/S

52. Course Revision Proposal – MSS 251 Clinical Procedures II

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

MSS 251 Clinical Procedures II

This course covers advanced theory and techniques of medical assisting skills including diagnostic testing procedures of hematology, blood chemistries, blood drawing (capillary and venous); emergency/first aid skills in the medical office; preparing for radiography; minor office surgery techniques and the physical agents that promote tissue healing.

Credits: 4

Prerequisite: ALH 107, ALH 151, CPS 298, MSS 151

Semester Offered: F/S

53. Course Revision Proposal – MSS 252 Principles of Pharmacology for Medical Assistants

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

MSS 252 Principles of Pharmacology for Medical Assistants

This course is designed to provide instruction in concepts and application of pharmacological principles. The focus of this course is on drug classifications, principles and procedures of medication administration, mathematical systems and conversions, calculation of drug problems and medico-legal responsibilities of the medical assistant. This course provides demonstration and techniques of administration of medications in the medical office setting, including intradermal, subcutaneous, and intramuscular routes as well as oral, topical, sublingual, vaginal and rectal administration. Students are to be expected to perform to competency level the pharmacological skills in check-off format outlined by the instructor.

Credits: 3

Prerequisite: ALH 107, ALH 151, CPS 298, MSS 151

Semester Offered: F/S

54. Course Revision Proposal – MSS 299 Fieldwork Experience

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

MSS 299 Fieldwork Experience

This is a 12-week, 180-hour unpaid externship at an appropriate, approved clinical site. Students participate in an integrated experience in which they apply the skills and knowledge learned in the medical assisting program.

Credits: 4

Prerequisite: ALH 152, MSS 251, MSS 252

Semester Offered: F/S/SU

55. Certificate Revision Proposal – Medical Assisting Certificate (ME)

- a. Effective date: Fall 2020
- b. Program grid (as it will appear in catalog):

Medical Assisting Certificate (Program Code: ME)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|--|
| Semester 1 (Summer) | | | | | |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | Apply and get accepted to this program (Program Code: ME). This program does not have a waitlist. Contact QCC Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Complete ALH 102 with a grade of "C" or higher. Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101. |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101. |
| | | Total | 9 | | |
| Semester 2 (Fall) | | | | | |
| Medical Coding and Billing | ALH 107 | F/S | 3 | ALH 102, Placement into college level English | Register as soon as possible each semester for all Medical Assisting courses, which are first come, first served and fill before most courses. |
| Medical Office Administration I | ALH 151 | F/S | 3 | ALH 102, ENG 101, PSY 101 | Meet with a QCC Career Services Representative and attend Workshops. See www.QCC.edu/career-services . |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | |
| Clinical Procedures I | MSS 151 | F/S | 4 | ALH 102, ENG 101, PSY 101 | Complete ALH 107, ALH 151, and MSS 151 with grades of "C" or higher. |
| | | Total | 10 | | |
| Semester 3 (Spring) | | | | | |
| Medical Office Administration II | ALH 152 | F/S | 3 | ALH 107, ALH 151, CPS 298, MSS 151 | Complete ALH 152, MSS 251, and MSS 252 with grades of "C" or higher. |
| Clinical Procedures II | MSS 251 | F/S | 4 | ALH 107, ALH 151, CPS 298, MSS 151 | |
| Principles of Pharmacology for Medical Assistants | MSS 252 | F/S | 3 | ALH 107, ALH 151, CPS 298, MSS 151 | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| | | Total | 10 | | |
| Semester 4 (Summer) | | | | | |
| Fieldwork Experience | MSS 299 | F/S/SU | 4 | ALH 152, MSS 251, MSS 252 | Meet with a Career Services Representative for Job Search Assistance services. Complete MSS 299 with a grade of "C" or higher. |
| | | Total | 4 | | |
| Total Credits Required | | | 33 | | |

56. Degree Revision Proposal – Medical Support Specialist - Medical Assisting Option (MSMA)

- a. Effective date: Fall 2020
- b. Program grid (as it will appear in catalog):

Medical Support Specialist - Medical Assisting Option - Associate in Science (Program Code: MSMA)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|--|--------------|-----------|---------------|--|
| Semester 1 (Fall) | | | | | |
| Upon successful completion of Certified Medical Assistant (CMA) through American Association of Medical Assistants (AAMA) or Registered Medical Assistant (RMA) through American Medical Technologists (AMT), 22 credits credentialed (22 credits can be transferred from regionally accredited college) | Transfer Courses: ALH 102 ALH 151 ALH 152 MSS 151 MSS 251 MSS 252 MSS 299 | | 22 | | Apply and get accepted to this program (Program Code: MSMA). Meet with Career Services Representative to credential 22 credits for CMA or RMA. Contact QCC Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. |
| | | Total | 22 | | |
| Semester 2 (Spring) | | | | | |
| | | | | | Complete ENG 101; or AP English/ |

| | | | | | |
|-------------------------------------|---------|--------------|-----------|---|---|
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101. |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101. |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 12 | | |
| Semester 3 (Fall) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. Meet with a QCC Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or HS AP Biology, Coreq: ENG 101 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 4 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. Continue with/complete the transfer application process. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| History Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Total Credits Required | | | 60 | | |

57. Course Revision Proposal – DAS 101 Clinical Science I

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

DAS 101 Clinical Science I

This course covers terminology and procedures performed in a general dental office. Students learn oral diagnosis, treatment of dental disease, management of medical emergencies, and dental therapeutics. Students will also gain familiarity in pharmacology including addiction.

Credits: 3

Prerequisite: DA students only, BIO 100 with a grade of "C" or higher or BIO 111 with a grade of "C" or higher and BIO 112 with a grade of "C" or higher, DHY 125 with a grade of "C" or higher, ENG 101

Corequisite: DAS 102, DAS 151, DHY 131, DHY 241

Semester Offered: F

58. Course Revision Proposal – DAS 102 Dental Sciences

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

DAS 102 Dental Sciences

This course provides knowledge and understanding of the development, form, and function of the structures of the head and neck and oral cavity, including histology and embryology of the teeth and periodontium, and the embryonic development of the face and teeth, in order to understand the rationale behind the performance of general dentistry procedures.

Credits: 3

Prerequisite: DA students only, BIO 100 with a grade of "C" or higher or BIO 111 with a grade of "C" or higher and BIO 112 with a grade of "C" or higher, DHY 125 with a grade of "C" or higher, ENG 101

Corequisite: DAS 101, DAS 151, DHY 131, DHY 241

Semester Offered: F

59. Course Revision Proposal – DAS 105 Clinical Science II

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

DAS 105 Clinical Science II

This course explores the concepts of preventive dentistry, patient education and motivation, and dental specialties. Topics include dietary considerations for the dental patient; the psychology of human behavior as it relates to working and communicating with patients, other dental personnel, and society; and, restorative dentistry equipment and methods. Students prepare for the DANB CDA examination through a review of chairside materials, laboratory materials, and procedures.

Credits: 4

Prerequisite: DAS 153 with a grade of "C" or higher

Corequisite: DAS 111, DAS 124, DAS 155

Semester Offered: S

60. Course Revision Proposal – DAS 111 Practice Management

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

DAS 111 Practice Management

This course introduces students to office principles including reception techniques, appointment control, third-party billing, financial records, and manual and computerized accounting procedures. Students learn the basics of Microsoft Windows®, Word®, and PowerPoint®. Students learn effective oral communication through presentations on selected topics. Students prepare for employment through study of interviewing skills and creation of a resume.

Credits: 3

Prerequisite: DAS 153 with a grade of “C” or higher

Corequisite: DAS 105, DAS 124, DAS 155

Semester Offered: S

61. Course Revision Proposal – DAS 124 Introduction to Oral Pathology

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

DAS 124 Introduction to Oral Pathology

This course is an introduction to the etiology, incidence, and disease process of common oral and dental pathological conditions. Students gain familiarity with diseases of the teeth and supporting structures, developmental disturbances of the oral cavity, and neoplasms; and, distinguish normal from abnormal tissue.

Credits: 1

Prerequisite: DAS 153 with a grade of “C” or higher

Corequisite: DAS 105, DAS 111, DAS 155

Semester Offered: S

62. Course Revision Proposal – DAS 151 Dental Assisting I

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

DAS 151 Dental Assisting I

This course prepares students to provide chairside assistance to the dentist in all phases of general and specialty dentistry. Topics include principles of four-handed dentistry, instrument use and identification, exposure control, OSHA regulations, and hazard control recommendations. Students explore dental ethics, jurisprudence, and manipulation of chairside intraoral materials. Students gain a familiarity with a professional dental setting through an externship in a local dental office.

Credits: 4

Prerequisite: DA students only, BIO 100 with a grade of “C” or higher or BIO 111 with a grade of “C” or higher and BIO 112 with a grade of “C” or higher, DHY 125 with a grade of “C” or higher, ENG 101

Corequisite: DAS 101, DAS 102, DHY 131, DHY 241

Semester Offered: F

63. Course Revision Proposal – DAS 153 Dental Assisting Clinical Practicum

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

DAS 153 Dental Assisting Clinical Practicum

In the setting of a general dental office, during hours of rotation, students will apply the skills and knowledge acquired in the classroom by competently performing dental assisting functions including participating in four-handed chairside techniques and related dental assisting procedures. Students are responsible for recruiting patients to participate in full-mouth radiographic series.

Credits: 2

Prerequisite: DAS 101 with a grade of “C” or higher, DAS 102 with a grade of “C” or higher, DAS 151 with a grade of “C” or higher, DHY 131 with a grade of “C” or higher, DHY 241 with a grade of “C” or higher

Semester Offered: IN

64. Course Revision Proposal – DAS 155 Dental Assisting II

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

DAS 155 Dental Assisting II

In the setting of a general and specialty dental office rotations, students apply the skills and knowledge acquired in the classroom by competently performing dental assisting functions including participating in four-handed chairside techniques and related dental assisting procedures. A minimum number of externship hours will be required. Students must attend weekly seminars to discuss extern issues and topics related to the practice of dentistry. The course also provides a review of the DANB CDA examination.

Credits: 6

Prerequisite: DAS 153 with a grade of “C” or higher

Corequisite: DAS 105, DAS 111, DAS 124

Semester Offered: S

65. Course Revision Proposal – DHY 111 Dental Hygiene Process I

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

DHY 111 Dental Hygiene Process I

In this fundamental course, students are introduced to the dental hygiene process of care through lecture and laboratory sessions. The theoretical concepts presented in this lecture are expanded upon and applied in the laboratory setting. Emphasis is placed on patient assessment in the dental hygiene process of care, including: disease transmission theory and regulatory guidelines, infection control practices, medical histories, vital signs assessment, intra and extra oral examination, soft and hard deposits, caries theory, removal of extrinsic stains/biofilm, dentifrices and mouth rinses, and the develop of basis instrumentation skills. Skills are developed through practice on mannequins and student partners.

Credits: 4

Prerequisite: BIO 112 with a grade of “C” or higher, CHM 101 with a grade of “C” or higher, DHY 125 with a grade of “C” or higher, ENG 101

Semester Offered: F

66. Course Revision Proposal – DHY 112 Dental Hygiene Process II

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

DHY 112 Dental Hygiene Process II

This course continues theoretical preparation in the dental hygiene process of care. Emphasis is on the action and administration of fluorides, caries prevention, prevention and management of medical emergencies including medicolegal implications, dental hygiene care planning, introduction to ultrasonic instrumentation, health promotion, and care of special needs clients. In the clinical setting, emphasis is on patient assessment, care planning, patient education, basic hand and ultrasonic instrumentation, care of oral appliances and application of caries preventive agents. Students are expected to use critical thinking and problem solving skills when planning and implementing patient care. A weekly one-hour Service-Learning component integrates with the academic experience.

Credits: 5

Prerequisite: DHY 125 with a grade of “C” or higher

Semester Offered: S

67. Course Revision Proposal – DHY 113 Dental Hygiene Process Summer Clinic

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

DHY 113 Dental Hygiene Process Summer Clinic

This course continues preparation in the dental hygiene process of care and emphasizes developing and refining hand and ultrasonic instrumentation skills, medical emergency drills, protocol for dietary counseling, intraoral photography and an introduction to supportive periodontal treatment. Students demonstrate their understanding of the dental hygiene process of care in implementation and evaluation using critical thinking, problem solving and sound judgment in providing direct patient care in supervised clinical sessions.

Credits: 1

Prerequisite: BIO 232 with a grade of “C” or higher, DHY 112 with a grade of “C” or higher, DHY 124 with a grade of “C” or higher, DHY 126 with a grade of “C” or higher, DHY 150 with a grade of “C” or higher, DHY 250 with a grade of “C” or higher

Semester Offered: SU

68. Course Revision Proposal – DHY 116 Practice Management for the Dental Hygienist

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

DHY 116 Practice Management for the Dental Hygienist

This course introduces students to the duties related to dental practice management administrative functions and to dental office software, as it relates to the provision of clinical services used in the day-to-day operations in a dental setting. Students learn interpersonal and communication skills as well as basic computer skills to utilize dental practice management software for basic office procedures.

Credits: 1

Prerequisite: DHY 111 with a grade of “C” or higher, DHY 121 with a grade of “C” or higher, DHY 123 with a grade of “C” or higher, DHY 131 with a grade of “C” or higher, PSY 101

Semester Offered: IN

69. Course Revision Proposal – DHY 121 Anatomy of the Head and Neck
- a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):
DHY 121 Anatomy of the Head & Neck
This course provides a theoretical and practical study of the anatomy of the head and neck. Students apply this foundational knowledge of anatomical principals and concepts to dental hygiene practice and the provision of comprehensive dental hygiene care. Students will gain in depth knowledge in head and neck anatomy including: anatomical nomenclature, identification of dento-osseous structures, location and function of muscles, nerves, lymphatics, glandular tissues, blood supply and the anatomy involved in the administration of local anesthesia.
Credits: 2
Prerequisite: BIO 112 with a grade of “C” or higher, CHM 101 with a grade of “C” or higher, DHY 125 with a grade of “C” or higher, ENG 101
Semester Offered: F
70. Course Revision Proposal – DHY 123 Oral Histology and Embryology
- a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):
DHY 123 Oral Histology & Embryology
The student will study the microscopic anatomy of the oral tissues. Oral structure and its embryonic development and function will be presented. The student will gain knowledge in the cellular structure and embryonic development of the head, face, and oral cavity.
Credits: 2
Prerequisite: BIO 112 with a grade of “C” or higher, CHM 101 with a grade of “C” or higher, DHY 125 with a grade of “C” or higher, ENG 101
Semester Offered: F
71. Course Revision Proposal – DHY 124 Periodontology
- a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):
DHY 124 Periodontology
This course provides a gross and microscopic study of the anatomy and physiology of the supporting structures of the teeth. The student will gain theoretical and practical knowledge in the etiology, the classification, and principles of examination and treatment of periodontal disease. An ability to recognize normal versus abnormal states of periodontium tissues is an expected learner outcome.
Credits: 2
Prerequisite: DHY 125 with a grade of “C” or higher
Semester Offered: S
72. Course Revision Proposal – DHY 125 Dental Anatomy
- a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):
DHY 125 Dental Anatomy
This course examines the anatomy and morphology of the human permanent and primary dentitions. The student will gain a theoretical and practical knowledge of tooth anatomy and relate those anatomical principles to the dental hygiene process of clinical care. The student will identify the anatomy of the human teeth.
Credits: 1
Prerequisite: DA or DH students only, BIO 100 with a grade of “C” or higher or BIO 111 with a grade of “C” or higher, Placement into college level English
Semester Offered: SU
73. Course Revision Proposal – DHY 126 Oral Pathology
- a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):
DHY 126 Oral Pathology
The student is introduced to the basic principles and process of pathology. Emphasized are the disease process, pathology of the oral cavity, and their relationship to caring for the total patient. The student is expected to recognize visually normal and abnormal tissue and gain a theoretical and practical knowledge of diseases of the teeth and supporting structures and developmental disturbances of the oral cavity and neoplasms.
Credits: 2
Prerequisite: DHY 125 with a grade of “C” or higher
Semester Offered: S

74. Course Revision Proposal – DHY 131 Dental Radiology
- a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):
DHY 131 Dental Radiology
This course provides an introduction to the history of dental radiology, radiation hazards and protection, and the production and control of the dental x-ray beam. Classroom and laboratory instruction in x-ray exposure and processing techniques, as well as interpretation of dental x-rays, are designed to prepare the student for future clinical x-ray experience.
Credits: 3
Prerequisite: BIO 100 with a grade of “C” or higher or BIO 111 with a grade of “C” or higher and BIO 112 with a grade of “C” or higher, DHY 125 with a grade of “C” or higher, ENG 101
Semester Offered: F
75. Course Revision Proposal – DHY 150 Local Anesthesia for the Dental Hygienist
- a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):
DHY 150 Local Anesthesia for the Dental Hygienist
This course provides the dental hygiene student with the essential skills and knowledge necessary to deliver safe and effective administration of local anesthetics for pain control. Through lectures and clinical experience, students learn to select appropriate anesthetic agents for each patient, select and prepare local anesthetic equipment, locate anatomical landmarks for each injection site and provide comfortable and safe maxillary and mandibular injections. Emphasis is placed on prevention, recognition and management of complications associated with local anesthetic administration. Students serve as patients for each other during laboratory sessions.
Credits: 2
Prerequisite: DHY 125 with a grade of “C” or higher
Semester Offered: S
76. Course Revision Proposal – DHY 201 Health Promotion
- a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):
DHY 201 Health Promotion
This course examines the role of the dental hygiene professional in the promotion of patient-client health and well-being and in the prevention of disease. The multiple dimensions of health will be integrated with theories, principles, and processes of teaching and learning, communication, motivation and strategies for behavior change. Particular patient populations with unique health promotion needs are also presented. The learner will gain an overview of holistic nature of health and the importance of patient-provider relationships.
Credits: 2
Prerequisite: DHY 113 with a grade of “C” or higher
Semester Offered: F
77. Course Revision Proposal – DHY 202 Dental Ethics, Jurisprudence & Professional Issues
- a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):
DHY 202 Dental Ethics, Jurisprudence & Professional Issues
This course explores the ethical and legal obligations of the Dental Hygiene professional. Content will include the major ethical theories applied in healthcare, the ethical code of the Dental Hygiene profession, and the resolution of ethical dilemma. The learner will become familiar with the legal regulation of their profession including practice acts, licensure, risk management, and quality assurance. A component of the course experience is devoted to preparing for dental hygiene employment and includes current professional issues, preparation of a resume, participation in employment interviews and selecting a career position.
Credits: 2
Prerequisite: DHY 201 with a grade of “C” or higher, DHY 211 with a grade of “C” or higher, DHY 231 with a grade of “C” or higher, DHY 241 with a grade of “C” or higher
Semester Offered: S
78. Course Revision Proposal – DHY 211 Dental Hygiene Process III
- a. Effective date: Fall 2020
 - b. Course description (as it will appear in catalog):
DHY 211 Dental Hygiene Process III
This course continues the preparation in the dental hygiene process of care and emphasizes the theory of implementation of care for periodontally involved patients including advanced periodontal instrumentation, and the use of chemotherapeutic agents. Students evaluate dental hygiene care through case study applications. This course emphasizes the student

demonstrating understanding of dental hygiene implementation and evaluation using critical thinking, problem solving, professional demeanor and sound judgment in providing direct patient care in supervised clinical sessions.

Credits: 5

Prerequisite: DHY 113 with a grade of “C” or higher

Semester Offered: F

79. Course Revision Proposal – DHY 212 Dental Hygiene Process IV

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

DHY 212 Dental Hygiene Process IV

This clinical theory course emphasizes the various dental specialties, including, but not limited to: General, Orthodontics, Pediatric Dentistry, Endodontics, Periodontics and Oral surgery practice. Lectures provided by dental specialists highlight the role of the dental hygienist in each area. The clinical component emphasizes mastering the delivery of the dental hygiene process of care while demonstrating independent decision making, sound judgment, and critical thinking and problem solving skills. The course emphasizes the treatment of periodontally involved patients requiring advanced instrumentation skills. Service-learning externships include oral health promotion and provision of services to specific target populations in the community.

Credits: 6

Prerequisite: DHY 201 with a grade of “C” or higher, DHY 211 with a grade of “C” or higher, DHY 231 with a grade of “C” or higher, DHY 241 with a grade of “C” or higher

Semester Offered: S

80. Course Revision Proposal – DHY 231 Dental Pharmacology

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

DHY 231 Dental Pharmacology

This course studies the basic principles of pharmacology and anesthesiology and applies this knowledge to the treatment of patients. The student will gain knowledge of drugs, drug actions, and the efficacy of both those drugs used in dentistry and those impacting on the treatment of patients. The course content will include the physical and chemical properties, preparations, mode of administration, and effect on body systems, as well as reference to medical emergencies associated with dental treatment.

Credits: 2

Prerequisite: DHY 113 with a grade of “C” or higher

Semester Offered: F

81. Course Revision Proposal – DHY 241 Dental Materials

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

DHY 241 Dental Materials

This course studies the physical properties of dental materials encompassing principles of various materials, composition, and uses. The student will be introduced to a variety of dental materials in the classroom and laboratory settings. Emphasis is placed on the rationale for use of particular materials, selection criteria for various manipulative techniques of materials, and the importance of knowledge of materials for the dental hygienist and how these affect his/her responsibility in a clinical setting.

Credits: 2

Prerequisite: BIO 100 with a grade of “C” or higher or BIO 111 with a grade of “C” or higher and BIO 112 with a grade of “C” or higher, DHY 125 with a grade of “C” or higher

Semester Offered: F

82. Course Revision Proposal – DHY 243 Dental Public Health

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

DHY 243 Dental Public Health

This course introduces dental public health and community dentistry. Emphasis is placed on the dental care delivery system, public health methodology, scientific evaluation, health care financing, and patient groups being served. The student will utilize classroom presentation and discussion, outside research, library assignments, and community experiences to become familiar with this aspect of the healthcare delivery system.

Credits: 2

Prerequisite: DHY 201 with a grade of “C” or higher, DHY 211 with a grade of “C” or higher, DHY 231 with a grade of “C” or higher, DHY 241 with a grade of “C” or higher

Semester Offered: S

83. Course Revision Proposal – DHY 250 Nutrition in Oral and Systemic Health
- Effective date: Fall 2020
 - Course description (as it will appear in catalog):
DHY 250 Nutrition in Oral and Systemic Health
 The course provides an overview of the function and food sources of extreme essential to systemic and oral health with an emphasis on the role of nutrients in the development and maintenance of the oral tissues throughout the life cycle. Attention is given to specific life cycle nutrition and health issues that may impact oral health.
Credits: 2
Prerequisite: DHY 125 with a grade of “C” or higher
Semester Offered: S
84. Course Revision Proposal – RCP 103 Fundamentals of Respiratory Care I
- Effective date: Fall 2020
 - Course description (as it will appear in catalog):
RCP 103 Fundamentals of Respiratory Care I
 This course covers the theoretical knowledge base upon which entry-level clinical practice is founded. Topics include physical principles relevant to Respiratory Care, including: gas and fluid dynamics; medical gas regulation; delivery and basic therapeutics; aerosol and humidity delivery and basic therapeutics. A student-directed medical terminology course is also included.
Credits: 2
Corequisite: RCP 121
Semester Offered: F
85. Course Revision Proposal – RCP 104 Fundamentals of Respiratory Care II
- Effective date: Fall 2020
 - Course description (as it will appear in catalog):
RCP 104 Fundamentals of Respiratory Care II
 This course introduces theoretical concepts which are the basis for select therapeutic modalities employed in Respiratory Care. Students learn: infection control and sterilization; medical gas therapy; (hyperbaric, nitric, helium and carbon dioxide therapy); chest physical therapy; airway clearance techniques; monitoring of gas exchange; and lung expansion therapy. The concept of mechanical ventilation is introduced and explored.
Credits: 2
Prerequisite: RCP 103, RCP 121
Corequisite: RCP 122
Semester Offered: S
86. Course Revision Proposal – SUR 116 Surgical Procedures I (renumbered to SUR 131)
- Effective date: Summer 2020
 - Course description (as it will appear in catalog):
SUR 131 Surgical Procedures I
 This course introduces the role of the surgical technician in the healthcare system, and also 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”. This course introduces the student to ethical issues which relate to patient care in a hospital surgical setting. Legal issues and moral values relating to patient rights and operating room procedures will be discussed. Cultural, ethnic, and age issues will be considered, as appropriate.
Credits: 3
Prerequisite: BIO 101 or High School Advanced Placement Biology, Placement into college level English
Semester Offered: F
87. Course Revision Proposal – SUR 203 Surgical Procedures II (renumbered to SUR 132)
- Effective date: Summer 2020
 - Course description (as it will appear in catalog):
SUR 132 Surgical Procedures II
 This course provides the knowledge in areas of patient care directly associated with the surgical experience. Included are an in-depth overview of the hospital, operating room, and its equipment. The individual roles of the surgical team, principles of safety, identification, transportation, positioning, medical terminology, surgical pharmacology, and legal and ethical issues will be discussed. Students will be introduced to procedures and techniques utilized during the surgical experience. Topics covered include: scrubbing, gowning, and gloving; and the establishment of the sterile field with the 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.

Credits: 8

Prerequisite: BIO 111 with a grade of “C” or higher, SUR 131 with a grade of “C” or higher

Semester Offered: S

88. Course Revision Proposal – SUR 221 Surgical Procedures III (renumbered to SUR 231)

- a. Effective date: Summer 2020
- b. Course description (as it will appear in catalog):

SUR 231 Surgical Procedures III

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. Thoracic, neurosurgery, peripheral and cardiovascular surgeries are also covered. Ethics, legal and moral values relating to the individual patient, as well as the operating room procedures, are included. The lab portion continues demonstrating the principles and procedures taught in a non-patient contact environment.

Credits: 12

Prerequisite: BIO 112 with a grade of “C” or higher, SUR 132 with a grade of “C” or higher

Semester Offered: F

89. Course Revision Proposal – SUR 205 Clinical I (renumbered to SUR 232)

- a. Effective date: Summer 2020
- b. Course description (as it will appear in catalog):

SUR 232 Clinical

This course involves the practical application of the skills, knowledge, and abilities developed in these courses. The clinical experience provides students with supervised applications of the theory, principles, and procedures taught in the class and lab room. Students experience patient contact as a member of the operating room team. This experience takes place in hospitals and surgical clinics and focuses on minimally complex to complex surgical cases. This clinical experience requires appropriate case scheduling. The clinical runs the first 10 weeks: Tuesday - Friday, 7:00 - 15:30; and then for the remaining five (5) weeks: Monday - Friday, 7:00 - 15:30.

Credits: 8

Prerequisite: SUR 231 with a grade of “C” or higher

Semester Offered: S

90. Degree Revision Proposal – Surgical Technology (SUR)

- a. Effective date: Summer 2020
- b. Program grid (as it will appear in catalog):

Surgical Technology - Associate in Science (Program Code: SUR)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|-------------------------------------|----------|---------|--------------|--|--|
| Semester 1 (Fall) | | | | | |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | Apply and get accepted to this program (Program Code: SUR). Register for and successfully complete all courses to graduate in four semesters. Contact QCC Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. Complete ENG 101 or AP English/ Language and Composition, with AP Exam grade of “3” or higher, to count as ENG 101. Complete PSY 101 or AP Psychology, with AP Exam grade of “3” or higher, to count as PSY 101. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or HS AP Biology, Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| Surgical Procedures I | SUR 131 | F | 3 | BIO 101 or HS AP Biology, Placement into college level English | |
| | | | Total | 16 | |
| Semester 2 (Spring) | | | | | |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Surgical Procedures II | SUR 132 | S | 8 | BIO 111 and SUR 131 with grades of “C” or higher | |
| | | | Total | 15 | |
| Semester 3 (Fall) | | | | | |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | Meet with representatives of four-year schools to discuss/begin the transfer application process. |

| | | | | | |
|-------------------------------|---------|--------------|-----------|--|--|
| Surgical Procedures III | SUR 231 | F | 12 | BIO 112 and SUR 132 with grades of "C" or higher | |
| | | Total | 15 | | |
| Semester 4 (Spring) | | | | | |
| Clinical | SUR 232 | S | 8 | SUR 231 with a grade of "C" or higher | Meet with a Career Services Representative for Job Search Assistance services. |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| | | Total | 14 | | |
| Total Credits Required | | | 60 | | |

91. Course Revision Proposal – SCI 103 Earth Science

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

SCI 103 Earth Science

This course is an introduction to the science of Earth. Students apply fundamental physics and chemistry to the study of Earth's composition, origin and development. Topics include geology, oceanography, hydrology, earthquakes, volcanoes and other natural hazards.

Credits: 3

Prerequisite: Placement into college level English, MAT 095 with a grade of "C" or higher or appropriate placement

Semester Offered: F/S/SU

92. Course Revision Proposal – SCI 105 Integrated Science: Earth and Space

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

SCI 105 Integrated Science: Earth and Space

This course focuses on the basic concepts of astronomy and earth science. Students apply fundamental physics and chemistry to the study of the physical world they live in, and, through the laboratory component, gain an understanding of the methods and applications of science. The course is designed for but not limited to students in Elementary and Early Childhood Education programs.

Credits: 4

Prerequisite: Placement into college level English, MAT 095 with a grade of "C" or higher or appropriate placement

Semester Offered: F/S/SU

93. Course Revision Proposal – SCI 106 Integrated Science: The Living World

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

SCI 106 Integrated Science: The Living World

This course covers the basic concepts of life science and examines the interactions of living organisms with the physical world they inhabit. Students apply fundamental physics and chemistry to various topics in biology and environmental science, and, through the laboratory component, gain an understanding of the methods and applications of science. This course is designed for but not limited to students in Elementary and Early Childhood Education programs.

Credits: 4

Prerequisite: Placement into college level English, MAT 095 with a grade of "C" or higher or appropriate placement

Semester Offered: F/S/SU

94. Course Revision Proposal – SCI 109 Environmental Science: Biological Topics

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

SCI 109 Environmental Science: Biological Topics

This course covers selected biological topics of environmental science. Students learn about the interactions between humans and the environment and gain the ability to connect the issues to a framework of ideas and values that allow them to become part of the solution to environmental problems. Topics include the themes of environmental science, the definition, functioning and changing of ecosystems, human population, wild species and biodiversity and pests and their control. Lab exercises are designed to reinforce and expand on topics covered in lecture. Students are required to participate in off-campus field work for some of the class/laboratory activities.

Credits: 4

Prerequisite: Placement into college level English, MAT 095 with a grade of "C" or higher or appropriate placement

Semester Offered: F/S

95. Course Revision Proposal – SCI 110 Sustaining Earth's Environment

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

SCI 110 Sustaining Earth's Environment

This course focuses on the basic concepts of environmental science. Students apply fundamental physics and chemistry to the study of the physical world they live in, and, through the laboratory component, gain an understanding of the methods and applications of science. Topics include consumption and conservation of Earth's natural resources, the impact of the humans on the environment, waste management and renewable energy sources.

Credits: 4

Prerequisite: Placement into college level English, MAT 095 with a grade of "C" or higher or appropriate placement

Semester Offered: F/S

96. Course Revision Proposal – BIO 104 Introduction to Plant Biology

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

BIO 104 Introduction to Plant Biology

This course introduces the formal concepts of the science of botany as well as the impact that plants have on humans and earth. Topics include plant structure, plant growth, diversity of plants, life cycles and natural history, major plant environments of the world, and the economic influence that plants have on our species. Students gain enhanced appreciation of the importance of plants in our lives and present the fundamental concepts used in the study of plants. In the laboratory component, students learn basic scientific investigation of the plant world.

Credits: 4

Prerequisite: Placement into college level English, MAT 095 with a grade of "C" or higher or appropriate placement

Semester Offered: F/S/SU

97. Course Revision Proposal – BIO 105 Principles of Ecology

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

BIO 105 Principles of Ecology

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.

Credits: 4

Prerequisite: Placement into college level English, MAT 090 with a grade of "C" or higher or appropriate placement

Semester Offered: F/S/SU

98. Course Revision Proposal – MAT 103 Mathematics for Business

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

MAT 103 Mathematics for Business

This course introduces the mathematical processes and techniques currently used in the fields of business and finance. Students use practical examples throughout to illustrate the relevance of analyzing and interpreting data in business and financial management. Students learn sound decision making skills that will aid them in fulfilling their roles as citizens, consumers, employees, employers, investors, and entrepreneurs. The course introduces business statistics and continues with business and financial topics including bank services, business and consumer loans, simple and compound interest, payroll taxes, risk management, the mathematics of buying, break-even and cost-volume-profit analysis, discounts, markups and markdowns, inventory control, stocks and bonds, annuities and sinking funds, depreciation, interpreting financial statements and financial analysis.

Credits: 3

Prerequisite: MAT 095 with a grade of "C" or higher or appropriate placement

Semester Offered: F

Restriction: Restricted to Business Administration Career (BB and BBAP) and Business Administration Certificate (BAC) students

99. Course Revision Proposal – MAT 121 Topics in Mathematics

a. Effective date: Fall 2020

b. Course description (as it will appear in catalog):

MAT 121 Topics in Mathematics

This course explores various areas in contemporary mathematics and consists of two components: required topics and optional topics. Required topics include mathematical patterns and problem solving, consumer finance, probability, statistics and Euclidean and transformational geometry. Optional topics may be chosen from the following: linear functions and applications; numeration systems; sets; logic; graph theory; election theory; apportionment; tessellations and fractals; and cryptography; in addition, instructors may also choose to expand upon the required topics.

Credits: 3

Prerequisite: MAT 095 with a grade of "C" or higher or appropriate placement

Semester Offered: F/S/SU

100. Course Revision Proposal – MAT 122 Statistics

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

MAT 122 Statistics

This course covers the essentials of statistics. Students learn descriptive and inferential statistics; charts (histograms, frequency polygons, ogives, and pie charts); measures of central tendency (mean, median, mode, and weighted mean); and measures of dispersion (range, variance, and standard deviation). Additional areas of study include discrete and continuous random variables; basic probability theory; the binomial distribution and its application in binomial experiments; standard and non-standard normal distributions; the Central Limit Theorem; confidence intervals for means, proportions, and variances; linear correlation and regression; and the one sample hypotheses test for mean (large and small sample), proportions, and variances.

Credits: 3

Prerequisite: MAT 095 with a grade of “C” or higher or appropriate placement

Semester Offered: F/S/SU

101. Course Revision Proposal – PHY 105 General Physics I

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

PHY 105 General Physics I: Newtonian Mechanics

This course covers measurement, kinematics, vectors, Newton’s laws, friction, circular motion, gravitation, work and energy, conservation of energy, linear momentum and collisions, rotational motion about a fixed axis, moments of inertia, and angular momentum and its conservation. Students perform related laboratory experiments.

Credits: 4

Prerequisite: MAT 233

Semester Offered: F/S/SU

102. New Course Proposal – PHY 107 General Physics II: Electricity & Magnetism

- a. Effective date: Fall 2020
- b. Note: PHY 107 is replacing the retiring PHY 106
- c. Course description (as it will appear in catalog):

PHY 107 General Physics II: Electricity & Magnetism

This course covers waves and oscillations, fluids, electric charge and electric field, Gauss’s Law, electric potential, capacitance, dielectrics, electric energy storage, electric current and resistance, DC circuits, magnetism, sources of magnetic field, electromagnetic induction and Faraday’s Law, inductance and electromagnetic oscillations, and AC circuits. Students perform related laboratory experiments.

Credits: 4

Prerequisite: MAT 234, PHY 105

Semester Offered: F/S/SU

103. New Course Proposal – PHY 207 General Physics III: Optics & Modern Physics

- a. Effective date: Fall 2020
- b. Note: PHY 207 is replacing the retiring PHY 205
- c. Course description (as it will appear in catalog):

PHY 207 General Physics III: Optics & Modern Physics

This course covers reflection and refraction, lenses and optical instruments, the wave nature of light, interference, diffraction and polarization, special theory of relativity, early quantum theory and models of the atom, quantum mechanics, molecules and solids, nuclear physics, and elementary particles. Students perform related laboratory experiments.

Credits: 4

Prerequisite: MAT 235, PHY 107

Corequisite: MAT 238

Semester Offered: F/S/SU

104. Course Revision Proposal – ERG 221 Statics

- a. Effective date: Fall 2020
- b. Note: Corequisite affected due to the retiring of PHY 106
- c. Course description (as it will appear in catalog):

ERG 221 Statics

This course covers a vector approach in studying static systems. Areas of study include the resultant of concentrated and distributed force systems, two and three-dimensional equilibrium, trusses, plane friction, centeroids, and moments of inertia. Students learn how to use integral equations to determine centeroids and moments of inertia for various geometrical shapes and derive and graph equations of shear and moment.

Credits: 3

Corequisite: MAT 235, PHY 106 or PHY 107

Semester Offered: F/IN

105. Course Revision Proposal – ERG 223 Thermodynamics

- a. Effective date: Fall 2020
- b. Note: Prerequisite affected due to the retiring of PHY 106
- c. Course description (as it will appear in catalog):

ERG 223 Thermodynamics

This course introduces the laws of thermodynamics through the study of systems and the flow of energy across system boundaries. Students learn the First Law of Thermodynamics (utilizing heat, energy, work, enthalpy) and the Second Law of Thermodynamics (and the property of entropy) and their macroscopic and microscopic implications. The course focuses on the application of thermodynamics to engineering systems.

Credits: 3

Prerequisite: CHM 124, MAT 235, PHY 106 or PHY 107

Semester Offered: S/SU

106. Degree Revision Proposal – Engineering (ERG)

- a. Effective date: Fall 2020
- b. Note: Curriculum affected due to the retiring of PHY 106 and PHY 205
- c. Program grid (as it will appear in catalog):

Engineering - Associate in Science (Program Code: ERG)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|---------|--------------|---|---|
| Semester 1 (Fall) | | | | | Apply and get accepted to this program (Program Code: ERG). Register for and successfully complete all courses to graduate in five semesters. Meet with Program Coordinator. Attend Transfer Services events. For information see www.QCC.edu/transfer . |
| Principles of Chemistry for Engineers I | CHM 123 | F/S/SU | 4 | Coreq: MAT 233 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Engineering Graphics | ERG 101 | F/S/SU | 3 | MAT 124 | |
| Calculus I | MAT 233 | F/S/SU | 4 | MAT 124 or approp place score | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | | Total | 17 | Complete ENG 101 and MAT 233. |
| Semester 2 (Spring) | | | | | Meet with a QCC Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Principles of Chemistry for Engineers II | CHM 124 | F/S/SU | 4 | CHM 123, MAT 233 | |
| Engineering Computation and Modeling | ERG 280 | F/S/SU | 3 | MAT 233 | |
| Calculus II | MAT 234 | F/S/SU | 4 | MAT 233 | |
| General Physics I: Newtonian Mechanics | PHY 105 | F/S/SU | 4 | MAT 233 | |
| | | | Total | 15 | |
| Semester 3 (Summer) | | | | | |
| Principles of Biology I | BIO 107 | F/S/SU | 4 | MAT 099 with a grade of "C" or higher or approp place score, Coreq: ENG 101 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| | | | Total | 7 | |
| Semester 4 (Fall) | | | | | Meet with representatives of four-year schools to discuss/begin the transfer application process. |
| Introduction to Materials Science | ERG 211 | F/SU | 3 | CHM 123, PHY 105 | |
| Statics | ERG 221 | F/IN | 3 | Coreq: MAT 235, PHY 106 or PHY 107 | |
| Calculus III | MAT 235 | F/S/SU | 4 | MAT 234 | |
| Probability & Statistics for Engineers and Scientists | MAT 237 | F/S/SU | 3 | MAT 234 | |
| General Physics II: Electricity & Magnetism | PHY 107 | F/S/SU | 4 | MAT 234, PHY 105 | |
| | | | Total | 17 | |
| Semester 5 (Spring) | | | | | Continue with/complete the transfer application process. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Thermodynamics | ERG 223 | S/SU | 3 | CHM 124, MAT 235, PHY 106 or PHY 107 | |
| Strength of Materials | ERG 225 | S/SU | 3 | ERG 221, MAT 235, Coreq: MAT 238 | |
| Differential Equations | MAT 238 | F/S/SU | 3 | MAT 235 | |
| Linear Algebra | MAT 243 | F/S/SU | 3 | Coreq: MAT 238 | |

| | | | | | |
|--|---------|--------------|-----------|----------------------------------|--|
| General Physics III: Optics & Modern Physics | PHY 207 | F/S/SU | 4 | MAT 235, PHY 107, Coreq: MAT 238 | |
| | | Total | 16 | | |
| Total Credits Required | | | 72 | | |

107. Degree Revision Proposal – Engineering – Biomedical Engineering Option (ERBM)

- Effective date: Fall 2020
- Note: Curriculum affected due to the retiring of PHY 106 and PHY 205
- Program grid (as it will appear in catalog):

Engineering - Biomedical Engineering Option - Associate in Science (Program Code: ERBM)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|---|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: ERBM). Register for and successfully complete all courses to graduate in five semesters. Meet with Program Coordinator. Attend Transfer Services events. For information see www.QCC.edu/transfer . Complete ENG 101 and MAT 233. |
| Principles of Biology I | BIO 107 | F/S/SU | 4 | MAT 099 with a grade of "C" or higher or approp place score, Coreq: ENG 101 | |
| Principles of Chemistry for Engineers I | CHM 123 | F/S/SU | 4 | Coreq: MAT 233 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Calculus I | MAT 233 | F/S/SU | 4 | MAT 124 or approp place score | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 18 | | |
| Semester 2 | | | | | Meet with a QCC Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Cell Biology | BIO 259 | F/S | 4 | BIO 107 and CHM 105 or CHM 123 | |
| Principles of Chemistry for Engineers II | CHM 124 | F/S/SU | 4 | CHM 123, MAT 233 | |
| Calculus II | MAT 234 | F/S/SU | 4 | MAT 233 | |
| General Physics I: Newtonian Mechanics | PHY 105 | F/S/SU | 4 | MAT 233 | |
| | | Total | 16 | | |
| Semester 3 (Summer) | | | | | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Engineering Computation and Modeling | ERG 280 | F/S/SU | 3 | MAT 233 | |
| Probability & Statistics for Engineers and Scientists | MAT 237 | F/S/SU | 3 | MAT 234 | |
| General Physics II: Electricity & Magnetism | PHY 107 | F/S/SU | 4 | MAT 234, PHY 105 | |
| | | Total | 13 | | |
| Semester 4 | | | | | Meet with representatives of four-year schools to discuss/begin the transfer application process. |
| Molecular Biology | BIO 260 | S | 4 | BIO 107 | |
| Introduction to Materials Science | ERG 211 | F/SU | 3 | CHM 123, PHY 105 | |
| Statics | ERG 221 | F/IN | 3 | Coreq: MAT 235, PHY 106 or PHY 107 | |
| Calculus III | MAT 235 | F/S/SU | 4 | MAT 234 | |
| | | Total | 14 | | |
| Semester 5 | | | | | Continue with/complete the transfer application process. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Thermodynamics | ERG 223 | S/SU | 3 | CHM 124, MAT 235, PHY 106 or PHY 107 | |
| Strength of Materials | ERG 225 | S/SU | 3 | ERG 221, MAT 235, Coreq: MAT 238 | |
| Differential Equations | MAT 238 | F/S/SU | 3 | MAT 235 | |
| Linear Algebra | MAT 243 | F/S/SU | 3 | Coreq: MAT 238 | |
| General Physics III: Optics & Modern Physics | PHY 207 | F/S/SU | 4 | MAT 235, PHY 107, Coreq: MAT 238 | |
| | | Total | 16 | | |
| Total Credits Required | | | 77 | | |

108. Degree Revision Proposal – Liberal Arts - Biology Option (LABI)

- Effective date: Fall 2020
- Program grid (as it will appear in catalog):

Liberal Arts - Biology Option - Associate in Arts (Program Code: LABI)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|-------------------------|----------|---------|---------|---|---|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: LABI). Register for and successfully |
| Principles of Biology I | BIO 107 | F/S/SU | 4 | MAT 099 with a grade of "C" or higher or approp place score, Coreq: ENG 101 | |

| | | | | | |
|--|--------------------|--------------|-----------|--|--|
| General Chemistry I | CHM 105 | F/S/SU | 4 | CHM 090 or one year of HS Chemistry, MAT 099 with a grade of "C" or higher or approp place score | complete all courses to graduate in four semesters. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Attend Transfer Services events. For information see www.QCC.edu/transfer . |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | Complete BIO 107, ENG 101, and MAT 122. |
| | | Total | 14 | | Complete prerequisite(s) for MAT 123. |
| Semester 2 | | | | | |
| Principles of Biology II | BIO 108 | F/S | 4 | BIO 107 | Meet with Academic Advisor to review choices (CHM 201, PHY 101, or PHY 105) that depend on transfer plans and mathematics prerequisite(s) completed. |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | Meet with a QCC Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| College Mathematics I: Pre-Calculus | MAT 123 | F/S/SU | 3 | MAT 100 or approp place score | |
| Social Science Foundational Elective | --- | F/S/SU | 3 | | |
| | | Total | 17 | | Complete BIO 108. |
| Semester 3 | | | | | |
| Principles of Genetics | BIO 262 | F/S | 4 | BIO 108, MAT 122 | Meet with representatives of four-year schools to discuss/begin the transfer application process. |
| Organic Chemistry I or Physics I or | CHM 201 PHY 101 | F/S/SU F | 4 | CHM 106 or CHM 124 MAT 148 or Coreq: MAT 124 | |
| General Physics I: Newtonian Mechanics | PHY 105 | F/S/SU | | | MAT 233 |
| College Mathematics II: Trigonometry | MAT 124 | F/S/SU | 3 | MAT 123 or approp place score | |
| Literature, Philosophy, or Language Elective | --- | F/S/SU | 3 | | |
| U.S. or World History Survey Elective | --- | F/S/SU | 3 | | |
| | | Total | 17 | | |
| Semester 4 | | | | | |
| General Microbiology or Cell Biology | BIO 231 BIO 259 | F/S | 4 | BIO 107 and CHM 105 or CHM 123 | Continue with/complete the transfer application process. |
| Organic Chemistry II or | CHM 202 | F/S/SU | 4 | CHM 201 | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Physics II or | PHY 102 | S | | | |
| General Physics II: Electricity & Magnetism | PHY 107 | F/S/SU | | MAT 234, PHY 105 | |
| Creative Arts Elective | --- | F/S/SU | 3 | | |
| Multiple Perspectives Elective | --- | F/S/SU | 3 | | |
| | | Total | 14 | | |
| Total Credits Required | | | 62 | | |

109. Degree Revision Proposal – Liberal Arts - Chemistry Option (LACH)

- Effective date: Fall 2020
- Program grid (as it will appear in catalog):

Liberal Arts - Chemistry Option - Associate in Arts (Program Code: LACH)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--------------------------|----------|--------------|-----------|--|--|
| Semester 1 | | | | | |
| Principles of Biology I | BIO 107 | F/S/SU | 4 | MAT 099 with a grade of "C" or higher or approp place score, Coreq: ENG 101 | Apply and get accepted to this program (Program Code: LACH). |
| General Chemistry I | CHM 105 | F/S/SU | 4 | CHM 090 or one year of HS Chemistry, MAT 099 with a grade of "C" or higher or approp place score | Register for and successfully complete all courses to graduate in five semesters. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Attend Transfer Services events. For information see www.QCC.edu/transfer . |
| Calculus I | MAT 233 | F/S/SU | 4 | MAT 124 or approp place score | Complete ENG 101 and MAT 233. |
| | | Total | 15 | | |
| Semester 2 | | | | | |
| Principles of Biology II | BIO 108 | F/S | 4 | BIO 107 | Meet with a QCC Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |

| | | | | | | |
|--|---------|--------------|-----------|--------------------|---|-------------------|
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | Confirm that MassTransfer general education transfer block can be completed. | |
| Calculus II | MAT 234 | F/S/SU | 4 | MAT 233 | | Complete CHM 106. |
| | | Total | 15 | | | Complete MAT 234. |
| Semester 3 (Summer) | | | | | | |
| Creative Arts Elective | --- | F/S/SU | 3 | | | |
| Multiple Perspectives Elective | --- | F/S/SU | 3 | | | |
| | | Total | 6 | | | |
| Semester 4 | | | | | | |
| Organic Chemistry I | CHM 201 | F/S/SU | 4 | CHM 106 or CHM 124 | Meet with representatives of four-year schools to discuss/begin the transfer application process. | |
| General Physics I: Newtonian Mechanics | PHY 105 | F/S/SU | 4 | MAT 233 | | |
| Literature, Philosophy, or Language Elective | --- | F/S/SU | 3 | | | |
| | | Total | 11 | | Complete CHM 201. | |
| | | | | | Complete PHY 105. | |
| Semester 5 | | | | | | |
| Organic Chemistry II | CHM 202 | F/S/SU | 4 | CHM 201 | Continue with/complete the transfer application process. | |
| General Physics II: Electricity & Magnetism | PHY 107 | F/S/SU | 4 | MAT 234, PHY 105 | | |
| Social Science Foundational Elective | --- | F/S/SU | 3 | | | |
| U.S. or World History Survey Elective | --- | F/S/SU | 3 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . | |
| | | Total | 14 | | | |
| Total Credits Required | | | 61 | | | |

110. New Certificate Proposal – Addiction Education Certificate (AEC)

- a. Effective date: Fall 2020
- b. Program grid (as it will appear in catalog):

Addiction Education Certificate (Program Code: AEC)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|--------------------------------------|--|
| Upon successful completion of the AdCare Educational Institute, Inc. Addiction Counselor Education (ACE) program, 10 credits credentialed | | | | 10 | Students who successfully complete the AdCare ACE program may credential up to 10 credits; in the associate degree (Program Code: HA), these credits will replace the two Electives and HUS 243 (the prerequisite for HUS 244). Credentialing costs apply as per www.QCC.edu/credentialing ; a credentialing agreement between AdCare and QCC will be established. |
| | | Total | 10 | | |
| Semester 1 | | | | | |
| Introduction to Human Services | HUS 101 | F/S/SU | 3 | Placement into college level English | Meet with Academic Advisor to discuss associate degree (Program Code: HA). |
| The Helping Relationship: Delivering Human Services | HUS 121 | F/S/SU | 3 | Placement into college level English | |
| Human Services Practicum II | HUS 244 | S | 4 | HUS 243 | In order to complete the certificate, students must successfully complete the following courses (16 total credits in residence): HUS 101, HUS 121, HUS 244, PSY 101, and SOC 101. |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 16 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Total Credits Required | | | 26 | | |

111. Course Revision Proposal – EDU 103 Foundations of Multicultural Education & Diversity

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

EDU 103 Foundations of Multicultural Education & Diversity

This course examines the relationship of cultural values and social contexts to the formation of the child's self-concept and success in the educational environment. An examination of the role of prejudice, stereotypes, institutional racism and sexism, and cultural incompatibilities in education will be included. Emphasis on considering different world views, preparing future teachers to offer an equal educational opportunity to children of all cultural groups, and considering course concepts in relationship to the work environment. A pre-practicum of 24 hours beyond classroom time is required.

Credits: 4

Prerequisite: EDU 101, ENG 101
Semester Offered: S

112. Course Revision Proposal – EDU 200 Foundations of Reading

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

EDU 200 Foundations of Reading

This course provides a strong foundation in the best practices of literacy instruction. Essential areas of reading instruction are addressed: understanding phonological and phonemic awareness, the use of phonics, vocabulary development, fluency, comprehension, assessment, and writing. The course offers opportunities to gain knowledge of the mechanics of the reading process and to design and implement effective instruction for various student populations. A pre-practicum of 24 hours beyond classroom time is required.

Credits: 3

Prerequisite: EDU 202

Semester Offered: S

113. Course Revision Proposal – EDU 202 Children with Special Needs

- a. Effective date: Fall 2020
- b. Course description (as it will appear in catalog):

EDU 202 Children with Special Needs

This course explores ways of meeting the challenges of children with special needs. Students study ways to construct and design environments to support children and their families. Students are introduced to evolving social policies and legislation supportive of children with special needs and their families and complete a 24-hour pre-practicum program for children with special needs. A pre-practicum of 24 hours beyond classroom time is required.

Credits: 4

Prerequisite: EDU 103, ENG 101, PSY 123

Semester Offered: F

114. Degree Revision Proposal – General Studies - Elementary Education Transfer Option (GSEE)

- a. Effective date: Fall 2020
- b. Program grid (as it will appear in catalog):

General Studies - Elementary Education Transfer Option - Associate in Arts (Program Code: GSEE)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|---------|--------------|---|--|
| Semester 1 | | | | | |
| Elementary Education: Teaching and Learning | EDU 101 | F | 3 | Placement into college level English | Apply and get accepted to this program (Program Code: GSEE). Register for and successfully complete all courses to graduate in four semesters. Attend Transfer Services events. For information see www.QCC.edu/transfer . Upon transfer, Elementary Education Option graduates are required to have a second academic major in the Liberal Arts, in addition to the Education major. As requirements of each major at each institution vary, students need to intentionally select Liberal Arts Electives to maximize transfer of credit. Complete EDU 101; complete 24 hours of pre-practicum beyond classroom time. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Mathematics for Educators I | MAT 111 | F/S/SU | 3 | MAT 099 with a grade of "C" or higher or approp place score | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| | | | Total | 15 | Complete ENG 101 and MAT 111. |
| Semester 2 | | | | | |
| Foundations of Multicultural Education & Diversity | EDU 103 | S | 4 | EDU 101, ENG 101 | CORI/SORI checks required of all students taking EDU classes. Meet with a QCC Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. Complete EDU 103; complete 24 hours of pre-practicum beyond classroom time. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Mathematics for Educators II | MAT 112 | F/S/SU | 3 | MAT 111 | |
| Child Development | PSY 123 | F/S/SU | 3 | PSY 101 | |
| Liberal Arts Elective | --- | F/S/SU | 3 | | |
| | | | Total | 16 | |
| Semester 3 | | | | | |
| For the History Elective, choose: HST 104, | | | | | |

| | | | | | |
|--------------------------------------|---------|--------------|-----------|---|---|
| Children with Special Needs | EDU 202 | F | 4 | EDU 103, ENG 101, PSY 123 | HST 105, HST 106, HST 115, or HST 116. |
| Children's Literature | ENG 200 | F/S/SU | 3 | ENG 102 | Complete the CLST portion of the MTEL (recommended). A review class is offered through the QCC Center for Workforce Development and Continuing Education. |
| Integrated Science: Earth and Space | SCI 105 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | Meet with representatives of four-year schools to discuss/begin the transfer application process. |
| History Elective | --- | F/S/SU | 3 | | Confirm that MassTransfer 34-credit general education transfer block can be completed. |
| Liberal Arts Elective | --- | F/S/SU | 3 | | Complete EDU 202; complete 24 hours of pre-practicum beyond classroom time. |
| | | Total | 17 | | Continue with/complete the transfer application process. |
| Semester 4 | | | | | |
| Foundations of Reading | EDU 200 | S | 3 | EDU 202 | Complete EDU 200; complete 24 hours of pre-practicum beyond classroom time. |
| Integrated Science: The Living World | SCI 106 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Liberal Arts Elective | --- | F/S/SU | 3 | | |
| Liberal Arts Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Total Credits Required | | | 64 | | |

115. Degree Revision Proposal – Liberal Arts - Sociology Option (LASO)

- Effective date: Fall 2020
- Program grid (as it will appear in catalog):

Liberal Arts - Sociology Option - Associate in Arts (Program Code: LASO)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|--------------------|--------------|--------------|---|--|
| Semester 1 | | | | | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Apply and get accepted to this program (Program Code: LASO). Register for and successfully complete all courses to graduate in four semesters. Complete ENG 101 and MAT 121. |
| Critical Thinking and Problem Solving | HUM 101 | F/S/SU | 3 | Placement into college level English | |
| Topics in Mathematics | MAT 121 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 15 | | |
| Semester 2 | | | | | |
| Cultural Anthropology or Introduction to Psychology | ANT 111 PSY 101 | F/S/SU | 3 | Placement into college level English | Meet with a QCC Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. Complete ENG 102. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Introduction to Humanities | HUM 105 | F/S/SU | 3 | ENG 101 | |
| Social Problems & Social Change | SOC 111 | F/S/SU | 3 | Coreq: ENG 101 | |
| Science Elective or Lab Science Elective | --- | F/S/SU | 3-4 | | |
| | | Total | 15-16 | | |
| Semester 3 | | | | | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | Meet with representatives of four-year schools to discuss/begin the transfer application process. Confirm that MassTransfer 34-credit general education transfer block can be completed. Complete MAT 122. |
| Creative Arts Elective | --- | F/S/SU | 3 | | |
| Liberal Arts Elective (200-level) | --- | F/S/SU | 3 | | |
| Sociology Elective (200-level) | --- | F/S/SU | 3 | | |
| U.S. or World History Survey Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 4 | | | | | |
| Lab Science Elective | --- | F/S/SU | 4 | | Consult with transfer institution regarding selection of Liberal Arts Electives. Continue with/complete the transfer application process. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Liberal Arts Elective (200-level) | --- | F/S/SU | 3 | | |
| Literature, Philosophy, or Language Elective | --- | F/S/SU | 3 | | |
| Multiple Perspectives Elective | --- | F/S/SU | 3 | | |
| Sociology Elective (200-level) | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Total Credits Required | | | 61-62 | | |