



QUINSIGAMOND

Community College

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TO: The College Community

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

SUBJECT: **Academic Matters – February 14, 2023**

DATE: March 7, 2023

Final approval was given to the academic matters reviewed at the February 14, 2023 meeting of the Learning Council as follows:

School of Business, Engineering & Technology

1. Program Revision: Business Administration Transfer (BT)
 - a. Effective date: FA 2023
 - b. Remove one Program Elective in Semester 3
 - c. Add MGT 211 in Semester 3
 - d. See grid on page: 18
2. Program Closure: Manufacturing Technology - Applied Manufacturing Option (MPA) and Applied Manufacturing Certificate (AMC)
 - a. Effective date: FA 2023
3. Course Revision: ERG 101 Engineering Graphics
 - a. Effective date: FA 2023
 - b. Change in name
 - c. See grid on page: 28
 - d. Course description (as it will appear in catalog):

ERG 101 Engineering Design and Graphics Using CAD

This course focuses on engineering drawing utilizing computer-assisted drawing (CAD) techniques. It introduces descriptive geometry and the basic theory of orthographic projections. Students create orthographic, isometric, sectional views and assembly drawings and dimensioning using CAD software.

Credits: 3

Prerequisite: MAT 124

Semester Offered: F/S/SU

4. Program Revision: Engineering (ERG)
 - a. Effective date: FA 2023
 - b. Incorporate course name change for ERG 101
 - c. Incorporate course name and prerequisite change for BIO 107
 - d. **Friendly Amendment:** Incorporate prerequisite and corequisite change for ERG 221
 - e. **Friendly Amendment:** Incorporate prerequisite change for ERG 223
 - f. See grid on page: 35

5. Program Revision: Engineering - Biomedical Engineering Option (ERBM)
 - a. Effective date: FA 2023
 - b. Incorporate course name and prerequisite change for BIO 107
 - c. Move BIO 107 from Semester 1 to Semester 2
 - d. Incorporate prerequisite change for BIO 259
 - e. Move BIO 259 from Semester 2 to Semester 4
 - f. **Friendly Amendment:** Incorporate prerequisite and corequisite change for ERG 221
 - g. **Friendly Amendment:** Incorporate prerequisite change for ERG 223
 - h. See grid on page: 41

School of Healthcare

6. Course Revision: DHY 212 Dental Hygiene Process IV
 - a. **Friendly Amendment:** Effective date: SP 2024
 - b. Change in description
 - c. Course description (as it will appear in catalog):
DHY 212 Dental Hygiene Process IV
 This clinical theory course emphasizes the role of the dental hygienist in various dental specialties, including, but not limited to: General, Orthodontics, Pediatric Dentistry, Endodontics, Periodontics and Oral surgery practice. The clinical component emphasizes continued development in the delivery of the dental hygiene process of care while demonstrating independent decision-making, critical thinking and problem-solving skills focusing on the 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
7. Course Revision: NUR 100 Paramedic to ADN Bridge
 - a. Effective date: FA 2023
 - b. Change in description, prerequisite, and restriction wording
 - c. Course description (as it will appear in catalog):
NUR 100 Paramedic to ADN Bridge
 This course focuses on curriculum topics that are essential for those students who hold a Paramedic certification and who are seeking enrollment into the Nurse Education - Advanced Placement Paramedic Program (NUP). Topics include foundations of nursing practice, nursing theory, evidenced based practice, legal, ethical and advocacy issues, nursing care, role transition, nursing process, and promoting healthy psychosocial responses. Lab content includes basic nursing skills practice and competency. This course also includes clinical practice of basic skills in the long-term care setting. Successful completion of this one-credit course with a “C+” or higher enables students to enter the NUR 101 course.
Credits: 1
Prerequisite: BIO 111 with a grade of “C” or higher, BIO 112 with a grade of “C” or higher, ENG 101, PSY 101
Semester Offered: F
Restriction: Restricted to those students who have met admissions requirements for the Associate in Science in Nurse Education Program and hold a current certification in Massachusetts as a Paramedic or current certification from the National Registry of Emergency Medical Technicians (NREMT) in good standing

8. Course Revision: NUR 101 Advanced Placement Nursing I
- Effective date: FA 2023
 - Change in description, prerequisite, and restriction wording
 - Course description (as it will appear in catalog):

NUR 101 Advanced Placement Nursing I

This course is designed for eligible Licensed Practical Nurses and Paramedics who are seeking enrollment into the Nurse Education - Advanced Placement LPN (NUL) or Advanced Placement Paramedic (NUP) Program. The course focuses on curriculum topics that are essential for the first semester Associate Degree nursing student. Topics include nursing philosophy of the profession and of the QCC Associate in Science degree Nurse Education Program, nursing process application, decision-making, critical thinking and priority setting, Nursing Theory, Maslow's Hierarchy of Needs, and Erikson's Stages of Psychosocial Development. The course also reinforces foundations of basic nursing care, health promotion, complementary alternative medicine, physical assessment, and fluid and electrolytes. The lab component includes practice and competency demonstration of lab skills including asepsis, wound care, and other assigned modules. Successful completion of this one-credit course with a "C+" or higher is required.

Credits: 1

Prerequisite: BIO 112 with a grade of "C" or higher, NUR 100 with a grade of "C+" or higher or Admission to Nurse Education - Advanced Placement LPN (NUL) Program, PSY 101

Semester Offered: F

Restriction: Restricted to those students who have met admissions requirements for the Associate Degree in the Nursing Program and hold a current license to practice as a Licensed Practical Nurse (LPN) in good standing or to those students who have met admissions requirements for the Associate in Science in Nurse Education Program and hold a current certification in Massachusetts as a Paramedic or current certification from the National Registry of Emergency Medical Technicians (NREMT) in good standing.

9. Course Revision: NUR 103 Current Concepts in Nursing & Health Care I
- Effective date: FA 2023
 - Change in description, prerequisite, corequisite, number, and name
 - Course description (as it will appear in catalog):

NUR 106 Introduction to Nursing Concepts & Health Care

This course is the study of contemporary nursing in relation to historical development, nursing theory, social trends, and healthcare changes. The student explores influences of the past on present day nursing, health care settings, trends and legislation, challenges and issues for today's nurse and future predictions for nursing. Students will integrate concepts of diversity, equity and inclusion in discussion of patient-centered care. Successful completion of this one-credit course with a "C+" or higher is required.

Credits: 1

Prerequisite: BIO 111 with a grade of "C" or higher, ENG 101

Corequisite: BIO 112, NUR 107, PSY 101

Semester Offered: F/S

10. Course Revision: NUR 104 Fundamentals in Nursing
- Effective date: FA 2023
 - Change in description, prerequisite, corequisite, number, and credits
 - Course description (as it will appear in catalog):

NUR 107 Fundamentals of Nursing

This course provides an introduction to the role of the nurse in the health care system. Nursing Theory, Maslow's Hierarchy of Needs, and Erikson's Stages of Psychosocial Development are introduced and utilized as organizing frameworks. Additional integration of professional standards and competencies from National League for Nursing and other professional organizations is included. Students develop an understanding of and ability to use the nursing process as a method for assisting patients to meet healthcare needs. Students develop basic communication skills in order to promote effective relationships with patients, families and members of the health team. Content includes, but is not limited to, oxygenation, health assessment, elimination, medication administration,

and basic comfort and care. Students participate in laboratory to acquire nursing skills and demonstrate competency. Clinical experiences are provided to reinforce nursing skills and promote clinical judgment. Successful completion of this eight-credit course with a "C+" or higher is required.

Credits: 8

Prerequisite: BIO 111 with a grade of "C" or higher, ENG 101

Corequisite: BIO 112, NUR 106, PSY 101

Semester Offered: F/S

11. Course Revision: NUR 105 Medical Surgical Nursing I/Maternal Newborn

a. Effective date: FA 2023

b. Change in description, prerequisite, number, and credits

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

NUR 108 Medical Surgical Nursing I/Maternal Newborn

This course focuses on caring for maternal newborn patients and adults who have health care deviations that require specific nursing interventions. Content includes, but is not limited to, the perioperative experience, cellular proliferation, nutrition, metabolic activity, cardiovascular disorders, substance abuse, reproductive issues, domestic violence and maternal-newborn health. Students will use a developmental focus and a life span approach to concepts of health promotion and deviations.

The course is based on Nursing Theory, Maslow's Hierarchy of Needs, Erikson's Stages of Psychosocial Development, and the Nursing Process. Students participate in the laboratory to acquire nursing skills and demonstrate competency. Clinical experiences are provided to reinforce nursing skills and promote clinical judgment in the care of maternal newborn patients and adult patients in the acute care, rehabilitation and/or community settings. Successful completion of this nine-credit course with a "C+" or higher is required.

Credits: 9

Prerequisite: BIO 112 with a grade of "C" or higher, NUR 101 with a grade of "C+" or higher or NUR 106 with a grade of "C+" or higher and NUR 107 with a grade of "C+" or higher

Corequisite: BIO 232, PSY 121

Semester Offered: F/S

12. Course Revision: NUR 201 Medical Surgical Nursing II/Pediatric

a. Effective date: FA 2023

b. Change in description, prerequisite, number, and credits

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

NUR 204 Medical Surgical Nursing II/Pediatric

This course focuses on content related to caring for children and adult patients who have health care deviations that require specific nursing system interventions. Content includes, but is not limited to, growth and development, and deviations in respiratory, cardiac, dermatologic conditions, burns, gastrointestinal, genitourinary, musculoskeletal, neurological, hematologic and immunologic systems. The course is based on Nursing Theory, Maslow's Hierarchy of Needs, Erikson's Stages of Psychosocial Development, and the Nursing Process. Students participate in the laboratory to acquire nursing skills and demonstrate competency. Clinical experiences are provided to reinforce nursing skills and promote clinical judgment in the care of pediatric and adult patients in the acute care, rehabilitation and/or community settings. Successful completion of this nine-credit course with a "C+" or higher is required.

Credits: 9

Prerequisite: BIO 232 with a grade of "C" or higher, NUR 108 with a grade of "C+" or higher, PSY 121

Corequisite: ENG 102, any HST, SOC 101 or SOC 111

Semester Offered: F/S/SU

13. Course Revision: NUR 202 Advanced Medical Surgical Nursing III/Mental Health

a. Effective date: FA 2023

b. Change in description, prerequisite, corequisite, number, and credits

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

NUR 205 Advanced Medical Surgical Nursing III/Mental Health

This course focuses on content related to mental health issues and the care of patients who experience health care deviations that require complex nursing interventions. Content includes, but is not limited to, deviations in respiratory, cardiac, gastrointestinal, renal, neurological; and emergency and disaster management. The course is based on Nursing Theory, Maslow's Hierarchy of Needs, Erikson's Stages of Psychosocial Development, and the Nursing Process. Students participate in the laboratory to acquire nursing skills and demonstrate competency. Clinical experiences are provided to reinforce nursing skills and promote clinical judgment in the care of patients in acute, community, and mental health care settings. The clinical experience emphasizes application of nursing process, leadership, and management of complex patients. Successful completion of this nine-credit course with a "C+" or higher is required.

Credits: 9

Prerequisite: ENG 102, any HST, NUR 204 with a grade of "C+" or higher, SOC 101 or SOC 111

Corequisite: NUR 206, Humanities Elective

Semester Offered: F/S

14. Course Revision: NUR 203 Current Concepts in Nursing & Health Care II

- a. Effective date: FA 2023
- b. Change in description, prerequisite, corequisite, number, and name
- c. Course description (as it will appear in catalog):

NUR 206 Advanced Nursing Concepts & Transition to Practice

This course is the study of contemporary nursing in relation to social trends, health care changes, ethical issues, and transition to practice. The student will discuss influences of the past on present day nursing, health care trends and legislation, and challenges and issues for today's nurse. Management and delegation responsibilities of the professional practitioner will be included with theoretical content and application. The student will describe the role and responsibilities of the Registered Nurse, assess career potential, and future employment opportunities. Successful completion of this two-credit course with a "C+" or higher is required.

Credits: 2

Prerequisite: NUR 204 with a grade of "C+" or higher

Corequisite: NUR 205

Semester Offered: F/S

15. Program Revision: Healthcare - Practical Nursing (HCPN)

- a. Effective date: FA 2023
- b. Increase Credentialed Credits, from 17 to 18 total, and remove PNP 210 and PNP 233 from list of Transfer Courses and add PNP 240
- c. Remove FYE 102 from Semester 2
- d. Remove Semester 2, and re-number remaining Semesters
- e. Move ENG 101 and PSY 101 to new Semester 2
- f. Move ENG 102 to new Semester 3
- g. Adjust Milestones and Semester Credit Totals, accordingly
- h. Decrease Total Credits Required for program, from 62 to 60 total
- i. See grid on page: 77

16. Program Revision: Fire Science Certificate (FSC)

- a. Effective date: FA 2023
- b. Add Fire Science Elective as an alternative option to FSC 151 in Semester 1
- c. See grid on page: 80

17. Course Revision: OTA 101 Introduction to Occupational Therapy: Concepts & Interventions

- a. Effective date: FA 2023
- b. Change in description
- c. Course description (as it will appear in catalog):

OTA 101 Introduction to Occupational Therapy: Concepts & Interventions

This course introduces the basic tenets of the occupational therapy profession. Students will examine the history and philosophy of occupational therapy, current issues, future trends in the profession and OT practice globally. Educational requirements to practice, roles and responsibilities of the occupational therapist (OT) and occupational therapy assistant (OTA), ethical and legal aspects of practice, and professional organizations will be introduced. Practice settings, models of healthcare delivery and service management functions are explored.

Credits: 3

Semester Offered: F

18. Course Revision: OTA 131 Occupational Therapy: Methods and Modalities I

- a. Effective date: FA 2023
- b. Change in description
- c. Course description (as it will appear in catalog):

OTA 131 Occupational Therapy: Methods and Modalities I

This course provides in-depth study of occupations and begins to introduce students to how therapeutic occupations are used in occupational therapy practice. Students will learn to analyze occupational tasks and functional activities utilizing the Occupational Therapy Practice Framework as a guide, grade and adapt activities, and build the basic skills necessary for teaching therapeutic activities to meet the needs of occupational therapy consumers, either individually or in groups.

Credits: 3

Corequisite: OTA 101

Semester Offered: F

School of Math & Science

19. Course Revision: BIO 107 Principles of Biology I

- a. Effective date: FA 2023
- b. Change in description, prerequisite, corequisite, and name
- c. Revised course student learning outcomes
Upon successful completion of this course, students will be able to:
 - Explain the mechanism of natural selection and its role in evolution.
 - Apply basic chemical principles of bond formation, including the properties of water and carbon compounds, to biological systems.
 - Describe the structures and properties of the major classes of biological macromolecules and give examples of their functions in the cell.
 - Describe the generalized structures and functions of bacteria, animal and plant cells.
 - Describe energy flow and transformations in cells and organisms through metabolism and metabolic pathways.
 - Describe the processes by which heritable material is passed on to the next generation.
 - Discuss the structure and function of the genetic material and its role in inheritance and gene expression.
 - Demonstrate competency with the scientific techniques used in biology including measurements of volume and mass, microscopy, and graphing.
 - Apply the scientific method in the laboratory setting to design controlled experiments, collect and interpret data, and clearly communicate experimental results.

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

BIO 107 Biology II: Introduction to Cells and Molecules

This course examines principles of molecular, cellular and physiological levels of living organisms. Topics include structure and function of biomolecules and cells, cellular energetics, heredity, gene expression, and evolution. The laboratory component focuses on scientific methodology, acquiring and interpreting data, and experimental design. This course is designed for students majoring in science and engineering.

Credits: 4

Prerequisite: CHM 105 or CHM 123, ENG 101

Semester Offered: F/S/SU

20. Course Revision: BIO 108 Principles of Biology II

- a. Effective date: FA 2023
- b. Change in description, prerequisite, corequisite, number, and name
- c. Revised course student learning outcomes

Upon successful completion of this course, students will be able to:

- Describe the characteristics of the domains and kingdoms of organisms including differentiating between prokaryotic and eukaryotic species.
- Compare and contrast the kingdoms of life with regard to cellular structure, metabolism, homeostatic and reproductive strategies.
- Recognize and explain the causes of large evolutionary trends in biodiversity, and how cladistics inform phylogeny.
- Explain the processes and outcomes of macroevolution and microevolution.
- Explain organismal interactions at the levels of populations, communities, ecosystems, and biosphere.
- Demonstrate competency with the scientific techniques used in biology including observation, sketching, microscopy, and dissections.
- Apply the scientific method in the laboratory setting to design controlled experiments, collect and interpret data, and clearly communicate experimental results.

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

BIO 106 Biology I: Introduction to Organismal Diversity

This course examines the principles of organismal biology. Topics include evolution, comparative anatomy and physiology, diversity of biological organisms, phylogeny, and interactions at different levels of biological hierarchy. The laboratory component focuses on observing, sketching and dissecting specimens, designing experiments, as well as acquiring and interpreting data. The course is designed for students majoring in the sciences.

Credits: 4

Corequisite: ENG 101

Semester Offered: F/S

21. Course Revision: BIO 231 General Microbiology

- a. Effective date: FA 2023
- b. Change in description and prerequisite
- c. Revised course student learning outcomes

Upon successful completion of this course, students will be able to:

- Compare the structures, physiology and metabolism of prokaryotic and eukaryotic microbes, and viruses.
- Explain microbial growth patterns, nutritional requirements, and mechanisms to control growth.
- Examine the processes of gene transfer, and the role of microbes in biotechnology.
- Examine the role of microbes in the environment and their interactions with other organisms.
- Describe the role of host defense mechanisms in the process of disease.
- Demonstrate laboratory proficiency in microscopy, aseptic transfer, cultivation of microbes, microbial identification, and laboratory safety.
- Employ the scientific method to collect, analyze, and interpret data; effectively communicate experimental results.

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

BIO 231 General Microbiology

This course explores the morphology, growth, metabolism, and genetics of microorganisms including bacteria, fungi, and viruses. Topics include microbial growth and control, genetic transmission and expression, microbial pathogenicity, infectious disease transmission, immunology, and the role of microbes in biotechnology. Students also focus on microscopy, aseptic transfer, and safe cultivation of microorganisms with an additional emphasis on documentation, data analysis, and experimental design.

Credits: 4

Prerequisite: BIO 107

Semester Offered: F/S

22. Course Revision: BIO 259 Cell Biology

- a. Effective date: FA 2023
- b. Change in description and prerequisite
- c. Course description (as it will appear in catalog):

BIO 259 Cell Biology

This course focuses on the structure and function of cells. Topics include organelles, membrane structure and function, protein structure, function and trafficking, metabolism, signal transduction, cytoskeletal dynamics and regulation of growth as well as data collection, analysis, and documentation methods. Students learn laboratory instrumentation, microscopy, cellular techniques, and protein analysis methods employed in biomedical research and the biotechnology industry.

Credits: 4

Prerequisite: BIO 107

Semester Offered: F/S

23. Course Revision: BIO 262 Principles of Genetics

- a. Effective date: FA 2023
- b. Change in description and prerequisite
- c. Revised course student learning outcomes

Upon successful completion of this course, students will be able to:

- Compare and contrast the mechanisms of transmission of genetic material in prokaryotes and eukaryotes.
- Apply genetic mapping strategies to determine the position of genes in prokaryotic and eukaryotic genomes.
- Describe the genomic content, organization, and packaging of genetic material.
- Explain the mechanisms of DNA replication, transcription and translation.
- Compare and contrast the regulation of gene expression in prokaryotes and eukaryotes.
- Explain the mechanisms responsible for genetic mutation and DNA repair.
- Explain evolution in the context of population dynamics and genetic processes such as mutation, migration, natural selection, and random genetic drift.
- Utilize experimental methods in model organisms to characterize transmission, interaction, expression and function of genes.
- Apply the scientific method in the laboratory setting to design controlled experiments, collect and interpret data, and document and clearly communicate experimental results.
- Integrate genetic concepts with societal issues such as genetic counseling, ethics of eugenics, ownership of personal genetic information.

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

BIO 262 Principles of Genetics

This course covers the principles of classical, molecular and population genetics in both model organisms and humans. Students explore inheritance, gene expression, population genetics and evolution, and genetic mutation and repair. The material emphasizes experimental evidence for genetic principles along with application of these principles to solve problems. Students perform investigative laboratory exercises in genetic mapping, recombinant DNA techniques, gene regulation, and bioinformatics.

Credits: 4

Prerequisite: BIO 106, BIO 107, MAT 122

Semester Offered: F/S

24. Program Revision: Liberal Arts - Biology Option (LABI)

- a. Effective date: FA 2023
- b. Incorporate course name and prerequisite change for BIO 107
- c. Incorporate course name, course number, and prerequisite change for BIO 108 (now BIO 106)

- d. Incorporate prerequisite change for BIO 231
 - e. Incorporate prerequisite change for BIO 259
 - f. Incorporate prerequisite change for BIO 262
 - g. Incorporate prerequisite change for MAT 122
 - h. Move BIO 107 from Semester 1 to Semester 2
 - i. Move BIO 106 from Semester 2 to Semester 1
 - j. Adjust Milestones, accordingly
 - k. See grid on page: 132
25. Program Revision: Liberal Arts - Chemistry Option (LACH)
- a. Effective date: FA 2023
 - b. Incorporate course name and prerequisite change for BIO 107
 - c. Incorporate course name, course number, and prerequisite change for BIO 108 (now BIO 106)
 - d. Move BIO 107 from Semester 1 to Semester 2
 - e. Move BIO 106 from Semester 2 to Semester 1
 - f. See grid on page: 134
26. Program Revision: Liberal Arts - Environmental Science Option (LAES)
- a. Effective date: FA 2023
 - b. Incorporate course name and prerequisite change for BIO 107
 - c. Incorporate course name, course number, and prerequisite change for BIO 108 (now BIO 106)
 - d. Incorporate prerequisite change for MAT 122
 - e. Move BIO 107 from Semester 1 to Semester 2
 - f. Move BIO 106 from Semester 2 to Semester 1
 - g. See grid on page: 136
27. Program Revision: General Studies - Pre-Pharmacy Option (GSPH)
- a. Effective date: FA 2023
 - b. Incorporate course name and prerequisite change for BIO 107
 - c. Incorporate course name, course number, and prerequisite change for BIO 108 (now BIO 106)
 - d. Incorporate prerequisite change for BIO 231
 - e. Incorporate prerequisite change for MAT 122
 - f. Move BIO 107 from Semester 1 to Semester 2
 - g. Move BIO 106 from Semester 2 to Semester 1
 - h. See grid on page: 138
28. Program Revision: General Studies - Biotechnology Option (GSBT)
- a. Effective date: FA 2023
 - b. Incorporate course name and prerequisite change for BIO 107
 - c. Incorporate prerequisite change for BIO 231
 - d. Incorporate prerequisite change for BIO 259
 - e. Incorporate prerequisite change for MAT 122
 - f. Move BIO 107 from Semester 1 to Semester 2
 - g. Move BIO 259 from Semester 2 to Semester 4
 - h. Move MAT 122 from Semester 2 to Semester 1
 - i. Move MAT 123 from Semester 3 to Semester 2
 - j. Move MAT 124 from Semester 4 to Semester 3
 - k. Adjust Milestones and Semester Credit Totals, accordingly
 - l. See grid on page: 140
29. Program Revision: Biotechnology Technician Certificate (BI)
- a. Effective date: FA 2023
 - b. Incorporate course name and prerequisite change for BIO 107
 - c. Incorporate prerequisite change for BIO 231
 - d. Incorporate prerequisite change for BIO 259
 - e. Remove CHM 105 from Semester 1

- f. Adjust Milestones and Semester Credit Totals, accordingly
- g. Decrease Total Credits Required for program, from 29 to 25 total
- h. See grid on page: 141

30. Course Revision: BIO 101 General Biology: Core Concepts

- a. Effective date: FA 2023
- b. Change in prerequisite
- c. Course description (as it will appear in catalog):

BIO 101 General Biology: Core Concepts

Students intending to major in the health sciences learn scientific method, basic chemistry (for the understanding of biologic concepts), structure and function of basic cells and tissues, mitosis and meiosis, genetics, and the basic principles of evolution. The laboratory component covers basic techniques in observation, analysis, and interpretation of data relating to the topics discussed in lecture. The lab activities are investigative in nature with the students devising hypotheses, predictions, and identifying independent and dependent variables.

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

31. Course Revision: BIO 232 Medical Microbiology

- a. Effective date: FA 2023
- b. Change in description
- c. Revised course student learning outcomes

Upon successful completion of this course, students will be able to:

- Demonstrate competency in microbiology laboratory safety.
- Apply proper laboratory techniques to isolate, identify, and classify microbes.
- Differentiate the nutritional and environmental requirements for microbial growth.
- Compare physical and chemical methods of microbial control.
- Identify the reservoirs, modes of transmission, and virulence factors of medically significant pathogens.
- Describe the pathogenesis and manifestations of infectious diseases.
- Explain host defense mechanisms and the types of immunity.

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

BIO 232 Medical Microbiology

This course examines the structure, growth, and control of medically significant bacteria, viruses, fungi, protozoa, and helminths. Students learn about the transmission, pathogenesis, and clinical manifestations of disease. The course includes host defense mechanisms and types of immunity. Students also focus on the cultivation, isolation, identification, and control of bacteria.

Credits: 4

Prerequisite: BIO 112 or CHM 105 or CHM 123

Semester Offered: F/S/SU

32. New Course: MAT 051 Topics in Mathematics Corequisite

- a. Effective date: FA 2023
- b. Course description (as it will appear in catalog):

MAT 051 Topics in Mathematics Corequisite

This course covers various topics in developmental mathematics to support students enrolled in MAT 121. Students apply remedial mathematics topics such as fractions, decimals, percent, order of operations, scientific notation, exponential notation, and solving equations to strengthen comprehension of college level topics in MAT 121. This course requires co-enrollment with MAT 121.

Credits: 2

Corequisite: MAT 121

Semester Offered: F/S/SU

33. New Course: MAT 052 Statistics Corequisite

- a. Effective date: FA 2023
- b. Course description (as it will appear in catalog):

MAT 052 Statistics Corequisite

This course covers various topics in developmental mathematics to support students enrolled in MAT 122. Students apply remedial mathematics topics such as fractions, decimals, percent, proportion, scientific notation, coordinates, slope, graphing of linear equations, and mathematical phrasing just-in-time to strengthen comprehension of statistics concepts. This course requires co-enrollment with MAT 122.

Credits: 2

Corequisite: MAT 122

Semester Offered: F/S/SU

34. Course Revision: MAT 121 Topics in Mathematics

- a. Effective date: FA 2023
- b. Change in prerequisite and corequisite
- c. Course description (as it will appear in catalog):

MAT 121 Topics in Mathematics

This course explores a variety of topics in contemporary mathematics. These topics include problem solving and critical thinking, personal finance, numeration systems, set theory, counting principles and probability theory, and voting methods.

Credits: 3

Prerequisite: College level mathematics course or QMAT placement score > 21 or appropriate multiple measures placement or Corequisite: MAT 051

Semester Offered: F/S/SU

35. Course Revision: MAT 122 Statistics

- a. Effective date: FA 2023
- b. Change in description, prerequisite, and corequisite
- c. Course description (as it will appear in catalog):

MAT 122 Statistics

This introductory statistics course covers descriptive statistics, probability, and inferential statistics. Statistical content includes sampling, graphical summaries of data, measures of center and variability, probability theory and distributions, standard and non-standard normal distributions, the Central Limit Theorem, confidence intervals, one-sample hypothesis tests, linear correlation and regression. Statistical technology is used.

Credits: 3

Prerequisite: College level mathematics course or QMAT placement score > 21 or Corequisite: MAT 052

Semester Offered: F/S/SU

School of Public Service, Education & Social Sciences

36. Program Closure: Technician in Applied Behavior Analysis (TABC)

- a. Effective date: FA 2023

37. Course Revision: ECE 101 Introduction to Early Childhood Education

- a. Effective date: FA 2023
- b. Change in description
- c. Course description (as it will appear in catalog):

ECE 101 Introduction to Early Childhood Education

This course is an introduction to early childhood education. Students study the history and contributing theories of the field and the basic aspects important to quality programs for young children. Course content includes studies of child development, the types of programs available; qualifications for teachers and staff; state regulations monitoring programs, state Guidance Policy, the Massachusetts Early Childhood Standards; career opportunities; special education considerations, and current issues in early childhood education. During a 10-hour field experience, students make

observations in the Children's School: QCC's Early Childhood Education Lab School, or local licensed Child Care program, or public school that focuses on guidance practices; children's play; integrated curriculum practices; transitions and routines; and appropriate methods for addressing students of differing abilities.

Credits: 3

Prerequisite: Placement into college level English

Semester Offered: F/S/SU

38. Course Revision: ECE 202 Fieldwork with Young Children I

a. Effective date: FA 2023

b. Change in prerequisite

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

ECE 202 Fieldwork with Young Children I

This course provides onsite supervision and consultation for students who are developing skills and competencies as they work directly with young children in a school setting (ages 2.9-under seven years old and not yet enrolled in first grade). Early Childhood Education faculty observe and consult with students during this process. Students demonstrate and document competence in the following areas: setting up and maintaining a safe, healthy learning environment for children; providing positive guidance for children; implementing an age appropriate, culturally sensitive curricula; providing appropriate social experiences for young children; communicating and cooperating with team members appropriately; documenting self-growth over time; and demonstrating awareness of the total classroom at all times.

Credits: 3

Prerequisite: ECE 102

Semester Offered: S

School of English & Humanities

39. New Course: ENG 101L Composition I with Lab

a. Effective date: FA 2023

ENG 101L Composition I with Lab

The course focuses on theme-based argument. Students practice and develop critical reading, thinking, and writing skills necessary for college. Students read, analyze, and summarize college level analytic arguments from various genres (popular, academic, etc.) and compose research-based analytic arguments based on the course's theme. Students become aware of writing decisions made for different audiences, purposes, and genres, with a focus on academic writing conventions. Students also learn beginning research skills, including appropriate quotation, summary, paraphrase, and documentation skills. At the end of the semester, students compile a portfolio of 15-25 pages, to include their summary, synthesis, and analysis projects. This section of the course includes a two-hour lab component where an academic coach will support students with planning, organizing, and revising assignments, focusing on sentence and paragraph-level revision as well as the rhetorical content of the ENG 101 course.

Credits: 3

Prerequisite: Appropriate Placement based on GPA (2.4-2.89) and Self-Placement Test and/or Conference with Advisor

Semester Offered: F/S/SU

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

1. Degree or Certificate Name and Code: **Business Administration Transfer - Associate in Science**
(Program Code: BT) (from current AY 22/23 catalog)

2. Originator: **Jean McLean** Date: **12/9/2022**

3. School Dean: **Betty Lauer** Date: **12/9/2022**

4. Effective Date: **Fall 2023**

5. Reviewed by Program and Process (if applicable) Date:

6. Recommended by the School of Bus., Eng., & Tech. Date: 12/15/2022

Comments: **Unanimous approval**

7. AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: ☒ Not Recommended: ☐

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: ☒ Not Recommended: ☐

Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: ☒ Not Recommended: ☐

Comments: _____

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: ☒ Not Approved: ☐

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

| |
|---|
| Degree or Certificate name and code: Business Administration Transfer - Associate in Science (Program Code: BT) |
| <p>Provide a detailed list of the proposed changes to the degree or certificate.</p> <p>In Semester 3:</p> <ol style="list-style-type: none"> 1. Remove one Program Elective 2. Add MGT 211 3. 4. 5. |
| <p>Attachments:</p> <p>Current academic map</p> <p>Proposed academic map with changes in bold</p> |
| <p>Submit separate proposals for any new courses or revised courses in the degree or certificate. Please list here the new courses or revised courses for which separate proposals will be submitted.</p> <p>MGT 211 is not a new or revised course.</p> |
| <p>Provide a rationale for the proposed changes.</p> <p>Principles of Management is the prerequisite for some third-year courses at WSU. Recommended by Transfer coordinator.</p> |
| <p>Do any of the proposed changes affect the program goals and/or the program student learning outcomes? Please indicate any revisions to the program goals and/or program student learning outcomes.</p> <p>No</p> |
| <p>Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments.</p> <p>No</p> <p>Department(s) Affected: None</p> |
| <p>Do any of the proposed changes affect articulation agreements? No. Consult with the Transfer Coordinator.</p> <p>Consulted with Transfer. Transfer approved the change.</p> |
| <p>For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer?</p> <p>No</p> <p>If yes please provide a rationale.</p> |
| <p>Will any of the following be required:</p> <p>No</p> <p>Additional staff____Additional space____Additional equipment____Additional library resources ____</p> <p>Provide a rationale for any needs indicated and include approximate cost of equipment.</p> |

Please complete the following tables for your program or indicate the date of the **Academic Matters** (within the last three years) where they have previously been published.

List the **PROGRAM STUDENT LEARNING OUTCOMES** in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

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

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

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

| PROGRAM STUDENT LEARNING OUTCOMES FOR (insert the name of the program) Business Transfer BT | | Supporting course(s) | I, M, E |
|---|---|---|---------|
| 1 | Demonstrate an understanding of the practice of business, including management, marketing, and accounting; demonstrate the application of this knowledge in a business setting. | ACC 101, ACC 102, ACC 222, Bus prog electives | E |
| 2 | Transfer to a business administration bachelor's degree program. | | |
| 3 | Communicate effectively using written, oral, and nonverbal techniques, including the use of technology in gathering and presenting information. | ENG 101, ENG 102, CIS 111, HUM electives | E, M |
| 4 | Use critical thinking skills to appraise and evaluate business practices, including the use of quantitative and qualitative techniques. | MAT 122, ACC 101,102, 222 | E, |
| 5 | Recognize the presence of various cultures in the business world, and comprehend the need to have a global perspective when analyzing and planning in a business environment. | HUM, SSE electives, program electives. ECO 115, 116 | M |
| 6 | Demonstrate knowledge of the concept of ethics and how businesses integrate social responsibility into their ongoing operations. | ACC 101,102,222, Hum electives, prog. electives | E |
| 7 | Comprehend the rapid change taking place in the business environment, and demonstrate an ability to engage in ongoing professional development. | Prog electives, ECO, CIS 111, ACC | E |

For a DEGREE PROGRAM, indicate the courses that fulfill the General Education Student Learning Outcomes (Gen. Ed. Goals adopted 2022).

| GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR (insert the name of the program) | Supporting course(s) | I, M, E |
|--|------------------------------|---------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | ACC 101, 102, 222, electives | E, M |
| Communication Skills: Students will read, write and speak effectively to build knowledge and convey meaning. | ENG 101, 102 | E |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | CIS 111 | E |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals.. | HUM, SSE | I, M |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | MAT 122, 123, Sci electives | E |

Business, Financial & Hospitality Management**Business Administration Transfer - Associate in Science (Program Code: BT)****CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|--------------|--|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: BT).</p> <p>Register for and successfully complete all courses to graduate in four semesters.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 123 or MAT 231.</p> |
| 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 | |
| Introduction to Microcomputer Applications OR | CIS 111 | F/S/SU | 3 | | |
| Advanced Microcomputer Applications | CIS 112 | | | CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Principles of Macroeconomics | ECO 215 | F/S/SU | 3 | Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| College Mathematics I: Pre-Calculus OR | MAT 123 | F/S/SU | 3 | MAT 100 or approp place score | |
| Applied Calculus | MAT 231 | S | | MAT 123 or approp place score | |
| | | Total | 15 | | |
| Semester 2 | | | | | <p>Meet with Academic Advisor to choose Program Electives (Semesters 3 and 4); must be selected from ACC, BSL, FIN, MGT, or MRK course designations.</p> <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| Financial Accounting II | ACC 102 | F/S/SU | 3 | ACC 101, CIS 111 | |
| Principles of Microeconomics | ECO 216 | F/S/SU | 3 | 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 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 3 | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> <p>Students planning to transfer to WSU should choose MGT 211 as one of the Program Electives.</p> <p>Students in the Commonwealth Commitment program should choose MRK 201 as one of the Program Electives.</p> |
| Managerial Accounting | ACC 222 | F/S/SU | 3 | ACC 102 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | <p>Continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| Science Elective or Lab Science Elective | --- | F/S/SU | 3-4 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 15-16 | | |
| Total Credits Required | | | 61-62 | | |

Business, Financial & Hospitality Management**Business Administration Transfer - Associate in Science (Program Code: BT)****PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|--------------|--|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: BT).</p> <p>Register for and successfully complete all courses to graduate in four semesters.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 123 or MAT 231.</p> |
| 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 | |
| Introduction to Microcomputer Applications OR | CIS 111 | F/S/SU | 3 | | |
| Advanced Microcomputer Applications | CIS 112 | | | CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Principles of Macroeconomics | ECO 215 | F/S/SU | 3 | Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| College Mathematics I: Pre-Calculus OR | MAT 123 | F/S/SU | 3 | MAT 100 or approp place score | |
| Applied Calculus | MAT 231 | S | | MAT 123 or approp place score | |
| | | Total | 15 | | |
| Semester 2 | | | | | <p>Meet with Academic Advisor to choose Program Electives (Semesters 3 and 4); must be selected from ACC, BSL, FIN, MGT, or MRK course designations.</p> <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| Financial Accounting II | ACC 102 | F/S/SU | 3 | ACC 101, CIS 111 | |
| Principles of Microeconomics | ECO 216 | F/S/SU | 3 | 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 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 3 | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> <p>Students in the Commonwealth Commitment program should choose MRK 201 as the Program Elective.</p> |
| Managerial Accounting | ACC 222 | F/S/SU | 3 | ACC 102 | |
| Principles of Management | MGT 211 | F/S/SU | 3 | Placement into college level English | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | <p>Continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| Science Elective or Lab Science Elective | --- | F/S/SU | 3-4 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 15-16 | | |
| Total Credits Required | | | 61-62 | | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

**DEGREE PROGRAM OR CERTIFICATE
PROPOSAL FOR CLOSURE**

1. Degree or Certificate Name and Code to be closed: Manufacturing Technology - Applied
Manufacturing Option (Program Code: MPA)
2. Originator: Lee Duerden Date: 11/7/2022
3. School Dean: Betty Lauer Date: 11/7/2022
4. Rationale for the proposed program or certificate closure:
Program no longer has feeder credentials to support it. The program was built to support MACWIC
apprentice programming, however the graduates from this apprentice program did not grow as hoped.
The MACWIC program while still being offered is no longer supporting apprentice type programming
through MassMEP. As such this program should be retired.
5. Effective Date: Fall 2023
6. Reviewed by Program and Process (if applicable) N/A Date:
7. Recommended by the School of Business, Engineering & Technology Date: 12/15/2022
Comments: unanimous approval
8. AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: X Not Recommended: _____
Comments: _____
9. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: X Not Recommended: _____
Comments: _____
10. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____
Comments: _____
11. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____
Comments: _____

FOR PROGRAM/CERTIFICATE CLOSURE

President: _____

Date: _____

Approved: _____

Not Approved: _____

Board of Trustees: _____

Date: _____

Approved: _____

Not Approved: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

**DEGREE PROGRAM OR CERTIFICATE
PROPOSAL FOR CLOSURE**

1. Degree or Certificate Name and Code to be closed: Manufacturing Technology - Applied
Manufacturing Certificate (Program Code: AMC)
2. Originator: Lee Duerden Date: 11/7/2022
3. School Dean: Betty Lauer Date: 11/7/2022
4. Rationale for the proposed program or certificate closure:
This program exists as a pre-requisite to MPA program. The MPA program is being closed down and
as such this program should also follow and be closed.
5. Effective Date: Fall 2023
6. Reviewed by Program and Process (if applicable) Date:
7. Recommended by the School of Business, Engineering & Technology Date: 12/15/2022
Comments: unanimous approval
8. AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: X Not Recommended: _____
Comments: _____
9. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____
X
Comments: _____
10. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____
Comments: _____
11. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____
Comments: _____

FOR PROGRAM/CERTIFICATE CLOSURE

President: _____

Date: _____

Approved: _____

Not Approved: _____

Board of Trustees: _____

Date: _____

Approved: _____

Not Approved: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** ERG 101 *Engineering Graphics*
(from current AY22/23 catalog)

2. **Originator:** Dadbeh Bigonahy **Date:** 01-19-2023

3. **School Dean:** Betty Lauer **Date:** 01-19-2023

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:**

6. **Recommended by the School of Business, Engineering & Technology**

Date: 1/19/2023 _____

Comments: Unanimous vote

8 **AA Leadership Team:** Kevin Li **Date:** 01/23/23 _____

Recommended: X **Not Recommended:** _____

Comments:

9. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23 _____

Recommended: **Not Recommended:** _____

X

Comments:

10. **Learning Council:** John Stazinski **Date:** 02/14/23 _____

Recommended: X **Not Recommended:** _____

Comments:

11. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23 _____

Approved: X **Not Approved:** _____

Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

| | |
|---|---|
| Type of Revision: <input type="checkbox"/> Description <input type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input type="checkbox"/> Number <input checked="" type="checkbox"/> Name <input type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input type="checkbox"/> Other (explain) | |
| Course Discipline or Department: Engineering | School: Business, Engineering and Technology |
| Current Course Number: ERG 101 | |
| Current Course Name: Engineering Graphics | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): ERG 101 Engineering Graphics This course focuses on engineering drawing utilizing computer-assisted drawing (CAD) techniques. It introduces descriptive geometry and the basic theory of orthographic projections. Students create orthographic, isometric, sectional views and assembly drawings and dimensioning using CAD software. Credits: 3 Semester Offered: F/S/SU Prerequisites: MAT 124 | |
| Proposed Description (include all proposed changes): ERG 101 Engineering Design and Graphics Using CAD This course focuses on engineering drawing utilizing computer-assisted drawing (CAD) techniques. It introduces descriptive geometry and the basic theory of orthographic projections. Students create orthographic, isometric, sectional views and assembly drawings and dimensioning using CAD software. Credits: 3 Semester Offered: F/S/SU Prerequisites: MAT 124 | |
| Rationale for the change: Modernization | |
| Provide a description of any change in course content. NA | |

List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):

ERG : Engineering – Associate in Science

Please confer with the coordinator of the affected department.

Attach current and proposed academic maps (with changes in **bold**) for all affected programs. You can obtain academic maps from Barb Zabka.

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

Engineering & Engineering Technology

Engineering - Associate in Science (Program Code: ERG)

Current

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|--|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: ERG).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Meet with Program Coordinator.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 233.</p> |
| 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 | | |
| Semester 2 (Spring) | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| 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) | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> |
| 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. |
| Thermodynamics | ERG 223 | S/SU | 3 | CHM 124, MAT 235, PHY 106 or PHY 107 | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| 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 | | |

Engineering & Engineering Technology

Engineering - Associate in Science (Program Code: ERG)

Proposed

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|--|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: ERG).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Meet with Program Coordinator.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 233.</p> |
| 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 Design and Graphics Using CAD | 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 | | |
| Semester 2 (Spring) | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| 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) | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> |
| 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. |
| Thermodynamics | ERG 223 | S/SU | 3 | CHM 124, MAT 235, PHY 106 or PHY 107 | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| 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 | | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

1. Degree or Certificate Name and Code: *Engineering - Associate in Science (Program Code: ERG)*
(from current AY 22/23 catalog)

2. Originator: Dadbeh Bigonahy Date: 1/19/2023

3. School Dean: Betty Lauer Date: 1/19/2023

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date:

6. Recommended by the School of Business, Engineering & Technology Date: 1/19/2023
Comments: Unanimous vote

7 AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: X Not Recommended: _____

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____

X

Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____

Comments: Incorporate prerequisite and corequisite change for ERG221 and prerequisite change for ERG 223

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

| |
|--|
| Degree or Certificate name and code: Engineering - Associate in Science (Program Code: ERG) |
| Provide a detailed list of the proposed changes to the degree or certificate. 1. Semester 1: Incorporate new course name for ERG 101 from Engineering Graphics to <i>Engineering Design and Graphics Using CAD</i> 2. Semester 3: Incorporate the course name and prerequisite change of Principles of Biology I (BIO 107) to Biology II: Introduction to Cells and Molecules (BIO 107). |
| Attachments: Current academic map Proposed academic map with changes in bold |
| Submit separate proposals for any new courses or revised courses in the degree or certificate. Please list here the new courses or revised courses for which separate proposals will be submitted. ERG 101 BIO 107 |
| Provide a rationale for the proposed changes. Modernize naming to be consistent with transfer institutions. In order to increase student success in Liberal Arts-Biology and other programs that require BIO 107, the prerequisite has been changed to require one semester of chemistry (CHM 105 or CHM 123). In order to clarify the content, the name has been changed to BIO 107: Introduction to Cells and Molecules. |
| Do any of the proposed changes affect the program goals and/or the program student learning outcomes? Please indicate any revisions to the program goals and/or program student learning outcomes. <p style="text-align: center;">Program SLOs and goals remain the same.</p> |
| Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. <p style="text-align: center;">No other departments affected by the degree changes.</p> Department(s) Affected: |
| Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. |
| For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? <p style="text-align: center;">The order of courses and prerequisites have changed, but the content remains the same. There is no effect on MassTransfer.</p> If yes please provide a rationale. |
| Will any of the following be required: None |

Additional staff ____ Additional space ____ Additional equipment ____ Additional library resources ____

Provide a rationale for any needs indicated and include approximate cost of equipment.

Please complete the following tables for your program or indicate the date of the **Academic Matters** (within the last three years) where they have previously been published.

List the PROGRAM STUDENT LEARNING OUTCOMES in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

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

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

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

| PROGRAM STUDENT LEARNING OUTCOMES FOR (insert the name of the program) | | Supporting course(s) | I, M, E |
|--|--|----------------------|---------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |

For a DEGREE PROGRAM, indicate the courses that fulfill the General Education Student Learning Outcomes (Gen. Ed. Goals adopted 2022).

| GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR (insert the name of the program) | Supporting course(s) | I, M, E |
|--|----------------------|---------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | | |
| Communication Skills: Students will read, write and speak effectively to build knowledge and convey meaning. | | |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | | |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals.. | | |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | | |

Engineering & Engineering Technology
Engineering - Associate in Science (Program Code: ERG)

Current

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|--|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: ERG).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Meet with Program Coordinator.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 233.</p> |
| 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 | | |
| Semester 2 (Spring) | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| 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) | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> |
| 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) | | | | | <p>Continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| 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 | | |

Engineering & Engineering Technology
Engineering - Associate in Science (Program Code: ERG)

Proposed

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|--------------------------------------|--|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: ERG).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Meet with Program Coordinator.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 233.</p> |
| 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 Design and Graphics Using CAD | 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 | | |
| Semester 2 (Spring) | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| 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) | | | | | |
| Biology II: Introduction to Cells and Molecules | BIO 107 | F/S/SU | 4 | CHM 105 or CHM 123; ENG 101 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| | | Total | 7 | | |
| Semester 4 (Fall) | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> |
| 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) | | | | | <p>Continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| 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 | | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

1. Degree or Certificate Name and Code: *Engineering - Biomedical Engineering Option - Associate in Science (Program Code: ERBM)*

(from current AY 22/23 catalog)

2. Originator: Dadbeh Bigonahy Date: 1/19/2023

3. School Dean: Betty Lauer Date: 1/19/2023

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date:

6. Recommended by the School of Business, Engineering & Technology Date: 1/19/2023
Comments: Unanimous vote

7 AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: X Not Recommended: _____

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____

X

Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____

Comments: Incorporate prerequisite and co-requisite change for ERG 221 and prerequisite change for ERG 223

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

| |
|---|
| Degree or Certificate name and code: Engineering - Biomedical Engineering Option - Associate in Science (Program Code: ERBM) |
| Provide a detailed list of the proposed changes to the degree or certificate. 1. Semester 2: Move BIO 107 from semester 1 to semester 2. 2. Semester 2: Incorporate the course name and prerequisite change of Principles of Biology I (BIO 107) to Biology II: Introduction to Cells and Molecules (BIO 107). 3. Semester 4: Move BIO 259 from semester 2 to semester 4. 4. Semester 4: Incorporate prerequisite change for BIO 259 (Cell Biology). |
| Attachments: Current academic map Proposed academic map with changes in bold |
| Submit separate proposals for any new courses or revised courses in the degree or certificate. Please list here the new courses or revised courses for which separate proposals will be submitted. BIO 107 BIO 259 |
| Provide a rationale for the proposed changes. In order to increase student success in Liberal Arts-Biology and other programs that require BIO 107, the prerequisite has been changed to require one semester of chemistry (CHM 105 or CHM 123). In order to clarify the content, the name has been changed to BIO 107: Introduction to Cells and Molecules. Due to the prerequisite change for BIO 107, the chemistry prerequisite has been removed from BIO 259. |
| Do any of the proposed changes affect the program goals and/or the program student learning outcomes? Please indicate any revisions to the program goals and/or program student learning outcomes. Program SLOs and goals remain the same. |
| Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. No other departments affected by the degree changes. Department(s) Affected: |
| Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. |
| For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? The order of courses and prerequisites have changed, but the content remains the same. There is no effect on MassTransfer. If yes please provide a rationale. |

Will any of the following be required: None

Additional staff____Additional space____Additional equipment____Additional library resources ____

Provide a rationale for any needs indicated and include approximate cost of equipment.

Please complete the following tables for your program or indicate the date of the **Academic Matters** (within the last three years) where they have previously been published.

List the PROGRAM STUDENT LEARNING OUTCOMES in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

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

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

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

| PROGRAM STUDENT LEARNING OUTCOMES FOR (insert the name of the program) | | Supporting course(s) | I, M, E |
|--|--|----------------------|---------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |

For a DEGREE PROGRAM, indicate the courses that fulfill the General Education Student Learning Outcomes (Gen. Ed. Goals adopted 2022).

| GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR (insert the name of the program) | Supporting course(s) | I, M, E |
|--|----------------------|---------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | | |
| Communication Skills: Students will read, write and speak effectively to build knowledge and convey meaning. | | |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | | |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals.. | | |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | | |

Engineering & Engineering Technology

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

Current

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|---|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: ERBM).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Meet with Program Coordinator.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 233.</p> |
| 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 | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| 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 | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> |
| 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 | | | | | <p>Continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| 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 | | |

Engineering & Engineering Technology

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

| 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 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 | 14 | | |
| Semester 2 | | | | | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Biology II: Introduction to Cells and Molecules | BIO 107 | F/S/SU | 4 | CHM 105 or CHM 123; ENG 101 | |
| 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. |
| Cell Biology | BIO 259 | F/S | 4 | BIO 107 | |
| 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 | PHY 105, Coreq: MAT 235, | |
| Calculus III | MAT 235 | F/S/SU | 4 | MAT 234 | |
| | | Total | 18 | | |
| 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 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 | | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. Course Number and Name: DHY 212 Dental Hygiene Process IV

2. Originator: Jane Gauthier

Date: 11/28/22

3. School Dean: C. Pat Schmohl, Jr.

Date: 11/29/22

4. Effective Date: Spring 2023²⁰²⁴ (Course runs every spring semester)

5. Reviewed by Program and Process (if applicable)

Date: N/A

6. Recommended by the School of Healthcare
Comments: unanimous approval

Date: 12/15/22

7. AA Leadership Team: Kevin Li

Date: 01/23/23

Recommended: X Not Recommended: _____

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____

X
Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____

Comments: _____
Friendly amendment to change effective date to Spring 2024

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

| | |
|---|---------------------------|
| Type of Revision: <input checked="" type="checkbox"/> Description <input type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input type="checkbox"/> Number <input type="checkbox"/> Name <input type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input type="checkbox"/> Other (explain) | |
| Course Discipline or Department: Dental Hygiene | School: Healthcare |
| Current Course Number: DHY 212 | |
| Current Course Name: Dental Hygiene Process IV | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): | |
| <p>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</p> | |
| Proposed Description (include all proposed changes): | |
| <p>DHY 212 Dental Hygiene Process IV This clinical theory course emphasizes the role of the dental hygienist in various dental specialties, including, but not limited to: General, Orthodontics, Pediatric Dentistry, Endodontics, Periodontics and Oral surgery practice. The clinical component emphasizes continued development in the delivery of the dental hygiene process of care while demonstrating independent decision-making, critical thinking and problem-solving skills focusing on the 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</p> | |
| Rationale for the change: | |
| <p>The reason for the recommended change is two-fold:</p> <ul style="list-style-type: none"> • language is in alignment with that of the other clinical course descriptions. • eliminate the language “lectures provided by dental specialists” so we do not have to rely on outside providers to deliver course content. | |
| Provide a description of any change in course content. | |
| No change in course content. | |
| List the programs that are affected by this change (list program names and program codes as they appear in the college catalog): | |

- Dental Hygiene Program (DH)

Please confer with the coordinator of the affected department.

Attach current and proposed academic maps (with changes in **bold**) for all affected programs. You can obtain academic maps from Barb Zabka.

No changes in current Academic Map.

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

Done. Submitted to Dean Schmohl on 11/29/22.

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** NUR 100 Paramedic to ADN Bridge

2. **Originator:** Pat Creelman **Date:** 11/29/2022

3. **School Dean:** Pat Schmohl **Date:** 11/29/2022

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:** NA

6. **Recommended by the School of Healthcare** **Date:** 12/15/2022
Comments: unanimous approval

7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____

Comments: _____

8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: _____ **Not Recommended:** _____

X
Comments: _____

9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: X **Not Recommended:** _____

Comments: _____

10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: X **Not Approved:** _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE
COURSE REVISION PROPOSAL

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|---|---|
| Type of Revision: <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input type="checkbox"/> Number <input type="checkbox"/> Name <input type="checkbox"/> # Credits | |
| <input type="checkbox"/> Elective Type <input checked="" type="checkbox"/> Other (explain): Restriction wording changing | |
| Course Discipline or Department: NUR | School: HealthCare |
| Current Course Number: NUR 100 | Current Course Name: Paramedic to ADN Bridge |
| <p>Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites):</p> <p>NUR 100 Paramedic to ADN Bridge</p> <p>This one credit course focuses on curriculum topics that are essential for those students who hold a Paramedic certification in the state of Massachusetts and who are seeking Advanced Placement into the QCC Associate of Science Degree Nurse Education Evening Program. Topics include: Foundations of Nursing Practice, Nursing Theory and Evidenced Based Practice, Scope of Practice, Legal, Ethical and Advocacy Issues, Roles basic to nursing care, role transition, actions basic to nursing care and promoting healthy psychosocial responses. Introduction to the nursing process is also discussed. Clinical lab content includes basic nursing skills practice and competency. This course also includes clinical practice of basic skills in the long-term care setting. Successful completion of this one-credit course with a “C+” or higher enables students to enter the NUR 101 Advanced Placement Nursing I course.</p> <p>Credits: 1</p> <p>Prerequisite: Passing both BIO 111 and BIO 112 with a “C” or higher, ENG 101, PSY 101</p> <p>Semester Offered: F</p> <p>Restriction: Restricted to those students who have met admissions requirements for the Associate in Science in Nurse Education Program and hold a current certification in Massachusetts as a Paramedic or current certification from the National Registry of Emergency Medical Technicians (NREMT)</p> | |
| <p>Proposed Description (include all proposed changes):</p> <p>NUR 100 Paramedic to ADN Bridge</p> <p>This course focuses on curriculum topics that are essential for those students who hold a Paramedic certification and who are seeking enrollment into the Nurse Education - Advanced Placement Paramedic Program (NUP). Topics include foundations of nursing practice, nursing theory, evidenced based practice, legal, ethical and advocacy issues, nursing care, role transition, nursing process, and promoting healthy psychosocial responses. Lab content includes basic nursing skills practice and competency. This course also includes clinical practice of basic skills in the long-term care setting. Successful completion of this one-credit course with a “C+” or higher enables students to enter the NUR 101 course.</p> <p>Credits: 1</p> <p>Prerequisite: BIO 111 with a grade of “C” or higher, BIO 112 with a grade of “C” or higher, ENG 101, PSY 101</p> <p>Semester Offered: F</p> <p>Restriction: Restricted to those students who have met admissions requirements for the Associate in Science in Nurse Education Program and hold a current certification in Massachusetts as a Paramedic or current certification from the National Registry of Emergency Medical Technicians (NREMT) in good standing.</p> | |
| Rationale for the change: Updating description to reflect current program admission requirements accurately. | |
| Provide a description of any change in course content. None. | |
| <p>List the programs that are affected by this change (list program names and program codes as they appear in the college catalog): Nurse Education - Advanced Placement Paramedic (NUP)</p> <p>Please confer with the coordinator of the affected department.</p> | |
| Attach current and proposed academic maps (with changes in bold) for all affected programs. | |
| Please submit a generic syllabus to your dean with all of the revisions included. Submitted to Dean Schmohl | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** NUR 101 Advanced Placement Nursing I

2. **Originator:** Pat Creelman **Date:** 11/29/2022

3. **School Dean:** Pat Schmohl **Date:** 11/29/2022

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:** NA

6. **Recommended by the School of Healthcare** **Date:** 12/15/2022
Comments: unanimous approval

7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____

Comments: _____

8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: _____ **Not Recommended:** _____

X
Comments: _____

9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: X **Not Recommended:** _____

Comments: _____

10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: X **Not Approved:** _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE
COURSE REVISION PROPOSAL

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| Type of Revision: <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input type="checkbox"/> Number <input type="checkbox"/> Name <input type="checkbox"/> # Credits | |
| <input type="checkbox"/> Elective Type <input checked="" type="checkbox"/> Other (explain): Restriction wording changing | |
| Course Discipline or Department: NUR | School: HealthCare |
| Current Course Number: NUR 101 | Current Course Name: Advanced Placement Nursing I |
| <p>Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites):</p> <p>NUR 101 Advanced Placement Nursing I</p> <p>This one credit course is designed for all qualified Licensed Practical Nurses and Paramedics who are seeking advanced placement into the Evening Associate of Science Degree Program, NUR 105 course. The course focuses on curriculum topics that are essential for the first semester Associate Degree nursing student. Topics include: Nursing philosophy of the profession and of the QCC Associate of Science degree Nurse Education Program, nursing process application, decision-making, critical thinking and priority setting, Orem's Theory of Self Care and Erickson Theory of Human Development. The course also reinforces roles basic to nursing care, health promotion and complementary alternative medicine, physical assessment and fluid and electrolytes. The lab component includes practice and competency of all lab modules including asepsis, wound care, and other assigned modules. Successful completion of this one-credit course with a "C+" or higher is required.</p> <p>Credits: 1</p> <p>Prerequisite: Passing BIO 112 with a "C" or higher, PSY 101, NUR 100 or Admission to Nurse Education Advanced Placement LPN program</p> <p>Semester Offered: F</p> <p>Restriction: Restricted to those students who have met admissions requirements for the Associate Degree in the Nursing Program and hold a current license to practice as a Licensed Practical Nurse (LPN) in good standing</p> | |
| <p>Proposed Description (include all proposed changes):</p> <p>NUR 101 Advanced Placement Nursing I</p> <p>This course is designed for eligible Licensed Practical Nurses and Paramedics who are seeking enrollment into the Nurse Education - Advanced Placement LPN (NUL) or Advanced Placement Paramedic (NUP) Program. The course focuses on curriculum topics that are essential for the first semester Associate Degree nursing student. Topics include nursing philosophy of the profession and of the QCC Associate in Science degree Nurse Education Program, nursing process application, decision-making, critical thinking and priority setting, Nursing Theory, Maslow's Hierarchy of Needs, and Erikson's Stages of Psychosocial Development. The course also reinforces foundations of basic nursing care, health promotion, complementary alternative medicine, physical assessment, and fluid and electrolytes. The lab component includes practice and competency demonstration of lab skills including asepsis, wound care, and other assigned modules. Successful completion of this one-credit course with a "C+" or higher is required.</p> <p>Credits: 1</p> <p>Prerequisite: BIO 112 with a grade of "C" or higher, PSY 101, NUR 100 with a grade of "C+" or higher or Admission to Nurse Education - Advanced Placement LPN (NUL) Program</p> <p>Semester Offered: F</p> <p>Restriction: Restricted to those students who have met admissions requirements for the Associate Degree in the Nursing Program and hold a current license to practice as a Licensed Practical Nurse (LPN) in good standing or to those students who have met admissions requirements for the Associate in Science in Nurse Education Program and hold a current certification in Massachusetts as a Paramedic or current certification from the National Registry of Emergency Medical Technicians (NREMT) in good standing.</p> | |
| Rationale for the change: Updating description to reflect current program admission requirements accurately. | |

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| <p>Provide a description of any change in course content.</p> <p>None.</p> |
| <p>List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):</p> <p style="padding-left: 40px;">Nurse Education - Advanced Placement LPN (NUL)</p> <p style="padding-left: 40px;">Nurse Education - Advanced Placement Paramedic (NUP)</p> <p>Please confer with the coordinator of the affected department.</p> |
| <p>Attach current and proposed academic maps (<u>with changes in bold</u>) for all affected programs.</p> |
| <p>Please submit a generic syllabus to your dean with all of the revisions included. Submitted to Dean Schmohl</p> |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. Course Number and Name: NUR 103 Current Concepts in Nursing & Health Care I

2. Originator: Pat Creelman Date: 11/29/2022

3. School Dean: Pat Schmohl Date: 11/29/2022

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date: NA

6. Recommended by the School of Healthcare Date: 12/15/2022
Comments: unanimous approval

7. AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: X Not Recommended: _____

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____

X

Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____

Comments: _____

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE
COURSE REVISION PROPOSAL

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| Type of Revision: <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisite <input checked="" type="checkbox"/> Corequisite <input checked="" type="checkbox"/> Number <input checked="" type="checkbox"/> Name ____# Credits ____ Elective Type ____ Other (explain) | |
| Course Discipline or Department: NUR | School: Healthcare |
| Current Course Number: NUR 103 | Current Course Name: Current Concepts in Nursing & Health Care I |
| <p>Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites):</p> <p>NUR 103 Current Concepts in Nursing & Health Care I</p> <p>This course is the study of contemporary nursing in relation to historical development, social trends, and healthcare changes. The student discusses influences of the past on present day nursing, health care trends and legislation, challenges and issues for today's nurse, and future predictions for nursing. Successful completion of this one-credit course with a "C+" or higher is required.</p> <p>Credits: 1</p> <p>Prerequisite: Passing BIO 111 with a "C" or higher, ENG 101</p> <p>Corequisite: BIO 112, NUR 104, PSY 101</p> <p>Semester Offered: F/S</p> | |
| <p>Proposed Description (include all proposed changes):</p> <p>NUR 106 Introduction to Nursing Concepts & Health Care</p> <p>This course is the study of contemporary nursing in relation to historical development, nursing theory, social trends, and healthcare changes. The student explores influences of the past on present day nursing, health care settings, trends and legislation, challenges and issues for today's nurse and future predictions for nursing. Students will integrate concepts of diversity, equity and inclusion in discussion of patient-centered care. Successful completion of this one-credit course with a "C+" or higher is required.</p> <p>Credits: 1</p> <p>Prerequisite: BIO 111 with a grade of "C" or higher, ENG 101</p> <p>Corequisite: BIO 112, NUR 107, PSY 101</p> <p>Semester Offered: F/S</p> | |
| <p>Rationale for the change:</p> <p>Based on curricular review, determination was made to incorporate additional trends in nursing education. Finally, based on further review of curriculum, additional topics have been incorporated across the curriculum to promote currency of topics.</p> | |
| <p>Provide a description of any change in course content.</p> <p>Additional focus on diversity, equity and inclusion. Course name change. No change in credits.</p> | |
| <p>List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):</p> <ul style="list-style-type: none"> • Nurse Education (NUR) • Nurse Education Evening (NUE) • Nurse Education - Advanced Placement LPN (NUL) • Nurse Education - Advanced Placement Paramedic (NUP) <p>Please confer with the coordinator of the affected department.</p> | |
| <p>Attach current and proposed academic maps (<u>with changes in bold</u>) for all affected programs. You can obtain academic maps from Barb Zabka.</p> | |
| <p>Please submit a generic syllabus to your dean with all of the revisions included. Submitted to Dean Schmoehl</p> | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. Course Number and Name: NUR 104 Fundamentals of Nursing

2. Originator: Pat Creelman Date: 11/29/2022

3. School Dean: Pat Schmohl Date: 11/29/2022

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date: NA

6. Recommended by the School of Healthcare Date: 12/15/2022
Comments: unanimous approval

7. AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: X Not Recommended: _____

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____

X
Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____

Comments: _____

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE
COURSE REVISION PROPOSAL

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| Type of Revision: <input checked="" type="checkbox"/> Description <input type="checkbox"/> Prerequisite <input checked="" type="checkbox"/> Corequisite <input checked="" type="checkbox"/> Number <input type="checkbox"/> Name <input checked="" type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input type="checkbox"/> Other (explain) | |
| Course Discipline or Department: NUR | School: Healthcare |
| Current Course Number: NUR 104 | Current Course Name: Fundamentals of Nursing |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): NUR 104 Fundamentals of Nursing This course provides an introduction to the role of the nurse in the health care system. Orem's Theory of Self-Care and Erickson Theory of Human Development are introduced and utilized as organizing frameworks. Students also learn the concept of therapeutic self-care demands. Students develop an understanding of and ability to use the nursing process as a method for assisting patients to meet self-care needs. Students develop basic communication skills in order to promote effective relationships with patients, families and members of the health team. Students participate in Nursing Practice Laboratory and planned clinical experiences to learn nursing skills. Successful completion of this seven-credit course with a "C+" or higher is required. Credits: 7 Prerequisite: Passing BIO 111 with a "C" or higher, ENG 101 Corequisite: BIO 112, NUR 103, PSY 101 Semester Offered: F/S | |
| Proposed Description (include all proposed changes): NUR 107 Fundamentals of Nursing This course provides an introduction to the role of the nurse in the health care system. Nursing Theory, Maslow's Hierarchy of Needs, and Erikson's Stages of Psychosocial Development are introduced and utilized as organizing frameworks. Additional integration of professional standards and competencies from National League for Nursing and other professional organizations is included. Students develop an understanding of and ability to use the nursing process as a method for assisting patients to meet healthcare needs. Students develop basic communication skills in order to promote effective relationships with patients, families and members of the health team. Content includes but is not limited to oxygenation, health assessment, elimination, medication administration, and basic comfort and care. Students participate in laboratory to acquire nursing skills and demonstrate competency. Clinical experiences are provided to reinforce nursing skills and promote clinical judgment. Successful completion of this eight-credit course with a "C+" or higher is required. Credits: 8 Prerequisite: BIO 111 with a grade of "C" or higher, ENG 101 Corequisite: BIO 112, NUR 106, PSY 101 Semester Offered: F/S | |
| Rationale for the change: Based on curricular review, determination was made to include additional theoretical and professional foundations in response to current trends in nursing education. Additionally, effort to improve balance of curriculum credit requirements across the curriculum. Finally, based on further review of curriculum, additional topics have been incorporated across the curriculum to promote currency of topics. | |
| Provide a description of any change in course content. Additional focus on clinical judgment. Reallocating credit load for lab and clinical: Total of 8 credits - 4 credits didactic, 1.87 credits lab, and 2.13 credits clinical. | |
| List the programs that are affected by this change (list program names and program codes as they appear in the college catalog): <ul style="list-style-type: none"> • Nurse Education (NUR) • Nurse Education Evening (NUE) | |

- Nurse Education - Advanced Placement LPN (NUL)
- Nurse Education - Advanced Placement Paramedic (NUP)

Please confer with the coordinator of the affected department.

Attach current and proposed academic maps (with changes in **bold**) for all affected programs. You can obtain academic maps from Barb Zabka.

Please submit a generic syllabus to your dean with all of the revisions included. Submitted to Dean Schmohl

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** NUR 105 Medical Surgical Nursing I/Maternal Newborn

2. **Originator:** Pat Creelman **Date:** 11/29/2022

3. **School Dean:** Pat Schmohl **Date:** 11/29/2022

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:** NA

6. **Recommended by the School of Healthcare** **Date:** 12/15/2022
Comments: unanimous approval

7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____

Comments: _____

8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: _____ **Not Recommended:** _____

X

Comments:

9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: X **Not Recommended:** _____

Comments:

10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: X **Not Approved:** _____

Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE
COURSE REVISION PROPOSAL

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| Type of Revision: <input checked="" type="checkbox"/> Description <input type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input checked="" type="checkbox"/> Number <input type="checkbox"/> Name <input checked="" type="checkbox"/> # Credits | |
| ____ Elective Type ____ Other (explain) | |
| Course Discipline or Department: NUR | School: Health care |
| Current Course Number: NUR 105 | Current Course Name: Medical Surgical Nursing I/Maternal Newborn |
| <p>Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites):</p> <p>NUR 105 Medical Surgical Nursing I/Maternal Newborn</p> <p>This course focuses on content related to caring for perinatal patients and patients who have health care deviations that require specific nursing system interventions. Content will include health concerns related to the perioperative experience, cellular proliferation, nutrition, metabolic activity, cardiovascular disorders, substance abuse, reproductive issues, domestic violence and maternal-infant health. Students will use a developmental focus and a life span approach to concepts of health promotion, developmental needs, and health deviations. The course is based on Orem's Theory of Self Care, Erickson Theory of Human Development and the Nursing Process. Emphasis is placed upon meeting needs of patients whose therapeutic self-care demands exceed their capacity to engage in self-care activities. Selected learning experiences are provided in the care of perinatal patients and adult patients in the acute care, rehabilitation and community settings. Successful completion of this eight-credit course with a "C+" or higher is required.</p> <p>Credits: 8</p> <p>Prerequisite: NUR 101 with a grade of "C+" or higher; or NUR 103 and NUR 104 with a grade of "C+" or higher</p> <p>Corequisite: BIO 232, PSY 121</p> <p>Semester Offered: F/S</p> | |
| <p>Proposed Description (include all proposed changes):</p> <p>NUR 108 Medical Surgical Nursing I/Maternal Newborn</p> <p>This course focuses on caring for maternal newborn patients and adults who have health care deviations that require specific nursing interventions. Content includes but is not limited to the perioperative experience, cellular proliferation, nutrition, metabolic activity, cardiovascular disorders, substance abuse, reproductive issues, domestic violence and maternal-newborn health. Students will use a developmental focus and a life span approach to concepts of health promotion and deviations. The course is based on Nursing Theory, Maslow's Hierarchy of Needs, Erikson's Stages of Psychosocial Development, and the Nursing Process. Students participate in the laboratory to acquire nursing skills and demonstrate competency. Clinical experiences are provided to reinforce nursing skills and promote clinical judgment in the care of maternal newborn patients and adult patients in the acute care, rehabilitation and/or community settings. Successful completion of this nine-credit course with a "C+" or higher is required.</p> <p>Credits: 9</p> <p>Prerequisite: BIO 112 with a grade of "C" or higher, NUR 101 with a grade of "C+" or higher or NUR 106 with a grade of "C+" or higher and NUR 107 with a grade of "C+" or higher</p> <p>Corequisite: BIO 232, PSY 121</p> <p>Semester Offered: F/S</p> | |
| <p>Rationale for the change:</p> <p>In an effort to improve balance of curriculum credit requirements across the curriculum. Based on further review of curriculum, additional topics have been incorporated across the curriculum to promote currency of topics. Clarification of prerequisite requirement.</p> | |
| <p>Provide a description of any change in course content. Reallocating credit load from eight credits to nine credits as follows: Total of 9 credits - 5 credits didactic, 0.53 credits lab, and 3.47 credits clinical.</p> | |
| <p>List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):</p> <ul style="list-style-type: none"> • Nurse Education (NUR) | |

- Nurse Education Evening (NUE)
- Nurse Education - Advanced Placement LPN (NUL)
- Nurse Education - Advanced Placement Paramedic (NUP)

Please confer with the coordinator of the affected department.

Attach current and proposed academic maps (with changes in **bold**) for all affected programs. You can obtain academic maps from Barb Zabka.

Please submit a generic syllabus to your dean with all of the revisions included. Submitted to Dean Schmohl

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. Course Number and Name: NUR 201 Medical Surgical Nursing II/Pediatric

2. Originator: Pat Creelman Date: 11/29/2022

3. School Dean: Pat Schmohl Date: 11/29/2022

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date: NA

6. Recommended by the School of Healthcare Date: 12/15/2022
Comments: unanimous approval

7. AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: X Not Recommended: _____

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____

X
Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____

Comments: _____

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE
COURSE REVISION PROPOSAL

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| Type of Revision: <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input checked="" type="checkbox"/> Number <input type="checkbox"/> Name <input checked="" type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input type="checkbox"/> Other (explain) | |
| Course Discipline or Department: NUR | School: Healthcare |
| Current Course Number: NUR 201 | Current Course Name: Medical Surgical Nursing II/Pediatric |
| <p>Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites):</p> <p>NUR 201 Medical Surgical Nursing II/Pediatric</p> <p>This course focuses on content related to caring for children and adult patients who have health care deviations that require specific nursing system interventions. Topics include growth and development, respiratory and cardiac deviations, dermatologic conditions and burns, gastrointestinal system deviations, genitourinary deviations, musculoskeletal deviations, specific neurological deviations and hematologic and immunologic deviations. The course is based on Orem's Theory of Self Care, Erickson Theory of Human Development and the Nursing Process. Selected learning experiences are provided in the care of adult and children in the acute care, rehabilitation settings and/or health care agencies. Successful completion of this 10-credit course with a "C+" or higher is required.</p> <p>Credits: 10</p> <p>Prerequisite: BIO 112, BIO 232, PSY 121, a grade of "C+" or higher is required in NUR 105</p> <p>Corequisite: ENG 102, any HST, SOC 101 or SOC 111</p> <p>Semester Offered: F/S/SU</p> | |
| <p>Proposed Description (include all proposed changes):</p> <p>NUR 204 Medical Surgical Nursing II/Pediatric</p> <p>This course focuses on content related to caring for children and adult patients who have health care deviations that require specific nursing system interventions. Content includes but is not limited to growth and development, and deviations in respiratory, cardiac, dermatologic conditions, burns, gastrointestinal, genitourinary, musculoskeletal, neurological, hematologic and immunologic systems. The course is based on Nursing Theory, Maslow's Hierarchy of Needs, Erikson's Stages of Psychosocial Development, and the Nursing Process. Students participate in the laboratory to acquire nursing skills and demonstrate competency. Clinical experiences are provided to reinforce nursing skills and promote clinical judgment in the care of pediatric and adult patients in the acute care, rehabilitation and/or community settings. Successful completion of this nine-credit course with a "C+" or higher is required.</p> <p>Credits: 9</p> <p>Prerequisite: BIO 232 with a grade of "C" or higher, NUR 108 with a grade of "C+" or higher, PSY 121</p> <p>Corequisite: ENG 102, any HST, SOC 101 or SOC 111</p> <p>Semester Offered: F/S/SU</p> | |
| <p>Rationale for the change.</p> <p>In an effort to improve balance of curriculum credit requirements across the curriculum. Based on further review of curriculum, additional topics have been incorporated across the curriculum to promote currency of topics. Clarification of prerequisite requirement.</p> | |
| <p>Provide a description of any change in course content. Reallocating credit load from ten credits to nine credits as follows: Total of 9 credits - 5 credits didactic, 0.27 credits lab, and 3.73 credits clinical.</p> | |
| <p>List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):</p> <ul style="list-style-type: none"> • Nurse Education (NUR) • Nurse Education Evening (NUE) • Nurse Education - Advanced Placement LPN (NUL) | |

- Nurse Education - Advanced Placement Paramedic (NUP)

Please confer with the coordinator of the affected department.

Attach current and proposed academic maps (with changes in **bold**) for all affected programs. You can obtain academic maps from Barb Zabka.

Please submit a generic syllabus to your dean with all of the revisions included. Submitted to Dean Schmohl

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** NUR 202 Advanced Medical Surgical Nursing III/Mental Health

2. **Originator:** Pat Creelman **Date:** 11/29/2022

3. **School Dean:** Pat Schmohl **Date:** 11/29/2022

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:** NA

6. **Recommended by the School of Healthcare** **Date:** 12/15/2022
Comments: unanimous approval

7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____

Comments: _____

8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: _____ **Not Recommended:** _____

X
Comments: _____

9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: X **Not Recommended:** _____

Comments: _____

10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: X **Not Approved:** _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE
COURSE REVISION PROPOSAL

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| Type of Revision: <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisite <input checked="" type="checkbox"/> Corequisite <input checked="" type="checkbox"/> Number <input type="checkbox"/> Name <input checked="" type="checkbox"/> # Credits | |
| ____ Elective Type ____ Other (explain) | |
| Course Discipline or Department: NUR | School: Healthcare |
| Current Course Number: NUR 202 | Current Course Name: Advanced Medical Surgical Nursing III/Mental Health |
| <p>Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites):</p> <p>NUR 202 Advanced Medical Surgical Nursing III/Mental Health</p> <p>This course focuses on content related to mental health issues and the care of patients who experience health care deviations that require complex nursing interventions. Principles of pathophysiology, pharmacology, teaching, and management are incorporated into each unit. Specific topics include health care deviations related to oxygen, nutrition, elimination, protection from hazards, solitude and social interaction. The course is based upon Nursing Process, Orem's Theory of Self-Care and Erickson Human Development Theory. Students participate in clinical experiences with patients in acute, community, and psychiatric care settings. The clinical experience emphasizes application of nursing process, leadership, and management of complex patients. Successful completion of this 10-credit course with a "C+" or higher is required.</p> <p>Credits: 10</p> <p>Prerequisite: ENG 102, any HST, SOC 101 or SOC 111, a grade of "C+" or higher is required in NUR 201</p> <p>Corequisite: NUR 203, Humanities Elective</p> <p>Semester Offered: F/S</p> | |
| <p>Proposed Description (include all proposed changes):</p> <p>NUR 205 Advanced Medical Surgical Nursing III/Mental Health</p> <p>This course focuses on content related to mental health issues and the care of patients who experience health care deviations that require complex nursing interventions. Content includes but is not limited to deviations in respiratory, cardiac, gastrointestinal, renal, neurological; and emergency and disaster management. The course is based on Nursing Theory, Maslow's Hierarchy of Needs, Erikson's Stages of Psychosocial Development, and the Nursing Process. Students participate in the laboratory to acquire nursing skills and demonstrate competency. Clinical experiences are provided to reinforce nursing skills and promote clinical judgment in the care of patients in acute, community, and mental health care settings. The clinical experience emphasizes application of nursing process, leadership, and management of complex patients. Successful completion of this nine-credit course with a "C+" or higher is required.</p> <p>Credits: 9</p> <p>Prerequisite: ENG 102, any HST, NUR 204 with a grade of "C+" or higher, SOC 101 or SOC 111</p> <p>Corequisite: NUR 206, Humanities Elective</p> <p>Semester Offered: F/S</p> | |
| <p>Rationale for the change:</p> <p>In an effort to improve balance of curriculum credit requirements across the curriculum. Based on further review of curriculum, additional topics have been incorporated across the curriculum to promote currency of topics.</p> | |
| <p>Provide a description of any change in course content. Reallocating credit load from 10 credits to 9 credits as follows: Total of 9 credits - 5 credits didactic, 0.27 credits lab, and 3.73 credits clinical.</p> | |
| <p>List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):</p> <ul style="list-style-type: none"> • Nurse Education (NUR) • Nurse Education Evening (NUE) • Nurse Education - Advanced Placement LPN (NUL) • Nurse Education - Advanced Placement Paramedic (NUP) | |

| |
|---|
| Please confer with the coordinator of the affected department. |
| Attach current and proposed academic maps (<u>with changes in bold</u>) for all affected programs. You can obtain academic maps from Barb Zabka. |
| Please submit a generic syllabus to your dean with all of the revisions included. Submitted to Dean Schmohl |

2022 - 2023

QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. Course Number and Name: NUR 203 Current Concepts in Nursing & Health Care II

2. Originator: Pat Creelman Date: 11/29/2022

3. School Dean: Pat Schmohl Date: 11/29/2022

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date: NA

6. Recommended by the School of Healthcare Date: 12/15/2022
Comments: unanimous approval

7. AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: X Not Recommended: _____

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____

X

Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____

Comments: _____

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE
COURSE REVISION PROPOSAL

| | |
|--|--|
| Type of Revision: <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisite <input checked="" type="checkbox"/> Corequisite <input checked="" type="checkbox"/> Number <input checked="" type="checkbox"/> Name <input type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input type="checkbox"/> Other (explain) | |
| Course Discipline or Department: NUR | School: Healthcare |
| Current Course Number: NUR 203 | Current Course Name: Current Concepts in Nursing & Health Care II |
| <p>Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites):</p> <p>NUR 203 Current Concepts in Nursing & Health Care II</p> <p>This course is the study of contemporary nursing in relation to historical development, social trends, and health care changes and ethical issues. The student will discuss influences of the past on present day nursing, health care trends and legislation, challenges and issues for today's nurse. Management and delegation responsibilities of the professional practitioner will be included with theoretical content and application through vignettes and case study. As a result, the student will be able to describe the role and responsibilities of the Registered Nurse. The student will assess his/her career potential and future employment status. Student participation and presentation is required. Successful completion of this two-credit course with a "C+" or higher is required.</p> <p>Credits: 2</p> <p>Prerequisite: A grade of "C+" or higher is required in NUR 201</p> <p>Corequisite: NUR 202</p> <p>Semester Offered: F/S</p> | |
| <p>Proposed Description (include all proposed changes):</p> <p>NUR 206 Advanced Nursing Concepts & Transition to Practice</p> <p>This course is the study of contemporary nursing in relation to social trends, health care changes, ethical issues, and transition to practice. The student will discuss influences of the past on present day nursing, health care trends and legislation, and challenges and issues for today's nurse. Management and delegation responsibilities of the professional practitioner will be included with theoretical content and application. The student will describe the role and responsibilities of the Registered Nurse, assess career potential, and future employment opportunities. Successful completion of this two-credit course with a "C+" or higher is required.</p> <p>Credits: 2</p> <p>Prerequisite: NUR 204 with a grade of "C+" or higher</p> <p>Corequisite: NUR 205</p> <p>Semester Offered: F/S</p> | |
| Rationale for the change: Based on further review of curriculum, course name and description revised to promote currency of topics and standardized descriptions for all nursing courses. | |
| Provide a description of any change in course content. None. | |
| <p>List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):</p> <ul style="list-style-type: none"> • Nurse Education (NUR) • Nurse Education Evening (NUE) • Nurse Education - Advanced Placement LPN (NUL) • Nurse Education - Advanced Placement Paramedic (NUP) <p>Please confer with the coordinator of the affected department.</p> | |
| Attach current and proposed academic maps (<u>with changes in bold</u>) for all affected programs. | |
| Please submit a generic syllabus to your dean with all of the revisions included. Submitted to Dean Schmohl | |

Healthcare

Nurse Education - Associate in Science (Program Code: NUR)

CURRENT (Includes any approved curriculum changes from 11/08/2022 Learning Council)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|---------|---------|---|---|
| Semester 1 (Summer I or II) | | | | | Register for and successfully complete all courses to graduate in five semesters. Complete BIO 111 with a grade of "C" or higher. Complete ENG 101. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 7 | | |
| Semester 2 | | | | | Complete BIO 112 with a grade of "C" or higher. Complete NUR 103 and NUR 104 with grades of "C+" or higher. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Current Concepts in Nursing & Health Care I | NUR 103 | F/S | 1 | Passing BIO 111 with a "C" or higher, ENG 101, Coreq: BIO 112, NUR 104, PSY 101 | |
| Fundamentals of Nursing | NUR 104 | F/S | 7 | Passing BIO 111 with a "C" or higher, ENG 101, Coreq: BIO 112, NUR 103, PSY 101 | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 15 | | |
| Semester 3 | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Complete BIO 232 with a grade of "C" or higher. Complete NUR 105 with a grade of "C+" or higher. |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Medical Surgical Nursing I/ Maternal Newborn | NUR 105 | F/S | 8 | NUR 101 with a grade of "C+" or higher; or NUR 103 and NUR 104 with a grade of "C+" or higher, Coreq: BIO 232, PSY 121 | |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| | | Total | 15 | | |
| Semester 4 | | | | | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. Complete NUR 201 with a grade of "C+" or higher. |
| Medical Surgical Nursing II/ Pediatric | NUR 201 | F/S | 10 | BIO 112, BIO 232, PSY 121, a grade of "C+" or higher is required in NUR 105, Coreq: ENG 102, any HST, SOC 101 or SOC 111 | |
| Introductory Sociology (Principles) OR | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Social Problems & Social Change | SOC 111 | | | | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 19 | | |
| Semester 5 | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Complete NUR 202 and NUR 203 with grades of "C+" or higher. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Advanced Medical Surgical Nursing III/Mental Health | NUR 202 | F/S | 10 | ENG 102, any HST, SOC 101 or SOC 111, a grade of "C+" or higher is required in NUR 201, Coreq: NUR 203, Humanities Elective | |
| Current Concepts in Nursing & Health Care II | NUR 203 | F/S | 2 | A grade of "C+" or higher is required in NUR 201, Coreq: NUR 202 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Total Credits Required | | | 71 | | |

Healthcare

Nurse Education - Associate in Science (Program Code: NUR)

PROPOSED (Includes any approved curriculum changes from 11/08/2022 Learning Council)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|---------|---------|---|---|
| Semester 1 (Summer I or II) | | | | | Register for and successfully complete all courses to graduate in five semesters. Complete BIO 111 with a grade of "C" or higher. Complete ENG 101. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 7 | | |
| Semester 2 | | | | | Complete BIO 112 with a grade of "C" or higher. Complete NUR 106 and NUR 107 with grades of "C+" or higher. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Introduction to Nursing Concepts & Health Care | NUR 106 | F/S | 1 | BIO 111 with a grade of "C" or higher, ENG 101, Coreq: BIO 112, NUR 107, PSY 101 | |
| Fundamentals of Nursing | NUR 107 | F/S | 8 | BIO 111 with a grade of "C" or higher, ENG 101, Coreq: BIO 112, NUR 106, PSY 101 | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 16 | | |
| Semester 3 | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Complete BIO 232 with a grade of "C" or higher. Complete NUR 108 with a grade of "C+" or higher. |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Medical Surgical Nursing I/ Maternal Newborn | NUR 108 | F/S | 9 | BIO 112 with a grade of "C" or higher, NUR 101 with a grade of "C+" or higher or NUR 106 and NUR 107 with grades of "C+" or higher, Coreq: BIO 232, PSY 121 | |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| | | Total | 16 | | |
| Semester 4 | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. Complete NUR 204 with a grade of "C+" or higher. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Medical Surgical Nursing II/ Pediatric | NUR 204 | F/S | 9 | BIO 232 with a grade of "C" or higher, NUR 108 with a grade of "C+" or higher, PSY 121, Coreq: ENG 102, any HST, SOC 101 or SOC 111 | |
| Introductory Sociology (Principles) OR | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Social Problems & Social Change | SOC 111 | | | | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 18 | | |
| Semester 5 | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Complete NUR 205 and NUR 206 with grades of "C+" or higher. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Advanced Medical Surgical Nursing III/Mental Health | NUR 205 | F/S | 9 | ENG 102, any HST, NUR 204 with a grade of "C+" or higher, SOC 101 or SOC 111, Coreq: NUR 206, Humanities Elective | |
| Advanced Nursing Concepts & Transition to Practice | NUR 206 | F/S | 2 | NUR 204 with a grade of "C+" or higher, Coreq: NUR 205 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 14 | | |
| Total Credits Required | | | 71 | | |

Healthcare

Nurse Education - Evening - Associate in Science (Program Code: NUE)

CURRENT (Includes any approved curriculum changes from 11/08/2022 Learning Council)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|---------|---------|---|---|
| Semester 1 (Summer I or II) | | | | | Register for and successfully complete all courses to graduate in five semesters. Complete BIO 111 with a grade of "C" or higher. Complete ENG 101. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 7 | | |
| Semester 2 (Fall) | | | | | Complete BIO 112 with a grade of "C" or higher. Complete NUR 103 and NUR 104 with grades of "C+" or higher. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Current Concepts in Nursing & Health Care I | NUR 103 | F/S | 1 | Passing BIO 111 with a "C" or higher, ENG 101, Coreq: BIO 112, NUR 104, PSY 101 | |
| Fundamentals of Nursing | NUR 104 | F/S | 7 | Passing BIO 111 with a "C" or higher, ENG 101, Coreq: BIO 112, NUR 103, PSY 101 | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 15 | | |
| Semester 3 (Spring) | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Complete BIO 232 with a grade of "C" or higher. Complete NUR 105 with a grade of "C+" or higher. |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Medical Surgical Nursing I/ Maternal Newborn (January-April) | NUR 105 | F/S | 8 | NUR 101 with a grade of "C+" or higher; or NUR 103 and NUR 104 with a grade of "C+" or higher, Coreq: BIO 232, PSY 121 | |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| | | Total | 15 | | |
| Semester 4 (Summer I & II) | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. Complete NUR 201 with a grade of "C+" or higher. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Medical Surgical Nursing II/ Pediatric (May-July) | NUR 201 | F/S/SU | 10 | BIO 112, BIO 232, PSY 121, a grade of "C+" or higher is required in NUR 105, Coreq: ENG 102, any HST, SOC 101 or SOC 111 | |
| Introductory Sociology (Principles) OR | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Social Problems & Social Change | SOC 111 | | | | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 19 | | |
| Semester 5 (Fall) | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Complete NUR 202 and NUR 203 with grades of "C+" or higher. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Advanced Medical Surgical Nursing III/Mental Health | NUR 202 | F/S | 10 | ENG 102, any HST, SOC 101 or SOC 111, a grade of "C+" or higher is required in NUR 201, Coreq: NUR 203, Humanities Elective | |
| Current Concepts in Nursing & Health Care II | NUR 203 | F/S | 2 | A grade of "C+" or higher is required in NUR 201, Coreq: NUR 202 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Total Credits Required | | | 71 | | |

Healthcare

Nurse Education - Evening - Associate in Science (Program Code: NUE)

PROPOSED (Includes any approved curriculum changes from 11/08/2022 Learning Council)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|---------|---------|---|--|
| Semester 1 (Summer I or II) | | | | | Register for and successfully complete all courses to graduate in five semesters. Complete BIO 111 with a grade of "C" or higher. Complete ENG 101. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 7 | | |
| Semester 2 (Fall) | | | | | Complete BIO 112 with a grade of "C" or higher. Complete NUR 106 and NUR 107 with grades of "C+" or higher. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Introduction to Nursing Concepts & Health Care | NUR 106 | F/S | 1 | BIO 111 with a grade of "C" or higher, ENG 101, Coreq: BIO 112, NUR 107, PSY 101 | |
| Fundamentals of Nursing | NUR 107 | F/S | 8 | BIO 111 with a grade of "C" or higher, ENG 101, Coreq: BIO 112, NUR 106, PSY 101 | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 16 | | |
| Semester 3 (Spring) | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Complete BIO 232 with a grade of "C" or higher. Complete NUR 108 with a grade of "C+" or higher. |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Medical Surgical Nursing I/ Maternal Newborn (January-April) | NUR 108 | F/S | 9 | BIO 112 with a grade of "C" or higher, NUR 101 with a grade of "C+" or higher or NUR 106 and NUR 107 with grades of "C+" or higher, Coreq: BIO 232, PSY 121 | |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| | | Total | 16 | | |
| Semester 4 (Summer I & II) | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. Complete NUR 204 with a grade of "C+" or higher. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Medical Surgical Nursing II/ Pediatric (May-July) | NUR 204 | F/S | 9 | BIO 232 with a grade of "C" or higher, NUR 108 with a grade of "C+" or higher, PSY 121, Coreq: ENG 102, any HST, SOC 101 or SOC 111 | |
| Introductory Sociology (Principles) OR | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Social Problems & Social Change | SOC 111 | | | | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 18 | | |
| Semester 5 (Fall) | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Complete NUR 205 and NUR 206 with grades of "C+" or higher. |
| Advanced Medical Surgical Nursing III/Mental Health | NUR 205 | F/S | 9 | ENG 102, any HST, NUR 204 with a grade of "C+" or higher, SOC 101 or SOC 111, Coreq: NUR 206, Humanities Elective | |
| Advanced Nursing Concepts & Transition to Practice | NUR 206 | F/S | 2 | NUR 204 with a grade of "C+" or higher, Coreq: NUR 205 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 14 | | |
| Total Credits Required | | | 71 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |

Healthcare**Nurse Education - Advanced Placement LPN - Associate in Science (Program Code: NUL)****CURRENT (Includes any approved curriculum changes from 11/08/2022 Learning Council)**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|---------|---------|---|---|
| Semester 1 (Summer I) | | | | | Register for and successfully complete all courses to graduate in six semesters. Complete BIO 111 with a grade of "C" or higher. Complete ENG 101. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 7 | | |
| Semester 2 (Summer II) | | | | | Complete BIO 112 with a grade of "C" or higher. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 7 | | |
| Semester 3 (Fall) | | | | | Meet with Career Services to credential seven nurse education credits for current LPN License. NUR 101 (1 credit) and credentialed credits (7 credits) equivalent to NUR 103 and NUR 104 (8 credits total). Complete NUR 101 with a grade of "C+" or higher. |
| Advanced Placement Nursing I (October-December) | NUR 101 | F | 1 | Passing BIO 112 with a "C" or higher, PSY 101, NUR 100 or Admission to Nurse Education Advanced Placement LPN program | |
| Upon successful completion of NUR 101 (with a grade of "C+" or higher) and current license as a Practical Nurse, seven credits credentialed | NUR 888 | F | 7 | | |
| | | Total | 8 | | |
| Semester 4 (Spring) | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Complete BIO 232 with a grade of "C" or higher. Complete NUR 105 with a grade of "C+" or higher. |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Medical Surgical Nursing I/ Maternal Newborn (January-April) | NUR 105 | F/S | 8 | NUR 101 with a grade of "C+" or higher; or NUR 103 and NUR 104 with a grade of "C+" or higher, Coreq: BIO 232, PSY 121 | |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| | | Total | 15 | | |
| Semester 5 (Summer I & II) | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. Complete NUR 201 with a grade of "C+" or higher. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Medical Surgical Nursing II/ Pediatric (May-July) | NUR 201 | F/S/SU | 10 | BIO 112, BIO 232, PSY 121, a grade of "C+" or higher is required in NUR 105, Coreq: ENG 102, any HST, SOC 101 or SOC 111 | |
| Introductory Sociology (Principles) OR | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Social Problems & Social Change | SOC 111 | | | | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 19 | | |
| Semester 6 (Fall) | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Complete NUR 202 and NUR 203 with grades of "C+" or higher. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Advanced Medical Surgical Nursing III/Mental Health | NUR 202 | F/S | 10 | ENG 102, any HST, SOC 101 or SOC 111, a grade of "C+" or higher is required in NUR 201, Coreq: NUR 203, Humanities Elective | |
| Current Concepts in Nursing & Health Care II | NUR 203 | F/S | 2 | A grade of "C+" or higher is required in NUR 201, Coreq: NUR 202 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Total Credits Required | | | 71 | | |

Healthcare

Nurse Education - Advanced Placement LPN - Associate in Science (Program Code: NUL)

PROPOSED (Includes any approved curriculum changes from 11/08/2022 Learning Council)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|--|
| Semester 1 (Summer I) | | | | | Register for and successfully complete all courses to graduate in six semesters. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Complete BIO 111 with a grade of "C" or higher. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Complete ENG 101. |
| | | Total | 7 | | |
| Semester 2 (Summer II) | | | | | Complete BIO 112 with a grade of "C" or higher. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 7 | | |
| Semester 3 (Fall) | | | | | Meet with Career Services to credential eight nurse education credits for current LPN License. NUR 101 (1 credit) and credentialed credits (8 credits) equivalent to NUR 106 and NUR 107 (9 credits total). |
| Advanced Placement Nursing I (October-December) | NUR 101 | F | 1 | BIO 112 with a grade of "C" or higher, PSY 101, NUR 100 with a grade of "C+" or higher or Admission to Nurse Education - Advanced Placement LPN (NUL) Program | Complete NUR 101 with a grade of "C+" or higher. |
| Upon successful completion of NUR 101 (with a grade of "C+" or higher) and current license as a Practical Nurse, eight credits credentialed | NUR 888 | F | 8 | | |
| | | Total | 9 | | |
| Semester 4 (Spring) | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | Complete BIO 232 with a grade of "C" or higher. |
| Medical Surgical Nursing I/ Maternal Newborn (January-April) | NUR 108 | F/S | 9 | BIO 112 with a grade of "C" or higher, NUR 101 with a grade of "C+" or higher or NUR 106 and NUR 107 with grades of "C+" or higher, Coreq: BIO 232, PSY 121 | Complete NUR 108 with a grade of "C+" or higher. |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| | | Total | 16 | | |
| Semester 5 (Summer I & II) | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | Complete NUR 204 with a grade of "C+" or higher. |
| Medical Surgical Nursing II/ Pediatric (May-July) | NUR 204 | F/S | 9 | BIO 232 with a grade of "C" or higher, NUR 108 with a grade of "C+" or higher, PSY 121, Coreq: ENG 102, any HST, SOC 101 or SOC 111 | |
| Introductory Sociology (Principles) OR | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Social Problems & Social Change | SOC 111 | | | | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 18 | | |
| Semester 6 (Fall) | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Advanced Medical Surgical Nursing III/Mental Health | NUR 205 | F/S | 9 | ENG 102, any HST, NUR 204 with a grade of "C+" or higher, SOC 101 or SOC 111, Coreq: NUR 206, Humanities Elective | Complete NUR 205 and NUR 206 with grades of "C+" or higher. |
| Advanced Nursing Concepts & Transition to Practice | NUR 206 | F/S | 2 | NUR 204 with a grade of "C+" or higher, Coreq: NUR 205 | |
| Humanities Elective | --- | F/S/SU | 3 | | Submit an Intent to Graduate Form, located on The Q. |
| | | Total | 14 | | |
| Total Credits Required | | | 71 | | |

Healthcare

Nurse Education - Advanced Placement Paramedic - Associate in Science (Program Code: NUP)

CURRENT (Includes any approved curriculum changes from 11/08/2022 Learning Council)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|--|
| Semester 1 (Summer I) | | | | | Register for and successfully complete all courses to graduate in six semesters. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Complete BIO 111 with a grade of "C" or higher. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Complete ENG 101. |
| | | Total | 7 | | |
| Semester 2 (Summer II) | | | | | Complete BIO 112 with a grade of "C" or higher. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 7 | | |
| Semester 3 (Fall) | | | | | Meet with Career Services to credential six nurse education credits for current paramedic certification (State or National Paramedic). NUR 100 (1 credit), NUR 101 (1 credit), and credentialed credits (6 credits) equivalent to NUR 103 and NUR 104 (8 credits total). |
| Paramedic to ADN Bridge (October-November) | NUR 100 | F | 1 | Passing both BIO 111 and BIO 112 with a "C" or higher, ENG 101, PSY 101 | Complete NUR 100 and NUR 101 with grades of "C+" or higher. |
| Advanced Placement Nursing I (November-December) | NUR 101 | F | 1 | Passing BIO 112 with a "C" or higher, PSY 101, NUR 100 or Admission to Nurse Education Advanced Placement LPN program | |
| Upon successful completion of NUR 100 and NUR 101 (with grades of "C+" or higher) and successful completion of state or national Paramedic exam, six credits credentialed | NUR 888 | F | 6 | | |
| | | Total | 8 | | |
| Semester 4 (Spring) | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | Complete BIO 232 with a grade of "C" or higher. |
| Medical Surgical Nursing I/ Maternal Newborn (January-April) | NUR 105 | F/S | 8 | NUR 101 with a grade of "C+" or higher; or NUR 103 and NUR 104 with a grade of "C+" or higher, Coreq: BIO 232, PSY 121 | Complete NUR 105 with a grade of "C+" or higher. |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| | | Total | 15 | | |
| Semester 5 (Summer I & II) | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | Complete NUR 201 with a grade of "C+" or higher. |
| Medical Surgical Nursing II/ Pediatric (May-July) | NUR 201 | F/S/SU | 10 | BIO 112, BIO 232, PSY 121, a grade of "C+" or higher is required in NUR 105, Coreq: ENG 102, any HST, SOC 101 or SOC 111 | |
| Introductory Sociology (Principles) OR | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Social Problems & Social Change | SOC 111 | | | | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 19 | | |
| Semester 6 (Fall) | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Advanced Medical Surgical Nursing III/Mental Health | NUR 202 | F/S | 10 | ENG 102, any HST, SOC 101 or SOC 111, a grade of "C+" or higher is required in NUR 201, Coreq: NUR 203, Humanities Elective | Complete NUR 202 and NUR 203 with grades of "C+" or higher. |
| Current Concepts in Nursing & Health Care II | NUR 203 | F/S | 2 | A grade of "C+" or higher is required in NUR 201, Coreq: NUR 202 | |
| Humanities Elective | --- | F/S/SU | 3 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| | | Total | 15 | | |
| Total Credits Required | | | 71 | | |

Healthcare

Nurse Education - Advanced Placement Paramedic - Associate in Science (Program Code: NUP)

PROPOSED (Includes any approved curriculum changes from 11/08/2022 Learning Council)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|--|
| Semester 1 (Summer I) | | | | | Register for and successfully complete all courses to graduate in six semesters. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Complete BIO 111 with a grade of "C" or higher. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Complete ENG 101. |
| | | Total | 7 | | |
| Semester 2 (Summer II) | | | | | Complete BIO 112 with a grade of "C" or higher. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 7 | | |
| Semester 3 (Fall) | | | | | Meet with Career Services to credential seven nurse education credits for current paramedic certification (State or National Paramedic). NUR 100 (1 credit), NUR 101 (1 credit), and credentialed credits (7 credits) equivalent to NUR 106 and NUR 107 (9 credits total). |
| Paramedic to ADN Bridge (October-November) | NUR 100 | F | 1 | BIO 111 with a grade of "C" or higher, BIO 112 with a grade of "C" or higher, ENG 101, PSY 101 | |
| Advanced Placement Nursing I (November-December) | NUR 101 | F | 1 | BIO 112 with a grade of "C" or higher, PSY 101, NUR 100 with a grade of "C+" or higher or Admission to Nurse Education - Advanced Placement LPN (NUL) Program | |
| Upon successful completion of NUR 100 and NUR 101 (with grades of "C+" or higher) and successful completion of state or national Paramedic exam, seven credits credentialed | NUR 888 | F | 7 | | Complete NUR 100 and NUR 101 with grades of "C+" or higher. |
| | | Total | 9 | | |
| Semester 4 (Spring) | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | Complete BIO 232 with a grade of "C" or higher. |
| Medical Surgical Nursing I/ Maternal Newborn (January-April) | NUR 108 | F/S | 9 | BIO 112 with a grade of "C" or higher, NUR 101 with a grade of "C+" or higher or NUR 106 and NUR 107 with grades of "C+" or higher, Coreq: BIO 232, PSY 121 | Complete NUR 108 with a grade of "C+" or higher. |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| | | Total | 16 | | |
| Semester 5 (Summer I & II) | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Medical Surgical Nursing II/ Pediatric (May-July) | NUR 204 | F/S | 9 | BIO 232 with a grade of "C" or higher, NUR 108 with a grade of "C+" or higher, PSY 121, Coreq: ENG 102, any HST, SOC 101 or SOC 111 | Complete NUR 204 with a grade of "C+" or higher. |
| Introductory Sociology (Principles) OR Social Problems & Social Change | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| History Elective | SOC 111 | | | | |
| | --- | F/S/SU | 3 | | |
| | | Total | 18 | | |
| Semester 6 (Fall) | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Advanced Medical Surgical Nursing III/Mental Health | NUR 205 | F/S | 9 | ENG 102, any HST, NUR 204 with a grade of "C+" or higher, SOC 101 or SOC 111, Coreq: NUR 206, Humanities Elective | Complete NUR 205 and NUR 206 with grades of "C+" or higher. |
| Advanced Nursing Concepts & Transition to Practice | NUR 206 | F/S | 2 | NUR 204 with a grade of "C+" or higher, Coreq: NUR 205 | |
| Humanities Elective | --- | F/S/SU | 3 | | Submit an Intent to Graduate Form, located on The Q. |
| | | Total | 14 | | |
| Total Credits Required | | | 71 | | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

1. Degree or Certificate Name and Code: Healthcare - Practical Nursing - Associate in Science (Program Code: HCPN)

2. Originator: Meg Yoder Date: 12/05/2022

3. School Dean: Pat Schmohl Date: 12/05/2022

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date: NA

6. Recommended by the School of Healthcare Date: 12/15/2022
Comments: unanimous approval

7. AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: X Not Recommended: _____

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____

X

Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____

Comments: _____

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

| |
|---|
| Degree or Certificate name and code: Healthcare - Practical Nursing - Associate in Science (Program Code: HCPN) |
| Provide a detailed list of the proposed changes to the degree or certificate. <ol style="list-style-type: none"> 1. Increase Credentialed Credits, from 17 to 18 total; Remove PNP 210 and PNP 233 from list of Transfer Courses and add PNP 240. 2. Remove FYE 102 from Semester 2. 3. Remove Semester 2; Re-number remaining Semesters. 4. Move ENG 101 and PSY 101 to new Semester 2. 5. Move ENG 102 to new Semester 3. 6. Adjust Semester Milestones and Semester Credit Totals, accordingly. 7. Decrease Total Credits Required for program, from 62 to 60 total. |
| Attachments: Current academic map. Proposed academic map with changes in bold |
| Submit separate proposals for any new courses or revised courses in the degree or certificate. Please list here the new courses or revised courses for which separate proposals will be submitted. None. |
| Provide a rationale for the proposed changes. Students taking this program are LPN's and have petitioned to replace FYE 102. Aligning to courses needed in our nursing degree and our up-to 90 credit RN to BSN transfer agreements. Pathway – LP/LPE to HCPN to NUL and transfer 90 credits with our RN to BSN transfer agreements. |
| Do any of the proposed changes affect the program goals and/or the program student learning outcomes? Please indicate any revisions to the program goals and/or program student learning outcomes. No. |
| Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. Department(s) Affected: None. |
| Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. |
| For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? No, Meets Mass Transfer Block. Aligning to courses needed in our nursing degree and our up-to 90 credit RN to BSN transfer agreements. Pathway – LP/LPE to HCPN to NUL and transfer 90 credits with our RN to BSN transfer agreements. If yes please provide a rationale. |
| Will any of the following be required: Additional staff____Additional space____Additional equipment____Additional library resources ____ Provide a rationale for any needs indicated and include approximate cost of equipment. |

Healthcare

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

CURRENT (Includes any approved curriculum changes from 11/08/2022 Learning Council)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|---|---------|-----------|--|---|
| Semester 1 (Summer) | | | | | <p>Apply and get accepted to this program (Program Code: HCPN).</p> <p>Meet with Career Services to credential up to 17 Healthcare Elective credits for current LPN certification.</p> <p>Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714.</p> |
| 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 210 PNP 233 PNP 235 (or any combination of PNP courses) | | 17 | | |
| | Total | | 17 | | |
| Semester 2 (Fall) | | | | | <p>Apply and get accepted to a QCC nurse education program (e.g., Program Code: NUR, NUL, etc.) as these high demand programs have waitlists; or if considering transfer (LPN to BSN), meet with a Transfer Services Advisor. See www.QCC.edu/transfer.</p> <p>Complete ENG 101; or AP English/Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101.</p> <p>Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101.</p> |
| 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) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Monitor status on waitlist for selected QCC nurse education program.</p> <p>Complete BIO 111 with a grade of "C" or higher.</p> <p>Complete ENG 102; or AP English/Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102.</p> |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, 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) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Monitor status on waitlist for selected QCC nurse education program; or if considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs.</p> <p>Complete BIO 112 with a grade of "C" or higher.</p> |
| 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 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | Total | | 13 | | |
| Semester 5 (Spring) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Monitor status on waitlist for selected QCC nurse education program; or continue with/complete the transfer application process for LPN to BSN; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> <p>Complete BIO 232 with a grade of "C" or higher.</p> <p>Submit an Intent to Graduate Form, located on The Q.</p> |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | Total | | 13 | | |
| Total Credits Required | | | 61 | | |

Healthcare

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

PROPOSED (Includes any approved curriculum changes from 11/08/2022 Learning Council)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|--|---------|-----------|--|---|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: HCPN).</p> <p>Meet with Career Services to credential up to 18 Healthcare Elective credits for current LPN certification.</p> <p>Apply and get accepted to a QCC nurse education program (e.g., Program Code: NUR, NUL, etc.) as these high demand programs have waitlists; or if considering transfer (LPN to BSN), meet with a Transfer Services Advisor. See www.QCC.edu/transfer.</p> |
| Upon successful completion of LP certificate, LPE certificate, or state Licensed Practical Nursing exam, 18 credits credentialed (18 credits can be transferred from regionally accredited college) | Transfer Courses: PNP 235 PNP 240 (or any combination of PNP courses) | | 18 | | |
| | Total | | 18 | | |
| Semester 2 (Spring) | | | | | <p>Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714.</p> <p>Monitor status on waitlist for selected QCC nurse education program.</p> <p>Complete BIO 111 with a grade of "C" or higher.</p> <p>Complete ENG 101; or AP English/Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101.</p> <p>Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101.</p> |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | Total | | 13 | | |
| Semester 3 (Fall) | | | | | <p>Monitor status on waitlist for selected QCC nurse education program; or if considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs.</p> <p>Complete BIO 112 with a grade of "C" or higher.</p> <p>Complete ENG 102; or AP English/Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102.</p> |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| History Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | Total | | 16 | | |
| Semester 4 (Spring) | | | | | <p>Monitor status on waitlist for selected QCC nurse education program; or continue with/complete the transfer application process for LPN to BSN; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> <p>Complete BIO 232 with a grade of "C" or higher.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | Total | | 13 | | |
| Total Credits Required | | | 60 | | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

1. Degree or Certificate Name and Code: Fire Science Certificate (Program Code: FSC)

2. Originator: Mark Cady Date: 12/05/2022

3. School Dean: Pat Schmohl Date: 12/05/2022

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date: NA

6. Recommended by the School of Healthcare Date: 12/15/2022
Comments: unanimous approval

7. AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: X Not Recommended: _____

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____

X

Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____

Comments: _____

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

| |
|---|
| Degree or Certificate name and code: Fire Science Certificate (Program Code: FSC) |
| Provide a detailed list of the proposed changes to the degree or certificate. 1. Add Fire Science Elective as an alternative option to FSC 151 in Semester 1. |
| Attachments: Current academic map. Proposed academic map with changes in bold |
| Submit separate proposals for any new courses or revised courses in the degree or certificate. Please list here the new courses or revised courses for which separate proposals will be submitted. None. |
| Provide a rationale for the proposed changes. Students taking this certificate have petitioned for other fire science courses to meet this course. This will allow for students to complete this certificate without needing a petition. This program will start an academic program review to determine the future of this certificate. |
| Do any of the proposed changes affect the program goals and/or the program student learning outcomes? Please indicate any revisions to the program goals and/or program student learning outcomes. No. |
| Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. Department(s) Affected: None. |
| Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. |
| For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? NA If yes please provide a rationale. |
| Will any of the following be required: Additional staff____Additional space____Additional equipment____Additional library resources ____ Provide a rationale for any needs indicated and include approximate cost of equipment. |

Public & Social Services (Area of Study)
Fire Science Certificate (Program Code: FSC)

CURRENT (Includes any approved curriculum changes from 11/08/2022 Learning Council, if applicable)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|---|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: FSC). Register for and successfully complete all courses to graduate in two semesters. Meet with Academic Advisor to discuss associate degree (Program Code: FS); or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Basic Emergency Medical Technology | EMT 101 | F/S/SU | 7 | | |
| Principles of Emergency Services | FSC 101 | F | 3 | Placement into college level English | |
| Occupational Safety and Health for Emergency Services | FSC 151 | F | 3 | Placement into college level English | |
| | | Total | 13 | | |
| Semester 2 | | | | | Apply to associate degree (Program Code: FS); or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Fire Behavior and Combustion | FSC 104 | S | 3 | Placement into college level English, FSC 101 | |
| Building Construction for Fire Protection | FSC 121 | S | 3 | Placement into college level English, FSC 101 | |
| | | Total | 12 | | |
| Total Credits Required | | | 25 | | |

Public & Social Services (Area of Study)
Fire Science Certificate (Program Code: FSC)

PROPOSED (Includes any approved curriculum changes from 11/08/2022 Learning Council, if applicable)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|---|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: FSC). Register for and successfully complete all courses to graduate in two semesters. Meet with Academic Advisor to discuss associate degree (Program Code: FS); or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Basic Emergency Medical Technology | EMT 101 | F/S/SU | 7 | | |
| Principles of Emergency Services | FSC 101 | F | 3 | Placement into college level English | |
| Occupational Safety and Health for Emergency Services OR | FSC 151 | F | 3 | Placement into college level English | |
| Fire Science Elective | --- | F/S | | | |
| | | Total | 13 | | |
| Semester 2 | | | | | Apply to associate degree (Program Code: FS); or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Fire Behavior and Combustion | FSC 104 | S | 3 | Placement into college level English, FSC 101 | |
| Building Construction for Fire Protection | FSC 121 | S | 3 | Placement into college level English, FSC 101 | |
| | | Total | 12 | | |
| Total Credits Required | | | 25 | | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** OTA 101 Introduction to Occupational Therapy: Concepts & Interventions
(from current AY22/23 catalog)

2. **Originator:** Michelle Savrann **Date:** 1/18/23

3. **School Dean:** Pat Schmohl/Shanan Stratis **Date:** 1/18/23

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:** NA

6. **Recommended by the School of Healthcare** **Date:** 01/19/23
Comments:

7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____

Comments: _____

8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: _____ **Not Recommended:** _____

X

Comments: _____

9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: _____ **Not Recommended:** _____

X

Comments: _____

10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: _____ **Not Approved:** _____

X
Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

| | |
|--|---------------------------|
| Type of Revision: <input checked="" type="checkbox"/> Description <input type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input type="checkbox"/> Number <input type="checkbox"/> Name <input type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input type="checkbox"/> Other (explain) | |
| Course Discipline or Department: OTA | School: Healthcare |
| Current Course Number: OTA 101 | |
| Current Course Name: Introduction to Occupational Therapy: Concepts & Interventions | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): OTA 101 Introduction to Occupational Therapy: Concepts & Interventions This course provides an introduction to the occupational therapy profession. Students study the history, philosophy, and ethics of the profession. Students develop an understanding of the concept of occupation, and how activity is used to provide treatment interventions. The course examines the different settings in which a Certified Occupational Therapy Assistant can work, and teaches the basic written and oral communication skills required by the healthcare profession. Credits: 3 Semester Offered: F | |
| Proposed Description (include all proposed changes): OTA 101 Introduction to Occupational Therapy: Concepts & Interventions This course introduces the basic tenets of the occupational therapy profession. Students will examine the history and philosophy of occupational therapy, current issues, future trends in the profession and OT practice globally. Educational requirements to practice, roles and responsibilities of the occupational therapist (OT) and occupational therapy assistant (OTA), ethical and legal aspects of practice, and professional organizations will be introduced. Practice settings, models of healthcare delivery and service management functions are explored. Credits: 3 Semester Offered: F | |
| Rationale for the change: This revised course description utilizing language more consistent with current occupational therapy practice and provides a comprehensive foundation for the following semesters that will support 2018 accreditation standards. Accreditation outcomes include: <ul style="list-style-type: none"> • preparing students to understand the distinct roles and responsibilities of the OT/OTA, • upholding ethical standards, • educated as a generalist for broad exposure to service delivery models and systems used in settings where OT is practiced and where it is emerging as a service. | |
| Provide a description of any change in course content. N/A | |
| List the programs that are affected by this change (list program names and program codes as they appear in the college catalog). Please confer with the coordinator of the affected department: Course description wording change only – does not affect any program grids. | |
| Attach current and proposed academic maps (<u>with changes in bold</u>) for all affected programs. You can obtain academic maps from Barb Zabka. | |
| Please submit a generic syllabus to your dean with all of the revisions included. | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** OTA 131 Occupational Therapy Methods and Modalities 1
(from current AY22/23 catalog)

2. **Originator:** Michelle Savrann **Date:** 1/18/22

3. **School Dean:** Pat Schmohl/ Shanan Stratis **Date:**

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:**

6. **Recommended by the School of** _____ **Date:** _____
Comments:

7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____

Comments:

8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: _____ **Not Recommended:** _____

X

Comments:

9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: X **Not Recommended:** _____

Comments:

10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: X **Not Approved:** _____

Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

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|---|--------------------|
| Type of Revision: <input checked="" type="checkbox"/> Description <input type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input type="checkbox"/> Number <input type="checkbox"/> Name <input type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input type="checkbox"/> Other (explain) | |
| Course Discipline or Department: OTA | School: Healthcare |
| Current Course Number: OTA 131 | |
| Current Course Name: Occupational Therapy Methods and Modalities 1 | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites) OTA 131: Occupational Therapy: Methods and Modalities 1 This course provides an introduction to the use of living tasks, group skills, and crafts as therapeutic tools. Student learn specific treatment techniques valuable to the occupational therapy profession and perform indepth study of several activities to determine their therapeutic value. Students assume the role of teacher to instruct others in various activities, and explore how these activities can be used therapeutically with clients. The course course consists of two hour of lecture and three hours of laboratory per week. Credits: 3 Co-req: OTA 101 Semester Offered: F | |
| Proposed Description (include all proposed changes): Revised Course Description This course provides in-depth study of occupations and begins to introduce students to how therapeutic occupations are used in occupational therapy practice. Students will learn to analyze occupational tasks and functional activities utilizing the Occupational Therapy Practice Framework as a guide, grade and adapt activities, and build the basic skills necessary for teaching therapeutic activities to meet the needs of occupational therapy consumers, either individually or in groups. Credits: 3 Co-req: OTA 101 Semester Offered: F | |
| Rationale for the change: <ol style="list-style-type: none"> 1. This revised course description utilizing language more consistent with current occupational therapy practice and supports 2018 ACOTE accreditation standards which emphasizes preparing students to articulate therapeutic use of occupation as informed by the Occupational Therapy Practice Framework. 2. Current credit distribution as two lecture and 3 hour lab. This revised course will remain 3 credits, however, given the content is more didactic in nature rather than assessment and practice of psychomotor skills, this course is better suited for a 3 hour lecture. In addition, this change would support students who are also completing general education curriculum requirements. | |

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| <p>This course will be scheduled within the new College schedule and provide them more options for course selection to manage other demands of their weekly schedule such as work and childcare.</p> |
| <p>Provide a description of any change in course content.</p> <p>N/A</p> |
| <p>List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):</p> <p>N/A</p> <p>Please confer with the coordinator of the affected department.</p> |
| <p>Attach current and proposed academic maps (<u>with changes in bold</u>) for all affected programs. You can obtain academic maps from Barb Zabka.</p> |
| <p>Please submit a generic syllabus to your dean with all of the revisions included.</p> |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** BIO 107 Principles of Biology I
(from current AY22/23 catalog)
2. **Originator:** Jessica Crowley **Date:** 11/8/2022
3. **School Dean:** Dr. Ben Benton **Date:** 11/14/2022
4. **Effective Date:** Fall 2023
5. **Reviewed by Program and Process (if applicable)** **Date:**
6. **Recommended by the School of** Math and Science **Date:** 01/19/2023
Comments: Unanimously approved
7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____
Comments: _____
8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: X **Not Recommended:** _____
Comments: _____
9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: X **Not Recommended:** _____
Comments: _____
10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: X **Not Approved:** _____
Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

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|---|---|
| Type of Revision: <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisite <input checked="" type="checkbox"/> Corequisite ___ Number <input checked="" type="checkbox"/> Name ___ # Credits ___ Elective Type <input checked="" type="checkbox"/> Other (explain): Revised course student learning outcomes | |
| Course Discipline or Department: Natural Sciences | School: Mathematics & Sciences |
| Current Course Number: BIO 107 | |
| Current Course Name: Principles of Biology I | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): BIO 107 Principles of Biology I This course examines principles of molecular, cellular and physiological levels of living organisms. Topics include biomolecules, cell structure and function , cellular energetics, heredity, gene expression, and evolution. The laboratory component focuses on scientific methodology, acquiring and interpreting data and experimental design. The course is designed for those planning to major in the biological sciences, biotechnology, biochemistry, or biomedical engineering. Credits: 4 Prerequisite: MAT 099 with a grade of "C" or higher or appropriate placement score Corequisite: ENG 101 Semester Offered: F/S/SU | |
| Proposed Description (include all proposed changes): BIO 107 Biology II: Introduction to Cells and Molecules This course examines principles of molecular, cellular and physiological levels of living organisms. Topics include structure and function of biomolecules and cells , cellular energetics, heredity, gene expression, and evolution. The laboratory component focuses on scientific methodology, acquiring and interpreting data, and experimental design. This course is designed for students majoring in science and engineering. Credits: 4 Prerequisite: CHM 105 or CHM 123, ENG 101 Semester Offered: F/S/SU | |
| Rationale for the change and Course Student Learning Outcomes: Student success data in Principles of Biology I indicates a barrier to student progression through STEM programs for which the course is a requirement. Many times, this is a student's first laboratory course, and they often struggle with the workload and the fast pace of the course. In addition, the concepts covered in Principles of Biology I (BIO 107) are more abstract (molecules and metabolism) than those in Principles of Biology II (BIO 108), which focuses on organismal diversity. Therefore, beginning students may see more success with Principles of Biology II. Addition of a chemistry prerequisite to Principles of Biology I will ease the amount of new content in the class, giving students a foundation of atomic structure and bonding, which will be built upon for biological macromolecules. In addition, students will be more adept at managing their time for a laboratory course. BIO 108 (new course number 106) will not be the prerequisite for BIO 107. While the themes of structure-function relationships and evolution run through both courses, these courses do not build upon each other. The BIO 107 course focuses more on molecular structure, and so chemistry is a more appropriate prerequisite. Additionally, some programs (ERG, ERBM, GSBT, BI) do not require students to take the organismal diversity course (BIO 108/BIO 106). | |

Revised CSLOs:

Upon successful completion of this course, students will be able to:

1. Explain the mechanism of natural selection and its role in evolution.
2. Apply basic chemical principles of bond formation, including the properties of water and carbon compounds, to biological systems.
3. Describe the structures and properties of the major classes of biological macromolecules and give examples of their functions in the cell.
4. Describe the generalized structures and functions of bacteria, animal and plant cells.
5. Describe energy flow and transformations in cells and organisms through metabolism and metabolic pathways.
6. Describe the processes by which heritable material is passed on to the next generation.
7. Discuss the structure and function of the genetic material and its role in inheritance and gene expression.
8. Demonstrate competency with the scientific techniques used in biology including measurements of volume and mass, microscopy, and graphing.
9. Apply the scientific method in the laboratory setting to design controlled experiments, collect and interpret data, and clearly communicate experimental results.

Provide a description of any change in course content.

Course content will not change significantly. Chemistry content from the prerequisite will be reviewed with emphasis on knowledge required for understanding biological molecular structure and function.

List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):

Liberal Arts - Biology Option (LABI)

Liberal Arts - Chemistry Option (LACH)

Liberal Arts - Environmental Science Option (LAES)

General Studies - Pre-Pharmacy Option (GSPH)

General Studies - Biotechnology (GSBT)

Biotechnology Technician Certificate (BI)

Engineering (ERG)

Engineering - Biomedical Engineering Option (ERBM)

Please confer with the coordinator of the affected department.

Attach current and proposed academic maps (with changes in **bold**) for all affected programs. You can obtain academic maps from Barb Zabka.

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

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** BIO 108 Principles of Biology II
(from current AY22/23 catalog)
2. **Originator:** Jessica Crowley **Date:** 11/8/22
3. **School Dean:** Dr. Ben Benton **Date:** 11/14/22
4. **Effective Date:** Fall 2023
5. **Reviewed by Program and Process (if applicable)** **Date:** _____
6. **Recommended by the School of** Math and Science **Date:** 01/19/2023
Comments: Unanimously approved
7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____
Comments: _____
8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: X **Not Recommended:** _____
Comments: _____
9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: X **Not Recommended:** _____
Comments: _____
10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: X **Not Approved:** _____
Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

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|---|---|
| Type of Revision: <input type="checkbox"/> _X_ Description <input checked="" type="checkbox"/> _X_ Prerequisite <input checked="" type="checkbox"/> _X_ Corequisite <input type="checkbox"/> _X_ Number <input type="checkbox"/> _X_ Name ____# Credits <input type="checkbox"/> ____ Elective Type <input checked="" type="checkbox"/> _X_ Other (explain): Revised course student learning outcomes | |
| Course Discipline or Department: Natural Sciences | School: Mathematics & Sciences |
| Current Course Number: BIO 108 | |
| Current Course Name: Principles of Biology II | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): BIO 108 Principles of Biology II This course examines the principles of organismal biology. Topics include evolution, comparative anatomy and physiology, diversity of biological organisms, and plant phylogeny and biology. The laboratory component focuses on scientific methodology, acquiring and interpreting data, and experimental design. The course is designed for those planning to major in the biological sciences. Credits: 4 Prerequisite: BIO 107 Semester Offered: F/S | |
| Proposed Description (include all proposed changes): BIO 106 Biology I: Introduction to Organismal Diversity This course examines the principles of organismal biology. Topics include evolution, comparative anatomy and physiology, diversity of biological organisms, phylogeny, and interactions at different levels of biological hierarchy. The laboratory component focuses on observing, sketching and dissecting specimens, designing experiments, as well as acquiring and interpreting data. The course is designed for students majoring in the sciences. Credits: 4 Corequisite: ENG 101 Semester Offered: F/S | |
| Rationale for the change and Course Student Learning Outcomes: In order to increase student success, we are proposing to change the sequencing of the introductory biology first year courses for STEM majors. This organismal diversity course does not require the course material in the introduction to cells and molecules course. In addition, the content of this course is less abstract and more tangible and will provide the students with experience in navigating laboratory courses prior to the more challenging content in the introduction to cells and molecules course. Due to the amount of reading and writing, an ENG 101 co-requisite is suggested. Students will be introduced to scientific writing conventions, including source citations. Revised CSLOs: Upon successful completion of this course, students will be able to: <ol style="list-style-type: none"> 1. Describe the characteristics of the domains and kingdoms of organisms including differentiating between prokaryotic and eukaryotic species. 2. Compare and contrast the kingdoms of life with regard to cellular structure, metabolism, homeostatic and reproductive strategies. 3. Recognize and explain the causes of large evolutionary trends in biodiversity, and how cladistics inform phylogeny. 4. Explain the processes and outcomes of macroevolution and microevolution. 5. Explain organismal interactions at the levels of populations, communities, ecosystems, and biosphere. | |

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| 6. Demonstrate competency with the scientific techniques used in biology including observation, sketching, microscopy, and dissections. 7. Apply the scientific method in the laboratory setting to design controlled experiments, collect and interpret data, and clearly communicate experimental results. |
| Provide a description of any change in course content. |
| Course content will not change. |
| List the programs that are affected by this change (list program names and program codes as they appear in the college catalog): Liberal Arts-Biology (LABI) Liberal Arts-Chemistry (LACH) Liberal Arts-Environmental Science (LAES) General Studies Pre-Pharmacy (GSPH) Liberal Arts - Mathematics Option (LAMT) – “BIO 108” mentioned in Milestones only |
| Please confer with the coordinator of the affected department. |
| Attach current and proposed academic maps (<u>with changes in bold</u>) for all affected programs. You can obtain academic maps from Barb Zabka. |
| Please submit a generic syllabus to your dean with all of the revisions included. |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** **BIO 231 General Microbiology**
(from current AY22/23 catalog)

2. **Originator:** Jessica Crowley **Date:** 11/10/22

3. **School Dean:** Dr. Ben Benton **Date:** 11/14/22

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:**

6. **Recommended by the School of** Math and Science **Date:** 01/19/2023
Comments: Unanimously approved

7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____

Comments: _____

8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: _____ **Not Recommended:** _____

X

Comments: _____

9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: X **Not Recommended:** _____

Comments: _____

10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: X **Not Approved:** _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

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|---|---|
| Type of Revision: <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input type="checkbox"/> Number <input type="checkbox"/> Name <input type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input checked="" type="checkbox"/> Other (explain): Revised course student learning outcomes | |
| Course Discipline or Department: Natural Sciences | School: Mathematics & Sciences |
| Current Course Number: BIO 231 | |
| Current Course Name: General Microbiology | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): BIO 231 General Microbiology This course explores the morphology, growth, metabolism, and genetics of microorganisms including bacteria, fungi, and viruses. Topics include microbial growth, identification, genetic manipulation techniques used in the biotechnology industry, pathogenicity, disease transmission, and immunology. The course emphasizes documentation, data manipulation, and experimental design. Credits: 4 Prerequisite: BIO 107 and CHM 105 or CHM 123 Semester Offered: F/S | |
| Proposed Description (include all proposed changes): BIO 231 General Microbiology This course explores the morphology, growth, metabolism, and genetics of microorganisms including bacteria, fungi, and viruses. Topics include microbial growth and control, genetic transmission and expression, microbial pathogenicity, infectious disease transmission, immunology, and the role of microbes in biotechnology. Students also focus on microscopy, aseptic transfer, and safe cultivation of microorganisms with an additional emphasis on documentation, data analysis, and experimental design. Credits: 4 Prerequisite: BIO 107 Semester Offered: F/S | |
| Rationale for the change and Course Student Learning Outcomes: In an effort to increase student success in the former BIO 107 course, renamed BIO 107, one semester of chemistry (either CHM 105 or CHM 123) has been added as a prerequisite. Therefore, chemistry is no longer needed as a prerequisite for this course. Revised CSLOs: On successful completion of this course, students will be able to: <ol style="list-style-type: none"> 1. Compare the structures, physiology and metabolism of prokaryotic and eukaryotic microbes, and viruses. 2. Explain microbial growth patterns, nutritional requirements, and mechanisms to control growth. 3. Examine the processes of gene transfer, and the role of microbes in biotechnology. 4. Examine the role of microbes in the environment and their interactions with other organisms. 5. Describe the role of host defense mechanisms in the process of disease. 6. Demonstrate laboratory proficiency in microscopy, aseptic transfer, cultivation of microbes, microbial identification, and laboratory safety. 7. Employ the scientific method to collect, analyze, and interpret data; effectively communicate experimental results. | |
| Provide a description of any change in course content. No change in course content. | |

List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):

Liberal Arts-Biology Option (LABI)
General Studies - Biotechnology (GSBT)
Biotechnology Technician Certificate (BI)
General Studies - Pre-Pharmacy Option (GSPH)

Please confer with the coordinator of the affected department.

Attach current and proposed academic maps (with changes in **bold**) for all affected programs. You can obtain academic maps from Barb Zabka.

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

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** Cell Biology (BIO 259)
(from current AY22/23 catalog)

2. **Originator:** Jessica Crowley **Date:** 11/10/22

3. **School Dean:** Dr. Ben Benton **Date:** 11/14/22

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:**

6. **Recommended by the School of** Math and Science **Date:** 01/19/2023
Comments: Unanimously approved

7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____

Comments: _____

8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: _____ **Not Recommended:** _____

X

Comments: _____

9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: X **Not Recommended:** _____

Comments: _____

10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: X **Not Approved:** _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

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|---|---|
| Type of Revision: <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input type="checkbox"/> Number <input type="checkbox"/> Name <input type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input type="checkbox"/> Other (explain) | |
| Course Discipline or Department: Natural Sciences | School: Mathematics & Sciences |
| Current Course Number: BIO 259 | |
| Current Course Name: Cell Biology | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): BIO 259 Cell Biology This course focuses on the structure and function of cells. Topics include organelles, membrane structure and function, metabolism, signal transduction, cytoskeletal dynamics and regulation of growth as well as data collection, analysis, and documentation methods. Students learn laboratory instrumentation, microscopy, cellular techniques, and manipulations employed in the biotechnology industry. Credits: 4 Prerequisite: BIO 107 and CHM 105 or CHM 123 Semester Offered: F/S | |
| Proposed Description (include all proposed changes): BIO 259 Cell Biology This course focuses on the structure and function of cells. Topics include organelles, membrane structure and function, protein structure, function and trafficking , metabolism, signal transduction, cytoskeletal dynamics and regulation of growth as well as data collection, analysis, and documentation methods. Students learn laboratory instrumentation, microscopy, cellular techniques, and protein analysis methods employed in biomedical research and the biotechnology industry. Credits: 4 Prerequisite: BIO 107 Semester Offered: F/S | |
| Rationale for the change and Course Student Learning Outcomes: In an effort to increase student success in BIO 107, one semester of chemistry (either CHM 105 or CHM 123) has been added as a prerequisite. Therefore, chemistry is no longer needed as a prerequisite for this course. The course description has been updated to clarify techniques covered in the class. Upon successful completion of this course, students will be able to: <ol style="list-style-type: none"> 1. Compare and contrast the generalized structures and functions of bacterial, animal and plant cells. 2. Apply the laws of thermodynamics to chemical reactions in the cell and chemical equilibrium. 3. Explain how a protein is synthesized, modified, and trafficked to its site of action. 4. Explain how enzymes mediate catalysis and describe mechanisms of enzyme regulation in metabolic pathways. 5. Characterize the different modes by which molecules are transported across membranes and relate this to the structure of membranes. 6. Explain how signals are transduced from outside the cell to elicit an internal cellular response and predict how disruptions to these processes affect the cell. 7. Compare and contrast the functions of the cytoskeletal proteins, including structures, dynamics, and interactions with other cellular components. 8. Describe the mechanisms of cell cycle control. | |

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| <p>9. Compare and contrast various methods of visualizing and manipulating cells, including methods of cell lysis and protein purification.</p> <p>10. Apply the scientific method in the laboratory setting to design controlled experiments using current cell biology techniques, collect and interpret data, and document and clearly communicate experimental results.</p> |
| <p>Provide a description of any change in course content.</p> |
| <p>No change in content.</p> |
| <p>List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):</p> <p>Liberal Arts-Biology Option (LABI) General Studies - Biotechnology (GSBT) Biotechnology Technician Certificate (BI) Engineering - Biomedical Engineering Option (ERBM)</p> <p>Please confer with the coordinator of the affected department.</p> |
| <p>Attach current and proposed academic maps (<u>with changes in bold</u>) for all affected programs. You can obtain academic maps from Barb Zabka.</p> |
| <p>Please submit a generic syllabus to your dean with all of the revisions included.</p> |
| <p>Attached.</p> |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name: Principles of Genetics (BIO 262)**
(from current AY22/23 catalog)

2. **Originator:** Jessica Crowley **Date:** 11/9/22

3. **School Dean:** Dr. Ben Benton **Date:** 11/14/22

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:**

6. **Recommended by the School of** Math and Science **Date:** 01/19/2023
Comments: Unanimously approved

7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____

Comments: _____

8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: X **Not Recommended:** _____

Comments: _____

9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: X **Not Recommended:** _____

Comments: _____

10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: X **Not Approved:** _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

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|--|---------------------------------|
| Type of Revision: <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input type="checkbox"/> Number <input type="checkbox"/> Name <input type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input checked="" type="checkbox"/> Other (explain): Revised course student learning outcomes | |
| Course Discipline or Department: Natural Sciences | School: Math and Science |
| Current Course Number: BIO 262 | |
| Current Course Name: Principles of Genetics | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): BIO 262 Principles of Genetics This course covers the principles of classical and molecular genetics in both model organisms and humans. The material focuses on experimental evidence for genetic principles along with application of these principles to solve problems involving inheritance patterns. Students perform investigative laboratory exercises in genetic mapping, recombinant DNA techniques, gene regulation, and bioinformatics. Credits: 4 Prerequisite: BIO 108, MAT 122 Semester Offered: F/S | |
| Proposed Description (include all proposed changes): BIO 262 Principles of Genetics This course covers the principles of classical, molecular and population genetics in both model organisms and humans. Students explore inheritance, gene expression, population genetics and evolution, and genetic mutation and repair. The material emphasizes experimental evidence for genetic principles along with application of these principles to solve problems. Students perform investigative laboratory exercises in genetic mapping, recombinant DNA techniques, gene regulation, and bioinformatics. Credits: 4 Prerequisite: BIO 106, BIO 107, MAT 122 Semester Offered: F/S | |
| Rationale for the change and Course Student Learning Outcomes: The current prerequisite for Principles of Genetics (BIO 262) is BIO 108 and MAT 122. Course content from both introductory biology courses are necessary for success in Principles of Genetics. With the prerequisite and course name and number changes for BIO 107/108, the prerequisite for Principles of Genetics should be updated to include both Biology I and II (BIO 106 and BIO 107). Revised CSLOs: On successful completion of this course, students will be able to: <ol style="list-style-type: none"> 1. Compare and contrast the mechanisms of transmission of genetic material in prokaryotes and eukaryotes. 2. Apply genetic mapping strategies to determine the position of genes in prokaryotic and eukaryotic genomes. 3. Describe the genomic content, organization, and packaging of genetic material. 4. Explain the mechanisms of DNA replication, transcription and translation. 5. Compare and contrast the regulation of gene expression in prokaryotes and eukaryotes. 6. Explain the mechanisms responsible for genetic mutation and DNA repair. 7. Explain evolution in the context of population dynamics and genetic processes such as mutation, migration, natural selection, and random genetic drift. 8. Utilize experimental methods in model organisms to characterize transmission, interaction, expression and function of genes. | |

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|--|
| <p>9. Apply the scientific method in the laboratory setting to design controlled experiments, collect and interpret data, and document and clearly communicate experimental results.</p> <p>10. Integrate genetic concepts with societal issues such as genetic counseling, ethics of eugenics, ownership of personal genetic information.</p> |
| <p>Provide a description of any change in course content.</p> |
| <p>No change in course content.</p> |
| <p>List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):</p> <p>Liberal Arts-Biology Option (LABI)</p> <p>Please confer with the coordinator of the affected department.</p> |
| <p>Attach current and proposed academic maps (<u>with changes in bold</u>) for all affected programs. You can obtain academic maps from Barb Zabka.</p> |
| <p>Please submit a generic syllabus to your dean with all of the revisions included.</p> |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

1. Degree or Certificate Name and Code: Liberal Arts-Biology (LABI)
(from current AY 22/23 catalog)

2. Originator: Jessica Crowley Date: 11/8/22

3. School Dean: Dr. Ben Benton Date: 11/16/2022

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date:

6. Recommended by the School of Math and Science Date: 01/19/23
Comments: Unanimously approved

7. AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: X Not Recommended: _____

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____

X
Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: X Not Recommended: _____

Comments: _____

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: X Not Approved: _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

| |
|---|
| Degree or Certificate name and code: Liberal Arts-Biology Option (LABI) |
| Provide a detailed list of the proposed changes to the degree or certificate. 1. Incorporate course name and prerequisite changes for BIO 107. 2. Incorporate course name, course number, and prerequisite changes for BIO 108 (now BIO 106). 3. Incorporate prerequisite changes for BIO 231. 4. Incorporate prerequisite changes for BIO 259. 5. Incorporate prerequisite changes for BIO 262. 6. Incorporate prerequisite changes for MAT 122. 7. Move BIO 107 from Semester 1 to Semester 2. 8. Move BIO 106 from Semester 2 to Semester 1. 9. Adjust milestones, accordingly. |
| Attachments: Current academic map Proposed academic map with changes in bold |
| Submit separate proposals for any new courses or revised courses in the degree or certificate. Please list here the new courses or revised courses for which separate proposals will be submitted. Course Revisions submitted for: Principles of Biology I (BIO 107) Principles of Biology II (BIO 108) General Microbiology (BIO 231) Cell Biology (BIO 259) Principles of Genetics (BIO 262) Statistics (MAT 122) |
| Provide a rationale for the proposed changes. In order to increase student success in Liberal Arts-Biology and other programs that require BIO 107, the prerequisite has been changed to require one semester of chemistry (CHM 105 or CHM 123). In order to maintain the timing of the degree and to give students more opportunity to gain experience in laboratory courses prior to BIO 107, BIO 108 (revised to BIO 106) will be moved to the first semester. In order to clarify the content and suggested order of courses, the names have been changed to BIO 106: Introduction to Organismal Diversity and BIO 107: Introduction to Cells and Molecules. |
| Do any of the proposed changes affect the program goals and/or the program student learning outcomes? Please indicate any revisions to the program goals and/or program student learning outcomes. Program SLOs and goals remain the same. |
| Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. Department(s) Affected: No other departments affected by the degree changes. |
| Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. The order of courses and prerequisites have changed, but the content remains the same. |
| For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? If yes please provide a rationale. MassTransfer will not be affected. |

Will any of the following be required: No additional needs.

Additional staff____Additional space____Additional equipment____Additional library resources ____

Provide a rationale for any needs indicated and include approximate cost of equipment.

Please complete the following tables for your program or indicate the date of the **Academic Matters** (within the last three years) where they have previously been published.

List the PROGRAM STUDENT LEARNING OUTCOMES in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

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

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

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

| PROGRAM STUDENT LEARNING OUTCOMES FOR Liberal Arts-Biology | | Supporting course(s) | I, M, E |
|--|---|---|---------------------------------|
| 1 | Demonstrate an understanding of general biology principles including evolution and organismal diversity, cell structure and function, metabolism and enzyme function, cell reproduction and genetics. | BIO 106 BIO 107 BIO 262 BIO 231/BIO 259 | M M E E |
| 2 | Explain how the chemical principles of matter and energy affect processes in biological systems. | BIO 107 CHM 105 CHM 106 BIO 231/BIO 259 | M M M E |
| 3 | Employ the scientific method to investigate scientific principles, analyze and interpret data, and solve complex problems. | BIO 106 BIO 107 CHM 105 CHM 106 BIO 262 BIO 231/BIO 259 | M M M M E E |
| 4 | Demonstrate proper use of basic laboratory equipment, adhering to laboratory safety protocols, as well as a technical proficiency in computer technology for data analysis. | BIO 106/BIO 107 BIO 262 BIO 231/BIO 259 CHM 105 CHM 106 CHM 201/202 PHY 101/102; PHY 105/107 | M E E M M E M |
| 5 | Apply mathematical reasoning to explore biological and chemical concepts, including data analysis using statistics, the correct composition and interpretation of graphs, and solution chemistry and calculations to support the preparation of reagents. | MAT 122, 123, 124 BIO 106, 131 PHY 101/102; PHY 105/107 BIO 262 BIO 231/BIO 259 | M M M E E M E |

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|---|---|--|--|
| | | CHM 105/CHM 106 CHM 201/202 | |
| 6 | Demonstrate clear and effective communication skills, including verbal, written, graphic, and numerical, with emphasis on the presentation of experimental results. | ENG 101/ENG 102 BIO 106/BIO 107 CHM 105/CHM 106 CHM 201/202 BIO 262 BIO 231/BIO 259 PHY 101/102; PHY 105/107 Multiple Perspectives Elective Literature, Philosophy, or Language Social Science Foundational Elective History Elective | M M M M M E I/E E E E |
| 7 | Identify reliable sources of information for use in the formation and support of evidence-based arguments. | BIO 106/107 ENG 102 BIO 262 BIO 231/BIO 259 Social Science Foundational Elective History Elective | E M E E E E |
| 8 | Utilize the broad-based liberal arts curriculum to recognize the value of multiple perspectives needed to participate in a global society. | Creative Arts Elective Multiple Perspectives Elective Literature, Philosophy, or Language elective Social Science Foundational Elective History Elective BIO 106 BIO 262 | M E M M M I I |

For a DEGREE PROGRAM, indicate the courses that fulfill the General Education Student Learning Outcomes (Gen. Ed. Goals adopted 2022).

| GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR: Liberal Arts-Biology (LABI) | Supporting course(s) | I, M, E |
|--|---|-----------------------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | History elective Social Science Foundational Elective | E E |
| Communication Skills: Students will read, write and speak effectively to build knowledge and convey meaning. | BIO 106, 107, 231, 259, 262 ENG 101, 102 Literature, Philosophy, or Language elective | E E M |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | BIO 106, 107, 231, 259, 262 ENG 102 | E M |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals.. | Multiple Perspectives Elective Literature, Philosophy, or Language elective Social Science Foundational Elective History elective | M I I I |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | BIO 106, 107, 231, 259, 262 CHM 105/106 PHY 101/102 or PHY 105/107 MAT 122, 123 and 124 | E E E E E |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

1. Degree or Certificate Name and Code: **Liberal Arts - Chemistry Option (LACH)**
(from current AY 22/23 catalog)

2. Originator: **Hirul Patel** Date: **11/16/22**

3. School Dean: **Dr. Ben Benton** Date: **11/16/2022**

4. Effective Date: **Fall 2023**

5. Reviewed by Program and Process (if applicable) Date:

1. Recommended by the School of **Math and Science** Date: **01/19/2023**
Comments: **Unanimously approved**

2. AA Leadership Team: _____ Date: _____

Recommended: _____ Not Recommended: _____
Comments:

3. VP/Academic Affairs: _____ Date: _____

Recommended: _____ Not Recommended: _____
Comments:

4. Learning Council: _____ Date: _____

Recommended: _____ Not Recommended: _____
Comments:

5. VP/Academic Affairs: _____ Date: _____

Approved: _____ Not Approved: _____
Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

| |
|---|
| Degree or Certificate name and code: Liberal Arts - Chemistry Option (LACH) |
| Provide a detailed list of the proposed changes to the degree or certificate. 1. Incorporate course name and prerequisite changes for BIO 107. 2. Incorporate course name, course number, and prerequisite changes for BIO 108 (now BIO 106). 3. Move BIO 107 from Semester 1 to Semester 2. 4. Move BIO 106 from Semester 2 to Semester 1. |
| Attachments: Current academic map Proposed academic map with changes in bold |
| Submit separate proposals for any new courses or revised courses in the degree or certificate. Please list here the new courses or revised courses for which separate proposals will be submitted. BIO 107 BIO 108 |
| Provide a rationale for the proposed changes. In order to increase student success in Liberal Arts-Biology and other programs that require BIO 107, the prerequisite has been changed to require one semester of chemistry (CHM 105 or CHM 123). In order to maintain the timing of the degree and to give students more opportunity to gain experience in laboratory courses prior to BIO 107, BIO 108 (revised to BIO 106) will be moved to the first semester. In order to clarify the content and suggested order of courses, the names have been changed to BIO 106: Introduction to Organismal Diversity and BIO 107: Introduction to Cells and Molecules. |
| Do any of the proposed changes affect the program goals and/or the program student learning outcomes? Please indicate any revisions to the program goals and/or program student learning outcomes. Program SLOs and goals remain the same. |
| Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. Department(s) Affected: No other departments affected by the degree changes. |
| Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? The order of courses and prerequisites have changed, but the content remains the same. There is no effect on MassTransfer. If yes please provide a rationale. |
| Will any of the following be required: None. Additional staff ____ Additional space ____ Additional equipment ____ Additional library resources ____ Provide a rationale for any needs indicated and include approximate cost of equipment. |

Please complete the following tables for your program or indicate the date of the **Academic Matters** (within the last three years) where they have previously been published.

List the PROGRAM STUDENT LEARNING OUTCOMES in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

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

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

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

| PROGRAM STUDENT LEARNING OUTCOMES FOR LIBERAL ARTS -CHEMISTRY OPTION | | Supporting course(s) | I, M, E |
|--|--|---|---------|
| 1 | Demonstrate understanding of basic chemical principles including relation of matter and energy, atomic structure, stoichiometry, chemical reactions, thermodynamics, and theory of bonding. | CHM 105, CHM 106, CHM 201/ CHM 202 BIO 107, PHY 105, PHY 107 | E |
| 2 | Apply basic chemical principles to organic chemistry including organic synthesis design and related lab skills. | CHM 201/CHM 202 | E |
| 3 | Incorporate the Physics principles into the understanding of chemistry and apply chemical principles to biological systems. | PHY 105, PHY 107 BIO 107, BIO 106 | I |
| 4 | Employ the scientific method to investigate scientific principles, analyze and interpret data, and solve complex problems. | CHM 105/CHM 106 CHM 201/ CHM 202 BIO 107 /BIO 106 PHY 105 /PHY 107 | M |
| 5 | Apply mathematical reasoning to explore chemical concepts, including data analysis using statistics and the correct composition and interpretation of graphs. | MAT 233/ MAT 234 CHM 105/CHM 106 CHM 201/ CHM 202 BIO 107 /BIO 106 PHY 105 /PHY 107 | M |
| 6 | Demonstrate proper use of basic laboratory equipment, adhering to laboratory safety protocols, as well as a technical proficiency in computer technology for data analysis. | CHM 105/CHM 106 CHM 201/ CHM 202 BIO 107 /BIO 106 PHY 105 /PHY 107 | E |
| 7 | Demonstrate clear and effective communication skills, including verbal, written, graphic, and numerical, with emphasis on the presentation of experimental results. | CHM 105/ CHM 106 CHM 201/CHM 202 BIO 107 /BIO 106 PHY 105 /PHY 107 ENG 101/ ENG 102 | E |
| 8 | Utilize the broad-based liberal arts curriculum in the fine arts, humanities, mathematics, natural sciences, and social and behavioral sciences to examine the role of chemistry in society. | Creative Arts Elective Multiple Perspectives Elective Literature, Philosophy, or Language Elective Social Science Foundational Elective U.S. or World History Survey Elective | E |

For a DEGREE PROGRAM, indicate the courses that fulfill the General Education Student Learning Outcomes (Gen. Ed. Goals adopted 2022).

| GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR: Liberal Arts-Biology (LABI) | Supporting course(s) | I, M, E |
|--|---|---------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | History elective Social Science Foundational Elective | E |
| Communication Skills: Students will read, write and speak effectively to build knowledge and convey meaning. | Literature, Philosophy, or Language Elective ENG 101, ENG 102 CHM 105, 106, 201, 202 BIO 106, 107 PHY 105, 107 | M |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | CHM 105,106,201,202 BIO 106, 107, ENG 102 MAT 233,234 | E |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals.. | Multiple Perspectives Elective Literature, Philosophy, or Language elective Social Science Foundational Elective History elective | I |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | BIO 106, 107, CHM 105,106, 201,202 PHY 105,107 MAT 233,234 | E |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

1. Degree or Certificate Name and Code: Liberal Arts - Environmental Science Option (LAES)
(from current AY 22/23 catalog)

2. Originator: Anita Soracco Date: 11/16/22

3. School Dean: Ben Benton Date: 11/16/22

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date:

1. Recommended by the School of Math and Science Date: 01/19/2023
Comments: Unanimously approved

2. AA Leadership Team: _____ Date: _____

Recommended: _____ Not Recommended: _____
Comments:

3. VP/Academic Affairs: _____ Date: _____

Recommended: _____ Not Recommended: _____
Comments:

4. Learning Council: _____ Date: _____

Recommended: _____ Not Recommended: _____
Comments:

5. VP/Academic Affairs: _____ Date: _____

Approved: _____ Not Approved: _____
Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

| |
|---|
| Degree or Certificate name and code: Liberal Arts - Environmental Science Option (LAES) |
| Provide a detailed list of the proposed changes to the degree or certificate. |
| <ol style="list-style-type: none"> 1. Incorporate course name and prerequisite changes for BIO 107. 2. Incorporate course name, course number, and prerequisite changes for BIO 108 (now BIO 106). 3. Incorporate prerequisite changes for MAT 122. 4. Move BIO 107 from Semester 1 to Semester 2. 5. Move BIO 106 from Semester 2 to Semester 1. |
| Attachments: Current academic map Proposed academic map with changes in bold |
| Submit separate proposals for any new courses or revised courses in the degree or certificate. Please list here the new courses or revised courses for which separate proposals will be submitted. BIO 107 BIO 108 |
| Provide a rationale for the proposed changes. In order to increase student success in Liberal Arts-Biology and other programs that require BIO 107, the prerequisite has been changed to require one semester of chemistry (CHM 105 or CHM 123). In order to maintain the timing of the degree and to give students more opportunity to gain experience in laboratory courses prior to BIO 107, BIO 108 (revised to BIO 106) will be moved to the first semester. In order to clarify the content and suggested order of courses, the names have been changed to BIO 106: Introduction to Organismal Diversity and BIO 107: Introduction to Cells and Molecules. |
| Do any of the proposed changes affect the program goals and/or the program student learning outcomes? Please indicate any revisions to the program goals and/or program student learning outcomes. Program SLOs and goals remain the same. |
| Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. Department(s) Affected: |
| Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. |
| For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? The order of courses and prerequisites have changed, but the content remains the same. There is no effect on MassTransfer. If yes please provide a rationale. |
| Will any of the following be required: None Additional staff____Additional space____Additional equipment____Additional library resources ____ Provide a rationale for any needs indicated and include approximate cost of equipment. |

Please complete the following tables for your program or indicate the date of the **Academic Matters** (within the last three years) where they have previously been published.

List the PROGRAM STUDENT LEARNING OUTCOMES in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

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

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

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

| PROGRAM STUDENT LEARNING OUTCOMES FOR (insert the name of the program) | | Supporting course(s) | I, M, E |
|--|---|--|-----------------------|
| 1 | Evaluate human impact on the environment and be able to identify and explain local and global environmental issues to a diverse audience. | SCI 105 SCI 104 SCI 110 | I E M |
| 2 | Employ the scientific method to investigate scientific principles, analyze and interpret data, and solve complex problems. | SCI 104 SCI 105, SCI 110 CHM 105, PHY 101, BIO 107 BIO 106, CHM 106 | I E E M |
| 3 | Demonstrate proper use of basic laboratory equipment, adhering to laboratory safety protocols, as well as a technical proficiency in computer technology for data analysis. | SCI 105, SCI 110 BIO 106, BIO 107, CHM 105, CHM 106, PHY 101 | I E M |
| 4 | Apply mathematical reasoning to explore environmental phenomenon, including data analysis using statistics, and the correct composition and interpretation of graphs. | MAT 122, MAT 123, MAT 124, MAT 233 ECO elective BIO 106, BIO 107 CHM 105, CHM 106, PHY 101 SCI 104, SCI 105, SCI 110 | I E E E M |
| 5 | Demonstrate clear and effective communication skills, including verbal, written, graphic, and numerical, with emphasis on the presentation of experimental results. | SCI 105, SCI 110, SCI 104 ENG 101/ENG 102 BIO 106/BIO 107 CHM 105/CHM 106 PHY 101 SPH 101, PHI 131, ECO elective | I E E E E |
| 6 | Identify reliable sources of information for use in the formation and support of evidence-based arguments. | SCI 104, SCI 105, SCI 110 BIO 106/BIO 107 PHI 131, SPH 101 ENG 102 | I E E M |
| 7 | Utilize the broad-based liberal arts curriculum to recognize the value of multiple perspectives needed to participate in a global society. | BIO 108 SCI 104, SCI 110, SPH 101, SOC 101 PHI 131 | I E M |

For a DEGREE PROGRAM, indicate the courses that fulfill the General Education Student Learning Outcomes (Gen. Ed. Goals adopted 2022).

| GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR (insert the name of the program) | Supporting course(s) | I, M, E |
|--|--|----------------------------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | SCI 104 SCI 110 SOC 101 PHI 131 | I E E M |
| Communication Skills: Students will read, write and speak effectively to build knowledge and convey meaning. | SCI 105, SCI 110, SCI 104 ENG 101/ENG 102 BIO 106/BIO 107 CHM 105/CHM 106 PHY 101 SPH 101, PHI 131, ECO elective | I E E E E E |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | CHM 105, CHM 106, PHY 101 SCI 110, SCI 105 BIO 106, BIO 107 | I E M |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals.. | BIO 107 SCI 104, SCI 110, SPH 101, SOC 101 PHI 131 | I E M |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | SCI 104, SCI 105, SCI 110 ECO 200 LEVEL BIO 106, BIO 107, CHM 105, CHM 106, PHY 101 MAT 122, MAT 123, MAT 124, MAT 233 | I E E M M |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

1. Degree or Certificate Name and Code (current): General Studies—Pre-Pharmacy Option (GSPH)

2. Originator: Dilip Patel

Date: November 15, 2022

3. School Dean: Dr. Ben Benton

Date: 11/16/2022

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable)

Date:

1. Recommended by the School of Math and Science
Comments: Unanimously approved

Date: 01/19/2023

2. AA Leadership Team: _____

Date: _____

Recommended: _____ Not Recommended: _____
Comments:

3. VP/Academic Affairs: _____

Date: _____

Recommended: _____ Not Recommended: _____
Comments:

4. Learning Council: _____

Date: _____

Recommended: _____ Not Recommended: _____
Comments:

5. VP/Academic Affairs: _____

Date: _____

Approved: _____ Not Approved: _____
Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

| |
|---|
| Degree or Certificate name and code: General Studies—Pre-Pharmacy Option (GSPH) |
| Provide a detailed list of the proposed changes to the degree or certificate. 1. Incorporate course name and prerequisite changes for BIO 107. 2. Incorporate course name, course number, and prerequisite changes for BIO 108 (now BIO 106). 3. Incorporate prerequisite changes for BIO 231. 4. Incorporate prerequisite changes for MAT 122. 5. Move BIO 107 from Semester 1 to Semester 2. 6. Move BIO 106 from Semester 2 to Semester 1. |
| Attachments: Current academic map Proposed academic map with changes in bold |
| Submit separate proposals for any new courses or revised courses in the degree or certificate. Please list here the new courses or revised courses for which separate proposals will be submitted. Course Revisions submitted for: Principles of Biology I (BIO 107) Principles of Biology II (BIO 108) General Microbiology (BIO 231) Statistics (MAT 122) |
| Provide a rationale for the proposed changes. In order to increase student success in Liberal Arts-Biology and other programs that require BIO 107, the prerequisite has been changed to require one semester of chemistry (CHM 105 or CHM 123). In order to maintain the timing of the degree and to give students more opportunity to gain experience in laboratory courses prior to BIO 107, BIO 108 (revised to BIO 106) will be moved to the first semester. In order to clarify the content and suggested order of courses, the names have been changed to BIO 106: Introduction to Organismal Diversity and BIO 107: Introduction to Cells and Molecules. |
| Do any of the proposed changes affect the program goals and/or the program student learning outcomes? Please indicate any revisions to the program goals and/or program student learning outcomes. Program SLOs and goals remain the same. |
| Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. Department(s) Affected: No other departments affected by the degree changes. |
| Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. The order of courses and prerequisites have changed, but the content remains the same. |
| For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? If yes please provide a rationale. MassTransfer will not be affected. |
| Will any of the following be required: No additional needs. Additional staff____Additional space____Additional equipment____Additional library resources ____ Provide a rationale for any needs indicated and include approximate cost of equipment. |

Please complete the following tables for your program or indicate the date of the **Academic Matters** (within the last three years) where they have previously been published.

List the PROGRAM STUDENT LEARNING OUTCOMES in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

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

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

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

| PROGRAM STUDENT LEARNING OUTCOMES FOR GENERAL STUDIES – PRE-PHARMACY OPTION | | Supporting course(s) | I, M, E |
|--|--|--|---------|
| 1 | Apply general chemistry principles such as bond formation, pH, and states of matter, energetics, equilibria, and stoichiometry. Understand basic principles of physics such as laws of motion, work & energy, momentum, along with understanding of general biology, and microbiology principles. Use understanding of the organization of the human body for better understanding of Pharmacology. | CHM 105, CHM 106, BIO 106, BIO 107, BIO 111, PHY 105, BIO 231/232 | E |
| 2 | Demonstrate a foundational understanding of general chemistry principles including atomic structure, quantum theory, nuclear chemistry, reaction types, gas laws, chemical kinetics, equilibria, intermolecular forces, theory of acid base, thermodynamics of reactions. Understand the chemistry of carbon and carbon compounds including aliphatic and aromatic compounds and their derivatives. Learn various techniques used in organic synthesis. Synthesize intermediates, pharmaceuticals, polymers and bio molecules in lab. Demonstrate skill of organic analysis using NMR, GC and IR spectroscopy. | CHM 105, CHM 106, CHM 201, CHM 202 | E |
| 3 | Demonstrate a proficiency in mathematics to support future STEM courses in fields such as chemistry, biology, physics, and environmental science. Apply this skill for solving the problems related to chemistry, and physics | MAT 122, MAT 124, MAT 233, | M |
| 4 | Utilize critical thinking skills and the scientific method to investigate scientific principles and solve complex problems. | CHM 105, CHM 106, CHM 201, CHM 202, BIO 106, BIO 107, BIO 111, BIO 231/232, PHY 105, | E |
| 5 | Utilize the broad-based liberal arts curriculum in the fine arts, humanities, mathematics, natural sciences, and social and behavioral sciences to examine the role of chemistry in society. | CHM, PHY and BIO, MAT, SPH, SOC, HTS courses | I |
| 6 | Demonstrate the multiple perspectives that derive from knowledge and awareness of cultures and cultural practices | Multiple perspective electives | I |
| 7 | Demonstrate high-level communication skills (verbal, written, graphic, and numerical) across the full span of the liberal arts disciplines. | CHM, PHY and BIO courses | M |

| | | | |
|---|--|--|---|
| 8 | Utilize interlibrary catalog/loan systems and electronic databases and to distinguish between reliable and non-reliable sources, whether print, cinematic, televisual, or web. | CHM, PHY, BIO, MAT, SPH, SOC, HTS, and PSC courses | I |
| 9 | Demonstrate a technical proficiency in computer technology along with in using number of scientific instrumentation utilized in the curriculum. | CHM, PHY and BIO, MAT Courses | M |

For a DEGREE PROGRAM, indicate the courses that fulfill the General Education Student Learning Outcomes.

| GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR: General Studies—Pre-Pharmacy Option (GSPH) | Supporting course(s) | I, M, E |
|--|---|----------------------------------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | History elective Social Science Foundational Elective | E E |
| Communication Skills: Students will read, write and speak effectively to build knowledge and convey meaning. | CHM 105, 106, 201,202 BIO 106, 107, 231/232 PHY 105 MAT 233 ENG 101, 102 Literature, Philosophy, or Language elective | E E E E M |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | CHM 105, 106, 201,202 ENG 102 | E M |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals.. | Multiple Perspectives Elective Literature, Philosophy, or Language elective Social Science Foundational Elective History elective | M I I I |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | CHM 105, 106, 201, 202 BIO 106, 107, 111, 231/232, PHY 105 MAT 233 | E E E E E |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

1. Degree or Certificate Name and Code (current): General Studies - Biotechnology Option (GSBT)

2. Originator: Archana Mudbidri

Date: 01/12/2023

3. School Dean: Dr. Ben Benton

Date: 01/12/2023

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable)

Date:

1. Recommended by the School of Math and Science
Comments: Unanimously approved

Date: 01/19/2023

2. AA Leadership Team: _____

Date: _____

Recommended: _____ Not Recommended: _____
Comments:

3. VP/Academic Affairs: _____

Date: _____

Recommended: _____ Not Recommended: _____
Comments:

4. Learning Council: _____

Date: _____

Recommended: _____ Not Recommended: _____
Comments:

5. VP/Academic Affairs: _____

Date: _____

Approved: _____ Not Approved: _____
Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

| |
|--|
| Degree or Certificate name and code: General Studies - Biotechnology Option (GSBT) |
| <p>Provide a detailed list of the proposed changes to the degree or certificate.</p> <ol style="list-style-type: none"> 1. Incorporate course name and prerequisite changes for BIO 107. 2. Incorporate prerequisite changes for BIO 231. 3. Incorporate prerequisite changes for BIO 259. 4. Incorporate prerequisite changes for MAT 122. 5. Move BIO 107 from Semester 1 to Semester 2. 6. Move BIO 259 from Semester 2 to Semester 4. 7. Move MAT 122 from Semester 2 to Semester 1. 8. Move MAT 123 from Semester 3 to Semester 2. 9. Move MAT 124 from Semester 4 to Semester 3. 10. Adjust individual semester credit totals and milestones, accordingly (no change to overall total credits required for program). |
| <p>Attachments:</p> <ul style="list-style-type: none"> Current academic map Proposed academic map with changes in bold |
| <p>Submit separate proposals for any new courses or revised courses in the degree or certificate. Please list here the new courses or revised courses for which separate proposals will be submitted.</p> <p>Course Revisions submitted for:</p> <ul style="list-style-type: none"> Principles of Biology I (BIO 107) General Microbiology (BIO 231) Cell Biology (BIO 259) Statistics (MAT 122) |
| <p>Provide a rationale for the proposed changes.</p> <p>In order to increase student success in Liberal Arts-Biology and other programs that require BIO 107, the prerequisite has been changed to require one semester of chemistry (CHM 105 or CHM 123). In order to clarify the content, the name has been changed to BIO 107: Introduction to Cells and Molecules.</p> <p>Moved the MAT 122 Statistics to the first semester to align with college goal of first semester completion of a college-level mathematics.</p> <p>Moved MAT 123 College Mathematics I: Pre-Calculus and MAT 124 College Mathematics II: Trigonometry to better align the grid.</p> |
| <p>Do any of the proposed changes affect the program goals and/or the program student learning outcomes? Please indicate any revisions to the program goals and/or program student learning outcomes.</p> <p>No changes.</p> |
| <p>Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments.</p> <p>Department(s) Affected: No other departments affected by the degree changes.</p> |
| <p>Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator.</p> |
| <p>For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer?</p> <p>If yes please provide a rationale.</p> |

Will any of the following be required: No additional needs.

Additional staff____Additional space____Additional equipment____Additional library resources ____

Provide a rationale for any needs indicated and include approximate cost of equipment.

Please complete the following tables for your program or indicate the date of the **Academic Matters** (within the last three years) where they have previously been published.

List the **PROGRAM STUDENT LEARNING OUTCOMES** in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

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

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

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

| PROGRAM STUDENT LEARNING OUTCOMES FOR: GSBT | | Supporting course(s) | I, M, E |
|---|---|---|--------------------------------------|
| 1 | Explain the fundamental scientific principles in the field of biotechnology. | BIO 107 BTT 101 BIO 231 BIO 259 BIO 260 BTT 211 BTT 212 | M I E E E E M |
| 2 | Work effectively and collaboratively in a laboratory setting. | BIO 107 BIO231 BIO259 BIO260 BTT211 BTT212 CHM105/106 | M E E E E I E |
| 3 | Demonstrate the proper use of basic laboratory equipment, adhering to laboratory safety protocols, as well as a technical proficiency in computer technology for data analysis. | BIO107 BIO231 BIO259 BIO260 BTT211 BTT212 CHM105/106 | M E E E E I E |
| 4 | Apply mathematical principles to biotechnological concepts. | MAT122, 123, 124 BIO231 BIO262 BIO259 BTT211 BTT212 CHM105 | M M E E E E I E |
| 5 | Demonstrate clear and effective communication skills, including verbal, written, graphic, and numerical, with emphasis on documentation. | ENG101/102 BIO107 CHM105/106 BIO 231 BIO 259 BIO 260 BTT211/212 SPH101 | M M M M M M E E |

| | | | |
|---|--|--|----------------------------|
| 6 | Utilize scientific methodology and critical thinking to analyze and/or troubleshoot biotechnological issues. | BTT101 BIO231 BIO259 BIO260 BTT211 BTT212 | I E E E E E |
| 7 | Demonstrate knowledge and appreciation of the relative historical and cultural perspectives of society. | History elective BTT 101 | E M |
| 8 | Identify careers in biotechnology and utilize skills to seek employment including job search databases and resume writing. | BTT101 BTT212 | E E |

For a DEGREE PROGRAM, indicate the courses that fulfill the General Education Student Learning Outcomes.

| GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR: GSBT | Supporting course(s) | I, M, E |
|--|---|---------------------------------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | BTT 101 History Elective | I E |
| Communication Skills: Students will read, write and speak effectively to build knowledge and convey meaning. | BIO 107 BIO 231 BIO 259 BIO 260 ENG 101/102 E | E E E E E |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | BIO 107 BIO 231 BIO 259 BIO 260 BTT 101 ENG102 | E E E E M M |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals.. | History Elective | I |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | BIO 107 BIO231 BIO259 BIO260 BTT211 BTT212 CHM105/106 | M E E E E I E |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

1. Degree or Certificate Name and Code (current): Biotechnology Technician Certificate (BI)
(from current AY 22/23 catalog)

2. Originator: Archana Mudbidri Date: 01/12/2023

3. School Dean: Dr. Ben Benton Date: 01/12/2023

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date:

1. Recommended by the School of Math and Science Date: 01/19/2023
Comments: Unanimously approved

2. AA Leadership Team: _____ Date: _____

Recommended: _____ Not Recommended: _____
Comments:

3. VP/Academic Affairs: _____ Date: _____

Recommended: _____ Not Recommended: _____
Comments:

4. Learning Council: _____ Date: _____

Recommended: _____ Not Recommended: _____
Comments:

5. VP/Academic Affairs: _____ Date: _____

Approved: _____ Not Approved: _____
Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

DEGREE OR CERTIFICATE REVISION PROPOSAL

| |
|---|
| Degree or Certificate name and code: Biotechnology Technician Certificate (BI) |
| Provide a detailed list of the proposed changes to the degree or certificate. 1. Incorporate course name and prerequisite changes for BIO 107. 2. Incorporate prerequisite changes for BIO 231. 3. Incorporate prerequisite changes for BIO 259. 4. Remove CHM 105 from Semester 1. 5. Adjust individual semester credit totals and milestones, accordingly. 6. Adjust overall total credits required for program from 29 to 25. |
| Attachments: Current academic map Proposed academic map with changes in bold |
| Submit separate proposals for any new courses or revised courses in the degree or certificate. Please list here the new courses or revised courses for which separate proposals will be submitted. Course Revisions submitted for: Principles of Biology I (BIO 107) General Microbiology (BIO 231) Cell Biology (BIO 259) |
| Provide a rationale for the proposed changes. In order to increase student success in Liberal Arts-Biology and other programs that require BIO 107, the prerequisite has been changed to require one semester of chemistry (CHM 105 or CHM 123). In order to clarify the content, the name has been changed to BIO 107: Introduction to Cells and Molecules. In order to complete this certificate in 3 semesters, the admission requirements for this certificate were changed to include the new prerequisites for BIO 107 in semester 1. |
| Do any of the proposed changes affect the program goals and/or the program student learning outcomes? Please indicate any revisions to the program goals and/or program student learning outcomes. No changes. |
| Do any of the proposed changes affect another department? Examples include the deletion or addition of program courses that are offered by other departments. Please confer with the coordinators of affected departments. Department(s) Affected: No other departments affected by the certificate changes. |
| Do any of the proposed changes affect articulation agreements? Consult with the Transfer Coordinator. |
| For an associate degree program, are there any changes in the number of general education credits that could affect MassTransfer? If yes please provide a rationale. |
| Will any of the following be required: No additional needs. Additional staff____Additional space____Additional equipment____Additional library resources ____ Provide a rationale for any needs indicated and include approximate cost of equipment. |

Please complete the following tables for your program or indicate the date of the **Academic Matters** (within the last three years) where they have previously been published.

List the PROGRAM STUDENT LEARNING OUTCOMES in the table below. Indicate the course or courses that will fulfill each outcome and indicate the degree or level of connection between the course and outcome as indicated here.

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

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

| PROGRAM STUDENT LEARNING OUTCOMES FOR: BI | | Supporting course(s) | I, M, E |
|---|---|---|---------------------------------|
| 1 | Explain the fundamental scientific principles in the field of biotechnology. | BIO 107 BTT 101 BIO 231 BIO 259 BIO 260 BTT 211 BTT 212 | M I E E E E M |
| 2 | Work effectively and collaboratively in a laboratory setting. | BIO 107 BIO231 BIO259 BIO260 BTT211 BTT212 | M E E E E I |
| 3 | Demonstrate the proper use of basic laboratory equipment, adhering to laboratory safety protocols, as well as a technical proficiency in computer technology for data analysis. | BIO107 BIO231 BIO259 BIO260 BTT211 BTT212 | M E E E E I |
| 4 | Apply mathematical principles to biotechnological concepts. | BIO231 BIO262 BIO259 BTT211 BTT212 | M E E E E |
| 5 | Demonstrate clear and effective communication skills, including verbal, written, graphic, and numerical, with emphasis on documentation. | BIO107 BIO 231 BIO 259 BIO 260 BTT211/212 | M M M M E |
| 6 | Utilize scientific methodology and critical thinking to analyze and/or troubleshoot biotechnological issues. | BTT101 BIO231 BIO259 BIO260 BTT211 BTT212 | I E E E E E |

| | | | |
|---|--|------------------|--------|
| 7 | Demonstrate knowledge and appreciation of the relative historical and cultural perspectives of society. | BTT 101 | E M |
| 8 | Identify careers in biotechnology and utilize skills to seek employment including job search databases and resume writing. | BTT101 BTT212 | E E |

For a DEGREE PROGRAM, indicate the courses that fulfill the General Education Student Learning Outcomes.

| GENERAL EDUCATION STUDENT LEARNING OUTCOMES FOR: | Supporting course(s) | I, M, E |
|--|----------------------|---------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | | |
| Communication Skills: Students will read, write and speak effectively to build knowledge and convey meaning. | | |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | | |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals.. | | |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | | |

Mathematics & Sciences
Liberal Arts - Biology Option - Associate in Arts (Program Code: LABI)
CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|---------|---------|--|---|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: LABI). Register for and successfully complete all courses to graduate in four semesters. Attend Transfer Services events. For information see www.QCC.edu/transfer . Complete BIO 107, ENG 101, and MAT 122. Complete prerequisite(s) for MAT 123. |
| 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 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| | | Total | 14 | | |
| Semester 2 | | | | | Meet with Academic Advisor to review choices (CHM 201 or PHY 101 or PHY 105) that depend on transfer plans and mathematics prerequisite(s) completed. Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. Complete BIO 108. |
| Principles of Biology II | BIO 108 | F/S | 4 | BIO 107 | |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |
| 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 | |
| Social Science Foundational Elective | --- | F/S/SU | 3 | | |
| | | Total | 17 | | |
| Semester 3 | | | | | Meet with representatives of four-year schools to discuss/begin the transfer application process. Confirm that MassTransfer general education transfer block can be completed. |
| Principles of Genetics | BIO 262 | F/S | 4 | BIO 108, MAT 122 | |
| Organic Chemistry I OR | CHM 201 | F/S/SU | 4 | CHM 106 or CHM 124 | |
| Physics I OR | PHY 101 | F/SU | | 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 | | | | | Continue with/complete the transfer application process. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| General Microbiology OR | BIO 231 | F/S | 4 | BIO 107 and CHM 105 or CHM 123 | |
| Cell Biology | BIO 259 | | | | |
| Organic Chemistry II OR | CHM 202 | F/S/SU | 4 | CHM 201 | |
| Physics II OR | PHY 102 | S/SU | | PHY 101 | |
| 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 | | |

Mathematics & Sciences
Liberal Arts - Biology Option - Associate in Arts (Program Code: LABI)
PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|---------|---------|--|---|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: LABI).</p> <p>Register for and successfully complete all courses to graduate in four semesters.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete CHM 105, ENG 101, and MAT 122.</p> <p>Complete prerequisite(s) for MAT 123.</p> |
| Biology I: Introduction to Organismal Diversity | BIO 106 | F/S | 4 | 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 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| | | Total | 14 | | |
| Semester 2 | | | | | <p>Meet with Academic Advisor to review choices (CHM 201 or PHY 101 or PHY 105) that depend on transfer plans and mathematics prerequisite(s) completed.</p> <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> <p>Complete BIO 107.</p> |
| Biology II: Introduction to Cells and Molecules | BIO 107 | F/S/SU | 4 | CHM 105 or CHM 123, ENG 101 | |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |
| 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 | |
| Social Science Foundational Elective | --- | F/S/SU | 3 | | |
| | | Total | 17 | | |
| Semester 3 | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> <p>Confirm that MassTransfer general education transfer block can be completed.</p> |
| Principles of Genetics | BIO 262 | F/S | 4 | BIO 106, BIO 107, MAT 122 | |
| Organic Chemistry I OR | CHM 201 | F/S/SU | 4 | CHM 106 or CHM 124 | |
| Physics I OR | PHY 101 | F/SU | | 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 | | | | | <p>Continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| General Microbiology OR | BIO 231 | F/S | 4 | BIO 107 | |
| Cell Biology | BIO 259 | | | | |
| Organic Chemistry II OR | CHM 202 | F/S/SU | 4 | CHM 201 | |
| Physics II OR | PHY 102 | S/SU | | PHY 101 | |
| 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 | | |

Mathematics & Sciences
Liberal Arts - Chemistry Option - Associate in Arts (Program Code: LACH)
CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|--|---|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: LACH). Register for and successfully complete all courses to graduate in five semesters. 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 | |
| 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 | |
| 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 | |
| | | Total | 15 | | |
| Semester 2 | | | | | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. Confirm that MassTransfer general education transfer block can be completed. Complete CHM 106 and MAT 234. |
| Principles of Biology II | BIO 108 | F/S | 4 | BIO 107 | |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Calculus II | MAT 234 | F/S/SU | 4 | MAT 233 | |
| | | Total | 15 | | |
| Semester 3 (Summer) | | | | | |
| Creative Arts Elective | --- | F/S/SU | 3 | | |
| Multiple Perspectives Elective | --- | F/S/SU | 3 | | |
| | | Total | 6 | | |
| Semester 4 | | | | | Meet with representatives of four-year schools to discuss/begin the transfer application process. Complete CHM 201 and PHY 105. |
| Organic Chemistry I | CHM 201 | F/S/SU | 4 | CHM 106 or CHM 124 | |
| General Physics I: Newtonian Mechanics | PHY 105 | F/S/SU | 4 | MAT 233 | |
| Literature, Philosophy, or Language Elective | --- | F/S/SU | 3 | | |
| | | Total | 11 | | |
| Semester 5 | | | | | Continue with/complete the transfer application process. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Organic Chemistry II | CHM 202 | F/S/SU | 4 | CHM 201 | |
| 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 | | |
| | | Total | 14 | | |
| Total Credits Required | | | 61 | | |

Mathematics & Sciences**Liberal Arts - Chemistry Option - Associate in Arts (Program Code: LACH)****PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|--|---|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: LACH).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 233.</p> |
| Biology I: Introduction to Organismal Diversity | BIO 106 | F/S | 4 | 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 | |
| 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 | |
| | | Total | 15 | | |
| Semester 2 | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> <p>Confirm that MassTransfer general education transfer block can be completed.</p> <p>Complete CHM 106 and MAT 234.</p> |
| Biology II: Introduction to Cells and Molecules | BIO 107 | F/S/SU | 4 | CHM 105 or CHM 123, ENG 101 | |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Calculus II | MAT 234 | F/S/SU | 4 | MAT 233 | |
| | | Total | 15 | | |
| Semester 3 (Summer) | | | | | |
| Creative Arts Elective | --- | F/S/SU | 3 | | |
| Multiple Perspectives Elective | --- | F/S/SU | 3 | | |
| | | Total | 6 | | |
| Semester 4 | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> <p>Complete CHM 201 and PHY 105.</p> |
| Organic Chemistry I | CHM 201 | F/S/SU | 4 | CHM 106 or CHM 124 | |
| General Physics I: Newtonian Mechanics | PHY 105 | F/S/SU | 4 | MAT 233 | |
| Literature, Philosophy, or Language Elective | --- | F/S/SU | 3 | | |
| | | Total | 11 | | |
| Semester 5 | | | | | <p>Continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Organic Chemistry II | CHM 202 | F/S/SU | 4 | CHM 201 | |
| 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 | | |
| | | Total | 14 | | |
| Total Credits Required | | | 61 | | |

Mathematics & Sciences

Liberal Arts - Environmental Science Option - Associate in Arts (Program Code: LAES)

CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: LAES).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Meet with Academic Advisor to choose courses consistent with academic plan.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 123.</p> |
| 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 | |
| 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 | 14 | | |
| Semester 2 | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| Principles of Biology II | BIO 108 | F/S | 4 | BIO 107 | |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| College Mathematics II: Trigonometry | MAT 124 | F/S/SU | 3 | MAT 123 or approp place score | |
| | | Total | 14 | | |
| Semester 3 (Summer) | | | | | |
| 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 | 6 | | |
| Semester 4 | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> <p>Complete MassTransfer block audit to determine eligibility for transfer to public colleges.</p> <p>Complete Liberal Arts - Environmental Science Option degree audit.</p> |
| Calculus I | MAT 233 | F/S/SU | 4 | MAT 124 or approp place score | |
| Physics I | PHY 101 | F/SU | 4 | MAT 148 or Coreq: MAT 124 | |
| Climate and Weather: Causes and Effects | SCI 104 | F/S/SU | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| 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 | |
| | | Total | 15 | | |
| Semester 5 | | | | | <p>Continue with/complete the transfer application process.</p> <p>Complete MAT 122.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| Introduction to Ethics | PHI 131 | F/S/SU | 3 | Placement into college level English | |
| Sustaining Earth's Environment | SCI 110 | F/S | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | |
| Economics Elective (200-level) | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Total Credits Required | | | 62 | | |

Mathematics & Sciences

Liberal Arts - Environmental Science Option - Associate in Arts (Program Code: LAES)

PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: LAES).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Meet with Academic Advisor to choose courses consistent with academic plan.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 123.</p> |
| Biology I: Introduction to Organismal Diversity | BIO 106 | F/S | 4 | 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 | |
| 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 | 14 | | |
| Semester 2 | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| Biology II: Introduction to Cells and Molecules | BIO 107 | F/S/SU | 4 | CHM 105 or CHM 123, ENG 101 | |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| College Mathematics II: Trigonometry | MAT 124 | F/S/SU | 3 | MAT 123 or approp place score | |
| | | Total | 14 | | |
| Semester 3 (Summer) | | | | | |
| 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 | 6 | | |
| Semester 4 | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> <p>Complete MassTransfer block audit to determine eligibility for transfer to public colleges.</p> <p>Complete Liberal Arts - Environmental Science Option degree audit.</p> |
| Calculus I | MAT 233 | F/S/SU | 4 | MAT 124 or approp place score | |
| Physics I | PHY 101 | F/SU | 4 | MAT 148 or Coreq: MAT 124 | |
| Climate and Weather: Causes and Effects | SCI 104 | F/S/SU | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| 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 | |
| | | Total | 15 | | |
| Semester 5 | | | | | <p>Continue with/complete the transfer application process.</p> <p>Complete MAT 122.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| Introduction to Ethics | PHI 131 | F/S/SU | 3 | Placement into college level English | |
| Sustaining Earth's Environment | SCI 110 | F/S | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | |
| Economics Elective (200-level) | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Total Credits Required | | | 62 | | |

Mathematics & Sciences (cross-listed under Healthcare)
General Studies - Pre-Pharmacy Option - Associate in Arts (Program Code: GSPH)

CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|--|---|
| Semester 1 (Fall) | | | | | Apply and get accepted to this program (Program Code: GSPH). Register for and successfully complete all courses to graduate in five semesters. Attend Transfer Services events. For information see www.QCC.edu/transfer . Complete ENG 101 and MAT 122. |
| 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 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| | | Total | 14 | | |
| Semester 2 (Spring) | | | | | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Principles of Biology II | BIO 108 | F/S | 4 | BIO 107 | |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| College Mathematics II: Trigonometry | MAT 124 | F/S/SU | 3 | MAT 123 or approp place score | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 17 | | |
| Semester 3 (Summer) | | | | | Meet with Academic Advisor to choose Electives required for program. Complete BIO 111 with lab. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| 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 | |
| Economics Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 4 (Fall) | | | | | Meet with representatives of pharmacy schools to discuss/begin the transfer application process. Confirm that MassTransfer general education transfer block can be completed. Submit transfer application to pharmacy school during October/November. |
| General Microbiology OR | BIO 231 | F/S | 4 | BIO 107 and CHM 105 or CHM 123 | |
| Medical Microbiology | BIO 232 | F/S/SU | | BIO 112 or CHM 105 or CHM 123 | |
| Organic Chemistry I | CHM 201 | F/S/SU | 4 | CHM 106 or CHM 124 | |
| Calculus I | MAT 233 | F/S/SU | 4 | MAT 124 or approp place score | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 5 (Spring) | | | | | Prepare for interview with pharmacy colleges for admission. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Organic Chemistry II | CHM 202 | F/S/SU | 4 | CHM 201 | |
| General Physics I: Newtonian Mechanics | PHY 105 | F/S/SU | 4 | MAT 233 | |
| Political Science Elective | --- | F/S/SU | 3 | | |
| Psychology Elective (200-level) or Sociology Elective (200-level) | --- | F/S/SU | 3 | | |
| | | Total | 14 | | |
| Total Credits Required | | | 73 | | |

Mathematics & Sciences (cross-listed under Healthcare)
General Studies - Pre-Pharmacy Option - Associate in Arts (Program Code: GSPH)

PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|--|---|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: GSPH).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 122.</p> |
| Biology I: Introduction to Organismal Diversity | BIO 106 | F/S | 4 | 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 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| | | Total | 14 | | |
| Semester 2 (Spring) | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| Biology II: Introduction to Cells and Molecules | BIO 107 | F/S/SU | 4 | CHM 105 or CHM 123, ENG 101 | |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| College Mathematics II: Trigonometry | MAT 124 | F/S/SU | 3 | MAT 123 or approp place score | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 17 | | |
| Semester 3 (Summer) | | | | | <p>Meet with Academic Advisor to choose Electives required for program.</p> <p>Complete BIO 111 with lab.</p> |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| 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 | |
| Economics Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 4 (Fall) | | | | | <p>Meet with representatives of pharmacy schools to discuss/begin the transfer application process.</p> <p>Confirm that MassTransfer general education transfer block can be completed.</p> <p>Submit transfer application to pharmacy school during October/November.</p> |
| General Microbiology OR | BIO 231 | F/S | 4 | BIO 107 | |
| Medical Microbiology | BIO 232 | F/S/SU | | BIO 112 or CHM 105 or CHM 123 | |
| Organic Chemistry I | CHM 201 | F/S/SU | 4 | CHM 106 or CHM 124 | |
| Calculus I | MAT 233 | F/S/SU | 4 | MAT 124 or approp place score | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 5 (Spring) | | | | | <p>Prepare for interview with pharmacy colleges for admission.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Organic Chemistry II | CHM 202 | F/S/SU | 4 | CHM 201 | |
| General Physics I: Newtonian Mechanics | PHY 105 | F/S/SU | 4 | MAT 233 | |
| Political Science Elective | --- | F/S/SU | 3 | | |
| Psychology Elective (200-level) or Sociology Elective (200-level) | --- | F/S/SU | 3 | | |
| | | Total | 14 | | |
| Total Credits Required | | | 73 | | |

Mathematics & Sciences
General Studies - Biotechnology Option - Associate in Arts (Program Code: GSBT)
CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--------------------------------------|----------|--------------|-----------|---|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: GSBT). Register for and successfully complete all courses to graduate in five semesters. Complete BIO 107 and ENG 101. Complete prerequisite(s) for MAT 123. |
| 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 | |
| Introduction to Biotechnology | BTT 101 | F/S/SU | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| 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 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 14 | | |
| Semester 2 | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . |
| Cell Biology | BIO 259 | F/S | 4 | BIO 107 and CHM 105 or CHM 123 | |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |
| 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 | 14 | | |
| Semester 3 | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. Confirm that MassTransfer general education transfer block can be completed. |
| General Microbiology | BIO 231 | F/S | 4 | BIO 107 and CHM 105 or CHM 123 | |
| College Mathematics I: Pre-Calculus | MAT 123 | F/S/SU | 3 | MAT 100 or approp place score | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 4 | | | | | Meet with Academic Advisor to discuss internship option. Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Molecular Biology | BIO 260 | S | 4 | BIO 107 | |
| College Mathematics II: Trigonometry | MAT 124 | F/S/SU | 3 | MAT 123 or approp place score | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 5 (Summer) | | | | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Techniques in Biotechnology I | BTT 211 | SU | 3 | BIO 231, BIO 259, BIO 260 | |
| Techniques in Biotechnology II | BTT 212 | SU | 3 | BIO 231, BIO 259, BIO 260 | |
| | | Total | 6 | | |
| Total Credits Required | | | 60 | | |

Mathematics & Sciences
General Studies - Biotechnology Option - Associate in Arts (Program Code: GSBT)
PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------------|---------------|-----------|---|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: GSBT). |
| Introduction to Biotechnology | BTT 101 | F/S/SU | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | Register for and successfully complete all courses to graduate in five semesters. |
| 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 CHM 105 and ENG 101. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | Complete prerequisite(s) for MAT 123. |
| | | Total | 13 | | |
| Semester 2 | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . |
| Principles of Biology I | BIO 107 | F/S/SU | 4 | CHM 105 or CHM 123, ENG 101 | Complete BIO 107. |
| General Chemistry II | CHM 106 | F/S/SU | 4 | CHM 105 | |
| 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 | 14 | | |
| Semester 3 | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| General Microbiology | BIO 231 | F/S | 4 | BIO 107 | Confirm that MassTransfer general education transfer block can be completed. |
| College Mathematics II: Trigonometry | MAT 124 | F/S/SU | 3 | MAT 123 or approp place score | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 4 | | | | | Meet with Academic Advisor to discuss internship option. |
| Cell Biology | BIO 259 | F/S | 4 | BIO 107 | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Molecular Biology | BIO 260 | S | 4 | BIO 107 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 14 | | |
| Semester 5 (Summer) | | | | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Techniques in Biotechnology I | BTT 211 | SU | 3 | BIO 231, BIO 259, BIO 260 | |
| Techniques in Biotechnology II | BTT 212 | SU | 3 | BIO 231, BIO 259, BIO 260 | |
| | | Total | 6 | | |
| Total Credits Required | | | 60 | | |

Mathematics & Sciences

Biotechnology Technician Certificate (Program Code: BI)

CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--------------------------------|----------|--------------|-----------|---|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: BI).</p> <p>Register for and successfully complete all courses to graduate in three semesters.</p> <p>Meet with Academic Advisor to discuss associate degree (Program Code: GSBT); or create an account on the QCC job board to search for internships, co-ops and jobs.</p> <p>Complete BIO 107.</p> |
| 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 | |
| Introduction to Biotechnology | BTT 101 | F/S/SU | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| 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 | |
| | | Total | 11 | | |
| Semester 2 | | | | | <p>Apply to associate degree (Program Code: GSBT); or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> |
| General Microbiology | BIO 231 | F/S | 4 | BIO 107 and CHM 105 or CHM 123 | |
| Cell Biology | BIO 259 | F/S | 4 | BIO 107 and CHM 105 or CHM 123 | |
| Molecular Biology | BIO 260 | S | 4 | BIO 107 | |
| | | Total | 12 | | |
| Semester 3 (Summer) | | | | | <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Techniques in Biotechnology I | BTT 211 | SU | 3 | BIO 231, BIO 259, BIO 260 | |
| Techniques in Biotechnology II | BTT 212 | SU | 3 | BIO 231, BIO 259, BIO 260 | |
| | | Total | 6 | | |
| Total Credits Required | | | 29 | | |

Mathematics & Sciences

Biotechnology Technician Certificate (Program Code: BI)

PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: BI). CHM 105 or CHM 123 and ENG 101 must be completed prior to entering the program.</p> <p>Register for and successfully complete all courses to graduate in three semesters.</p> <p>Meet with Academic Advisor to discuss associate degree (Program Code: GSBT); or create an account on the QCC job board to search for internships, co-ops and jobs.</p> <p>Complete BIO 107.</p> |
| Biology II: Introduction to Cells and Molecules | BIO 107 | F/S/SU | 4 | CHM 105 or CHM 123, ENG 101 | |
| Introduction to Biotechnology | BTT 101 | F/S/SU | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| | | Total | 7 | | |
| Semester 2 | | | | | <p>Apply to associate degree (Program Code: GSBT); or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> |
| General Microbiology | BIO 231 | F/S | 4 | BIO 107 | |
| Cell Biology | BIO 259 | F/S | 4 | BIO 107 | |
| Molecular Biology | BIO 260 | S | 4 | BIO 107 | |
| | | Total | 12 | | |
| Semester 3 (Summer) | | | | | <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Techniques in Biotechnology I | BTT 211 | SU | 3 | BIO 231, BIO 259, BIO 260 | |
| Techniques in Biotechnology II | BTT 212 | SU | 3 | BIO 231, BIO 259, BIO 260 | |
| | | Total | 6 | | |
| Total Credits Required | | | 25 | | |

Mathematics & Sciences

Liberal Arts - Mathematics Option - Associate in Arts (Program Code: LAMT)

CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|--|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: LAMT). |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | Register for and successfully complete all courses to graduate in four semesters. |
| Principles of Macroeconomics OR | ECO 215 | F/S/SU | 3 | Coreq: ENG 101 | |
| Principles of Microeconomics | ECO 216 | | | | |
| 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 | |
| Introduction to Psychology OR | PSY 101 | | | | |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | Complete MAT 233. |
| | | Total | 16 | | |
| Semester 2 | | | | | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Computer Science I | CSC 108 | F/S | 4 | CIS 111, Placement into college level English, MAT 100 or approp place score | Complete MAT 234. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Discrete Mathematics | MAT 125 | F/S | 3 | MAT 123 or approp place score | |
| Calculus II | MAT 234 | F/S/SU | 4 | MAT 233 | |
| | | Total | 14 | | |
| Semester 3 | | | | | Meet with Academic Advisor to review Lab Science Elective choices (Semesters 3 and 4). Recommended sequences: BIO 107 and BIO 108 ; or CHM 105 and CHM 106; or PHY 105 and PHY 107. |
| Introduction to Humanities | HUM 105 | F/S/SU | 3 | ENG 101 | Meet with representatives of four-year schools to discuss/begin the transfer application process. |
| Calculus III | MAT 235 | F/S/SU | 4 | MAT 234 | |
| Probability & Statistics for Engineers and Scientists | MAT 237 | F/S/SU | 3 | MAT 234 | |
| Lab Science Elective | --- | F/S/SU | 4 | | Confirm that MassTransfer STEM general education transfer block can be completed. |
| | | Total | 14 | | Complete MAT 235. |
| Semester 4 | | | | | Continue with/complete the transfer application process. |
| World History I: Beginning to 1500 OR | HST 104 | F/S/SU | 3 | ENG 101 | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| World History II: 1500 to World War I OR | HST 105 | | | | |
| World History III: World War I to Present | HST 106 | | | | |
| Mathematics and Science in the Humanities | HUM 234 | F/S/SU | 3 | ENG 102 | |
| Differential Equations | MAT 238 | F/S/SU | 3 | MAT 235 | |
| Linear Algebra | MAT 243 | F/S/SU | 3 | Coreq: MAT 238 | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| | | Total | 16 | | |
| Total Credits Required | | | 60 | | |

Mathematics & Sciences
Liberal Arts - Mathematics Option - Associate in Arts (Program Code: LAMT)
PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|--|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: LAMT). |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | Register for and successfully complete all courses to graduate in four semesters. |
| Principles of Macroeconomics OR | ECO 215 | F/S/SU | 3 | Coreq: ENG 101 | |
| Principles of Microeconomics | ECO 216 | | | | |
| 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 | |
| Introduction to Psychology OR | PSY 101 | | | | |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | Complete MAT 233. |
| | | Total | 16 | | |
| Semester 2 | | | | | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Computer Science I | CSC 108 | F/S | 4 | CIS 111, Placement into college level English, MAT 100 or approp place score | Complete MAT 234. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Discrete Mathematics | MAT 125 | F/S | 3 | MAT 123 or approp place score | |
| Calculus II | MAT 234 | F/S/SU | 4 | MAT 233 | |
| | | Total | 14 | | |
| Semester 3 | | | | | Meet with Academic Advisor to review Lab Science Elective choices (Semesters 3 and 4). Recommended sequences: BIO 106 and BIO 107 ; or CHM 105 and CHM 106; or PHY 105 and PHY 107. |
| Introduction to Humanities | HUM 105 | F/S/SU | 3 | ENG 101 | Meet with representatives of four-year schools to discuss/begin the transfer application process. |
| Calculus III | MAT 235 | F/S/SU | 4 | MAT 234 | |
| Probability & Statistics for Engineers and Scientists | MAT 237 | F/S/SU | 3 | MAT 234 | |
| Lab Science Elective | --- | F/S/SU | 4 | | Confirm that MassTransfer STEM general education transfer block can be completed. |
| | | Total | 14 | | Complete MAT 235. |
| Semester 4 | | | | | Continue with/complete the transfer application process. |
| World History I: Beginning to 1500 OR | HST 104 | F/S/SU | 3 | ENG 101 | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| World History II: 1500 to World War I OR | HST 105 | | | | |
| World History III: World War I to Present | HST 106 | | | | |
| Mathematics and Science in the Humanities | HUM 234 | F/S/SU | 3 | ENG 102 | |
| Differential Equations | MAT 238 | F/S/SU | 3 | MAT 235 | |
| Linear Algebra | MAT 243 | F/S/SU | 3 | Coreq: MAT 238 | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| | | Total | 16 | | |
| Total Credits Required | | | 60 | | |

Engineering & Engineering Technology
Engineering - Associate in Science (Program Code: ERG)

CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|---|--|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: ERG).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Meet with Program Coordinator.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 233.</p> |
| 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 | | |
| Semester 2 (Spring) | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| 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) | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> |
| 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) | | | | | <p>Continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| 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 | | |

Engineering & Engineering Technology
Engineering - Associate in Science (Program Code: ERG)

PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|-----------|--------------------------------------|--|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: ERG).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Meet with Program Coordinator.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101 and MAT 233.</p> |
| 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 | | |
| Semester 2 (Spring) | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| 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) | | | | | |
| Biology II: Introduction to Cells and Molecules | BIO 107 | F/S/SU | 4 | CHM 105 or CHM 123, ENG 101 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| | | Total | 7 | | |
| Semester 4 (Fall) | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> |
| 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) | | | | | <p>Continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| 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 | | |

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

| 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 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 | | |

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

| 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 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 | 14 | | |
| Semester 2 | | | | | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Biology II: Introduction to Cells and Molecules | BIO 107 | F/S/SU | 4 | CHM 105 or CHM 123, ENG 101 | |
| 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. |
| Cell Biology | BIO 259 | F/S | 4 | BIO 107 | |
| 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 | 18 | | |
| Semester 5 | | | | | Continue with/complete the transfer application process. Submit an Intent to Graduate Form, located on The Q. |
| 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 | | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name: BIO 101 General Biology: Core Concepts**
(from current AY22/23 catalog)

2. **Originator: Lisa Antonelli**

Date: 20 October 2022

3. **School Dean: Ben Benton**

Date: 20 October 2022

4. **Effective Date: Fall 2023**

5. **Reviewed by Program and Process (if applicable)**

Date:

1. **Recommended by the School of Math and Science**
Comments: Unanimously approved

Date: 01/19/2023

2. **AA Leadership Team: _____ Date: _____**

Recommended: _____ Not Recommended: _____
Comments: _____

3. **VP/Academic Affairs: _____ Date: _____**

Recommended: _____ Not Recommended: _____
Comments: _____

4. **Learning Council: _____ Date: _____**

Recommended: _____ Not Recommended: _____
Comments: _____

5. **VP/Academic Affairs: _____ Date: _____**

Approved: _____ Not Approved: _____
Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

| | |
|--|---------------------------------|
| Type of Revision: ___Description X Prerequisite ___Corequisite ___Number ___Name ___# Credits ___Elective Type ___Other (explain) | |
| Course Discipline or Department: Natural Sciences | School: Math and Science |
| Current Course Number: BIO 101 | |
| Current Course Name: General Biology: Core Concepts | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): BIO 101 General Biology: Core Concepts Students intending to major in the health sciences learn scientific method, basic chemistry (for the understanding of biologic concepts), structure and function of basic cells and tissues, mitosis and meiosis, genetics, and the basic principles of evolution. The laboratory component covers basic techniques in observation, analysis, and interpretation of data relating to the topics discussed in lecture. The lab activities are investigative in nature with the students devising hypotheses, predictions, and identifying independent and dependent variables. Credits: 4 Prerequisite: Placement into college level English, MAT 095 with a grade of “C” or higher or appropriate placement score Semester Offered: F/S/SU | |
| Proposed Description (include all proposed changes): BIO 101 General Biology: Core Concepts Students intending to major in the health sciences learn scientific method, basic chemistry (for the understanding of biologic concepts), structure and function of basic cells and tissues, mitosis and meiosis, genetics, and the basic principles of evolution. The laboratory component covers basic techniques in observation, analysis, and interpretation of data relating to the topics discussed in lecture. The lab activities are investigative in nature with the students devising hypotheses, predictions, and identifying independent and dependent variables. 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 | |
| Rationale for the change: By removing the word “score” from the prerequisite, students can enroll in BIO 101 with multiple measures for mathematics placement out of MAT 095 including the CAPM waiver. This will enable more students to enroll in BIO 101 without needing to take the QMAT math placement examination. | |
| Provide a description of any change in course content. No change in course content. | |
| List the programs that are affected by this change (list program names and program codes as they appear in the college catalog): Please confer with the coordinator of the affected department. Healthcare (HLC) Healthcare-Medical Office Management Option (HCMO) Healthcare-Medical Sales/Marketing Option (HCSM) Healthcare-Pre-Dental Hygiene Option (HCDH) Healthcare-Pre-Nursing Option (HCNU) Liberal Arts-Psychology Option (LAPY) | |

Emergency Medical Technician Certificate (EMT)

Nursing Assistant Certificate (NA)

Pharmacy Technician Certificate (PT)

Phlebotomy/EKG Technician Certificate (PEKG)

Attach current and proposed academic maps (with changes in **bold**) for all affected programs. You can obtain academic maps from Barb Zabka.

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

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** BIO 232 Medical Microbiology
(from current AY22/23 catalog)

2. **Originator:** Lisa Antonelli

Date: 17 November 2022

3. **School Dean:** Ben Benton

Date: 17 November 2022

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)**

Date:

1. **Recommended by the School of** Math and Science
Comments: Unanimously approved

Date: 01/19/2023

2. **AA Leadership Team:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

3. **VP/Academic Affairs:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

4. **Learning Council:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

5. **VP/Academic Affairs:** _____ **Date:** _____

Approved: _____ **Not Approved:** _____
Comments:

2022 – 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

| | |
|---|---------------------------------|
| Type of Revision: <input checked="" type="checkbox"/> Description <input type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input type="checkbox"/> Number <input type="checkbox"/> Name <input type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input checked="" type="checkbox"/> Other (explain): Revised course student learning outcomes | |
| Course Discipline or Department: Natural Sciences | School: Math and Science |
| Current Course Number: BIO 232 | |
| Current Course Name: Medical Microbiology | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): BIO 232 Medical Microbiology This course examines the major groups of pathogenic bacteria. Topics include microbial control, immunization, and the physiological problems these microorganisms produce on body tissues. Student learn the general structure and function of bacteria, viruses, molds, fungi, and rickettsiae; the factors which make these microbes pathogenic, and how these factors induce the disease state; how the human body fights infection naturally; and, methods of natural and passive immunization. Credits: 4 Prerequisite: BIO 112 or CHM 105 or CHM 123 Semester Offered: F/S/SU | |
| Proposed Description (include all proposed changes): BIO 232 Medical Microbiology This course examines the structure, growth, and control of medically significant bacteria, viruses, fungi, protozoa, and helminths. Students learn about the transmission, pathogenesis, and clinical manifestations of disease. The course includes host defense mechanisms and types of immunity. Students also focus on the cultivation, isolation, identification, and control of bacteria. Credits: 4 Prerequisite: BIO 112 or CHM 105 or CHM 123 Semester Offered: F/S/SU | |
| Rationale for the change: This BIO 232 course description corresponds more accurately to the revised Course Student Learning Outcomes and the content of the course. <ol style="list-style-type: none"> 1. Demonstrate competency in microbiology laboratory safety. 2. Apply proper laboratory techniques to isolate, identify, and classify microbes. 3. Differentiate the nutritional and environmental requirements for microbial growth. 4. Compare physical and chemical methods of microbial control. 5. Identify the reservoirs, modes of transmission, and virulence factors of medically significant pathogens. 6. Describe the pathogenesis and manifestations of infectious diseases. 7. Explain host defense mechanisms and the types of immunity. | |
| Provide a description of any change in course content: No change in course content. | |
| List the programs that are affected by this change (list program names and program codes as they appear in the college catalog). Please confer with the coordinator of the affected department: Course description wording change only – no change to program grids. | |
| Attach current and proposed academic maps (with changes in bold) for all affected programs. You can obtain academic maps from Barb Zabka. | |
| Please submit a generic syllabus to your dean with all of the revisions included. | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

NEW COURSE PROPOSAL

1. **Course Number and Name:** MAT 051 Topics in Mathematics Corequisite
2. **Originator:** Sheiba Mas-Oud, Math Dept **Date:** November 12, 2022
3. **School Dean:** Ben Benton, School of Math & Science **Date:** November 14, 2022
4. **Effective Date:** **Fall 2023**
5. **Reviewed by Program and Process (if applicable)** **Date:** November 7, 2022

1. **Recommended by the School of** Math and Science **Date:** 01/19/2023
Comments: Unanimously approved

2. **AA Leadership Team:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

3. **VP/Academic Affairs:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

4. **Learning Council:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

5. **VP/Academic Affairs:** _____ **Date:** _____

Approved: _____ **Not Approved:** _____
Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

NEW COURSE PROPOSAL

| | |
|---|-----------------------------------|
| Course Discipline/Department: Mathematics | School: Math & Science |
| Course Number: MAT 051 | |
| Course Name: Topics in Mathematics Corequisite | |
| Prerequisites and/or corequisites (confer with affected department coordinator): Corequisite: MAT 121 | |
| CIP code (check with IRaP Office): 27.0101 | |
| Effective Term/year: Fall 2023 | |
| <p>Give a rationale for the new course. Be sure to indicate whether this course replaces another course. Is the course transferable?</p> <ul style="list-style-type: none"> • The sole purpose of this course is to cover remediation math topics in a just-in-time format towards the successful completion of MAT 121 Topics in Mathematics. • This course must be taken as a corequisite with MAT 121 Topics in Mathematics. • This is not a stand-alone course. Instead, it is integrated with the MAT 121 Topics in Mathematics content. • This course is a developmental math course and is not transferable. • This course does not replace any current (as of Spring 2023) math course. • Two different “versions” of MAT 121 will be offered: <ul style="list-style-type: none"> ○ <i>Version 1:</i> 3-credit “traditional” course, which does not cover remediation topics ○ <i>Version 2:</i> 3-credit + 2-credit corequisite course (MAT 051), which includes just-in-time remediation topics • Placement into MAT 121: <ul style="list-style-type: none"> ○ Students are eligible to take “Version 1” of MAT 121 (3 credits only) and are not required to take the corequisite course MAT 051 (but are allowed to if they so choose) if: <ul style="list-style-type: none"> ▪ the student passes a college-level math course <i>or</i> ▪ the student has a QMAT placement score > 21 <i>or</i> ▪ the student meets the appropriate multiple-measure placement ○ Students who do not meet the criteria to take “Version 1” should register for “Version 2”. These students must also register for MAT 051 Topics in Mathematics Corequisite and will pay for 2 extra credit hours of just-in-time remediation. | |
| <p>Is the course content similar to other courses now offered? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, attach a statement from the coordinator of the department offering the similar course.</p> <p>This course contains <i>some</i> mathematical topics/objectives currently covered in MAT 090, MAT 095, and MAT 099. To say that MAT 051 is equivalent to MAT 090, or MAT 095, or MAT 099 is not accurate. Instead, this course pulls targeted content from these developmental courses towards the goal of just-in-time remediation before MAT 121 Topics in Mathematics topics are covered.</p> | |
| <p>Please indicate if this course will serve as any of the following types of electives</p> <p><input type="checkbox"/> Elective (any college level course can serve as an elective)</p> <p><input type="checkbox"/> Specific Type (indicate Business, Multiple Perspectives*, Liberal Arts, Humanities, Foreign Language, Social Science, Behavioral Science, Mathematics, Science, Lab Science, Social Science Foundational*, Literature, Philosophy or Language*, Creative Arts*)</p> <p><input type="checkbox"/> Program specific (name the program)</p> <p>*confer with the Liberal Arts Coordinator</p> <p>N/A</p> | |

Is this course required for a program? If yes, submit a separate DEGREE OR CERTIFICATE REVISION PROPOSAL. If the course is required for a new program, submit a separate NEW DEGREE, OPTION OR CERTIFICATE PROPOSAL. Please list all affected programs here.

N/A

Expected enrollment per term: **100s**

Expected enrollment per year: **100s**

Will any of the following be required:

Additional staff ☒ Additional space ☐ Additional equipment ☐ Additional library resources ☐

Provide a rationale for any needs indicated above and include approximate cost of equipment.

Students taking this course require remediation in high school level math concepts that support the MAT 121 Topics in Mathematics course. Student support for this course is critical. Embedded (peer) tutors in the classroom will be an important contribution towards the type of support these students will need. The plan is to incorporate Math Center tutors as embedded tutors in each corequisite section of MAT 121 Topics in Mathematics. We estimate that staffing for embedded tutors to be approximately \$600 per section offered. Initially we will offer 4-6 sections for a total cost of \$2400-\$3000.

Course Materials

| | | |
|---|-------------------------|--|
| Lecture Hours: 2 hours | Lab Hours: | Clinic Hours: |
| <p>General course description and prerequisites as it will appear in the college catalog (including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites):</p> <p>MAT 051 Topics in Mathematics Corequisite This course covers various topics in developmental mathematics to support students enrolled in MAT 121. Students apply remedial mathematics topics such as fractions, decimals, percent, order of operations, scientific notation, exponential notation, and solving equations to strengthen comprehension of college level topics in MAT 121. This course requires co-enrollment with MAT 121. Credits: 2 Corequisite: MAT 121 Semester Offered: F/S/SU</p> | | |
| Lecture Hours per semester: (e.g., 45 hr. for 3 credit course) 30 hours | Lab Hours per semester: | Clinic Hours or Internship Hours per semester: |
| <p>Provide the following course information selected from the E-2 checklist for course materials. Provide your dean with a syllabus that includes all of the checklist course materials.</p> <ul style="list-style-type: none"> All required course readings (whether written or electronic), including information on publisher and edition used or website address or link Student Learning Outcomes (list) Teaching procedures (briefly describe) Course topics and/or assignments and/or required and/or supplemental reading Tentative test schedule/assignment(s) schedule Basis for student grading and calculation of final grade as well as criteria for evaluating student performance <p>This course is not a stand-alone math course. Instead, it must be taken concurrently with MAT 121 Topics in Mathematics. Therefore, its course material will be incorporated directly into a MAT 121 Topics in Mathematics syllabus (see below for an example).</p> <p>Note: Students will receive a final course grade of “Q” for MAT 051, which will not affect a student’s GPA.</p> | | |

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

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

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

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

NA – Not Applicable: This is not a learning outcome for this course.

| CONNECTION TO GENERAL EDUCATION STUDENT LEARNING OUTCOMES | I, M, E, NA |
|--|-------------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | NA |
| Communication Skills: Students will read, write, and speak effectively to build knowledge and convey meaning. | NA |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | NA |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals. | NA |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | NA |

(Gen. Ed. Goals adopted 2022).

****CIVIC LITERACY**

If civic learning or civic literacy is a component of this course (within the course description, course topics and/or student learning outcomes), please consult the “Guide for Designating Civic Learning Courses” from the Department of Higher Education, available on Frequently Used Forms (with the other Academic Governance Forms). Utilizing the DHE definitions, please indicate whether this course can be designated as one of the following:

☐ Civic Learning (CL)

☐ Civic Learning with Engagement Required (CLER)

☐ Civic Learning with Engagement Optional (CLEO)

☒ Civic Learning is not a component of this course (NA)

Quinsigamond Community College School of Math and Science

Instructor's Information

Instructor: Professor XX (she/her/hers)
Office: 403A
Email: xxxxx@qcc.mass.edu
Telephone: 508-854-xxxx

Course Information

Course: MAT 121 Topics in Mathematics – Section XX
+ MAT 051 Topics in Mathematics Corequisite
Meets: Tuesdays, Thursdays from 11:00am – 12:20pm and
Fridays from 11:00am – 12:30pm
Room: 178A
Credits: 3 credits for MAT 121 + 2 credits of MAT 051 corequisite remediation
Semester: Spring 2023

Course Descriptions

MAT 121: This course explores a variety of topics in contemporary mathematics. These topics include problem solving and critical thinking, personal finance, numeration systems, set theory, counting principles and probability theory, and voting methods.

MAT 051: This course covers various topics in developmental mathematics to support students enrolled in MAT 121 Topics in Mathematics. Students apply remedial mathematics topics such as fractions, decimals, percent, order of operations, scientific notation, exponential notation, and solving equations to strengthen comprehension of college-level topics in MAT 121. This course requires co-enrollment with MAT 121 Topics in Mathematics.

MAT 121 Prerequisite or Corequisite

Prerequisite: College-level mathematics course or QMAT placement score > 21 or appropriate multiple measures placement OR

Corequisite: MAT 051 Topics in Mathematics Corequisite

Required Textbook/Materials/Website

Textbook: Thinking Mathematically, Blitzer, 7th Edition, Pearson Education, © 2019.
Materials: Graphing calculator (recommended) or scientific calculator
Website: MyLabMath (required)

Student Learning Outcomes

Students will be able to:

1. Apply deductive or inductive reasoning appropriately to solve mathematical problems.
2. Apply set theory to perform operations with sets and model them using Venn diagrams.
3. Convert numbers from one base to another and perform operations with numbers in different bases.
4. Evaluate factorial expressions, permutations, combinations, and compute probabilities.
5. Determine present value, future value, value of an annuity and apply them to real-life situations like finding mortgage payments, car payments, and pension plans.
6. Apply different voting methods to determine an election's winner.

Corequisite Model

This particular course contains college-level math topics along with just-in-time remediation of particular developmental math topics to support the necessary learning of these math topics. For example, before probability is covered, students will spend time learning/reviewing how to appropriately round decimals, simplify fractions, and perform math operations with fractions. The remediation topics are specifically chosen to help students be successful in the college-level math material. To cover these remediation topics, extra time is required in class. Therefore, two (2) extra credit hours are required as a corequisite to the 3-credit Topics in Mathematics course.

Just-in-Time Remediation Topics Include:

- Rounding decimals
- Simplify fractions
- Change fractions to decimals and vice versa
- Learn the relationship between percents, decimals, and fractions
- Slope as rate of change
- Number sense
- Exponential notation
- Order of operations
- Solve an equation for an unknown variable
- Inequality notation
- Discrete phrasing, specifically regarding phrases such as
 - "at least two"
 - "at most two"

Course Topics & Required Assignments/Readings

Problem Solving and Critical Thinking

- Inductive and Deductive Reasoning
- Estimation, Graphs, and Mathematical Models
- Problem Solving

Set Theory

- Basic Set Concepts
- Subsets
- Venn Diagrams and Set Operations
- Set Operations and Venn Diagrams with Three Sets

- Survey Problems

Counting Methods and Probability Theory

- The Fundamental Counting Principle
- Permutations
- Combinations
- Fundamentals of Probability
- Probability with the Fundamental Counting Principle, Permutations, and Combinations
- Events Involving *Not* and *Or*; Odds

Personal Finance

- Percent, Sales Tax, and Discounts
- Simple Interest
- Compound Interest
- Annuities, Methods of Saving, and Investments
- Cars
- The Cost of Home Ownership
- Credit Cards

Number Representation and Calculation

- Number Bases in Positional Systems
- Computation in Positional Systems

Voting and Apportionment

- Voting Methods
- Apportionment Methods

Teaching Procedures

Most classes will be a combination of lecture, group activities, and in-class assignments. You will be given homework assignments to be completed outside of class, with due dates/times. There will occasionally be a quiz or exam given in class.

Grading Breakdown

| | |
|-----|------------|
| 20% | Homework |
| 10% | Quizzes |
| 5% | Attendance |
| 40% | Exams |
| 25% | Final Exam |

| Grade | Range | Grade | Range | Grade | Range |
|-------|----------|-------|---------|-------|---------|
| A | 95 – 100 | B – | 80 – 82 | D + | 67 – 69 |
| A – | 90 – 94 | C + | 77 – 79 | D | 63 – 66 |
| B + | 87 – 89 | C | 73 – 76 | D – | 60 – 62 |
| B | 83 – 86 | C – | 70 – 72 | F | 0 – 59 |

Attendance Policy

Students are expected to attend all classes, for the entire period. Attendance will be taken during every class and counts towards your final course grade. If you are absent from class, proper documentation will excuse your absence.

Accessibility Statement

Quinsigamond Community College is committed to providing access and inclusion for all persons with disabilities. Students who require an accommodation in this course should notify the professor as soon as possible. Students are responsible for forwarding the Accommodation Letter to the professor (via email or hard copy). Students may request accommodations at any time during the semester, which begin upon receipt (accommodations are not retroactive). Please discuss any barriers which may arise during the semester with your professor or coordinator in the Student Accessibility Services office.

Contact Information for Student Accessibility Services (SAS):

Call: 508-854-4471

Sorenson Video Phone: 508-502-7647

Email: disabilityservices@qcc.mass.edu

Services for Veterans

If you are a veteran of the US Armed Forces, please visit the Veteran Affairs Office located in 258A (Administration Building) or contact them at veteranaffairs@qcc.mass.edu.

Diversity, Equity, and Inclusion Statement for the School of Math & Science

The School of Math and Science is motivated to teach and learn from the diverse community we have at QCC. In Science, Technology, Engineering, and Mathematics (STEM), it is advantageous to approach problems from multiple perspectives. The power of diversity, equity and inclusion allows us to persevere and overcome challenges.

The faculty of the School of Math and Science pledge to help students meet the demands of STEM regardless of race/ethnicity, gender identity and expression, sexual orientation, faith, abilities/disabilities, age, socioeconomic background, political leaning, ancestry, national origin, home language and all other identities. We are dedicated to nurturing a culture of collaboration, mutual respect and understanding; and to empowering members of our community to embrace their full potential.

Academic Honesty and Plagiarism

Our purpose of education is to seek the truth; this work requires trust and honesty between teacher and student. If we are not honest about what we know and don't know, our learning will always be impaired. Because our teaching and learning depends on this honest communication, we expect all students to understand what plagiarism is and why it is unacceptable.

Plagiarism means taking someone else's ideas or words and presenting them as one's own. The offense can take many forms including cheating on a test, passing in a paper taken from the Internet or from another student, or failing to properly use and credit sources in an essay. Sometimes the issue is subtle, involving

getting too much help on an assignment from someone else. In every instance, plagiarism means cheating both oneself and the owner of the source. Since cheating sabotages a student's learning experience, consequences range from no credit for the assignment to failure for the course and possible expulsion from the college.

The penalty for getting caught cheating in this course is a failure of the quiz or test, or failure of the entire course. This is solely at the discretion of the instructor.

For further information concerning plagiarism, refer to the QCC Student Handbook.

Math Center & QCC Math YouTube Channel

The Math Center provides free, drop-in tutoring assistance for students in any QCC mathematics course. Located on the second floor of the Harrington Learning Center (HLC), the Math Center is a welcoming place where students have the opportunity to work collaboratively with tutors and classmates. Students can work intensively to improve their mathematical skills or simply drop by to ask a few questions. In addition to tutoring, the Math Center houses various math-related resources, and computers and software for math coursework. Visit their website for details and the semester schedule:

<https://www.qcc.edu/services/tutoring/math-center>

For further help, visit the QCC Math YouTube channel. This channel has a playlist specifically for this course, with many short videos created with students like you in mind, covering many of the topics in this course:

<https://www.youtube.com/user/QCCmath>

MAT 121 Topics in Mathematics (w/ Coreq Topics) – Assignment and Test Schedule

| | | |
|-------------|---|---|
| Week 1 & 2: | Syllabus Review Growth Mindset Class expectations | MyLab introduction Embedded tutor Course management – anxiety, time management, support |
| | <u>MAT 121</u> | <u>MAT 051 (just-in-time remediation)</u> |
| Week 3: | Sections 1.1, 1.2 Sections 1.2, 1.3 | Rounding decimals Slope as Rate of Change |
| Week 4: | Quiz 1 Sections 2.1, 2.2 | Inequality notation Determine intersection, union, and complement of two sets |
| Week 5: | Sections 2.3, 2.4 Section 2.5 Quiz 2 | Discrete Phrasing |
| Week 6: | Exam Review Exam 1 (Ch 1, 2) Section 4.2 | Exponential notation and scientific notation |
| Week 7: | Section 4.3 | Inequality symbols and notation |

| | | |
|----------|---|--|
| | Quiz 3 Section 13.1 | Review rounding decimals |
| Week 8: | Section 13.2 Exam Review Exam 2 (Ch 4, 13) | Change fractions to decimals |
| Week 9: | Sections 8.1, 8.3 Sections 8.4, 8.5 Section 8.6 | Reading/understanding/plugging values into financial formulas Order of operations Solving an equation for an unknown |
| Week 10: | Quiz 5 Section 8.7, 8.8 Exam Review | |
| Week 11: | Exam 3 (Ch 8) Sections 11.1, 11.2 | Relationship between decimals and fractions |
| Week 12: | Sections 11.3, 11.4 Sections 11.5, 11.6 | Simplifying fractions Review plugging values into formulas and solving for an unknown |
| Week 13: | Quiz 6 Exam Review | |
| Week 14: | Exam 4 (Ch 11) Final Exam Review | |
| Week 15: | Final Exam | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

NEW COURSE PROPOSAL

1. **Course Number and Name:** MAT 052 Statistics Corequisite

2. **Originator:** Ulises Poyser, Math Dept

Date: Sept 12, 2022

3. **School Dean:** Ben Benton, School of Math & Science

Date: October 1, 2022

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)**

Date: November 7, 2022

6. **Recommended by the School of** _____ **Date:** _____
Comments:

7. **AA Leadership Team:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

8. **VP/Academic Affairs:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

9. **Learning Council:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

10. **VP/Academic Affairs:** _____ **Date:** _____

Approved: _____ **Not Approved:** _____
Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

NEW COURSE PROPOSAL

| | |
|---|-----------------------------------|
| Course Discipline/Department: Mathematics | School: Math & Science |
| Course Number: MAT 052 | |
| Course Name: Statistics Corequisite | |
| Prerequisites and/or corequisites (confer with affected department coordinator): Corequisite: MAT 122 | |
| CIP code (check with IRaP Office): 27.0501 | |
| Effective Term/year: Fall 2023 | |
| <p>Give a rationale for the new course. Be sure to indicate whether this course replaces another course. Is the course transferable?</p> <ul style="list-style-type: none"> • The sole purpose of this course is to cover remediation math topics in a just-in-time format towards the successful completion of MAT 122 Statistics. • This course must be taken as a corequisite with MAT 122 Statistics. • This is not a stand-alone course. Instead, it is integrated with the MAT 122 Statistics content. • This course is a developmental math course and is not transferable. • This course does not replace any current (as of Spring 2023) math course. • Two different “versions” of MAT 122 will be offered: <ul style="list-style-type: none"> ○ <i>Version 1:</i> 3-credit “traditional” course, which does not cover remediation topics ○ <i>Version 2:</i> 3-credit + 2-credit corequisite course (MAT 052), which includes just-in-time remediation topics • Placement into MAT 122: <ul style="list-style-type: none"> ○ Students are eligible to take “Version 1” of MAT 122 (3 credits only) and are not required to take the corequisite course MAT 052 (but are allowed to if they so choose) if: <ul style="list-style-type: none"> ▪ the student passes a college-level math course <i>or</i> ▪ the student has a QMAT placement score > 21 ○ Students who do not meet the criteria to take “Version 1” should register for “Version 2”. These students must also register for MAT 052 Statistics Corequisite and will pay for 2 extra credit hours of just-in-time remediation. | |
| <p>Is the course content similar to other courses now offered? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, attach a statement from the coordinator of the department offering the similar course.</p> <p>This course contains <i>some</i> mathematical topics/objectives currently covered in MAT 090, MAT 095, and MAT 099. To say that MAT 052 is equivalent to MAT 090, or MAT 095, or MAT 099 is not accurate. Instead, this course draws targeted content from these developmental courses, as well as developmental material that is <i>not</i> specifically covered in any of these courses, towards the goal of just-in-time remediation before MAT 122 Statistics topics are covered.</p> | |
| <p>Please indicate if this course will serve as any of the following types of electives</p> <p><input type="checkbox"/> Elective (any college level course can serve as an elective)</p> <p><input type="checkbox"/> Specific Type (indicate Business, Multiple Perspectives*, Liberal Arts, Humanities, Foreign Language, Social Science, Behavioral Science, Mathematics, Science, Lab Science, Social Science Foundational*, Literature, Philosophy or Language*, Creative Arts*)</p> <p><input type="checkbox"/> Program specific (name the program)</p> <p>*confer with the Liberal Arts Coordinator</p> <p>N/A</p> | |

Is this course required for a program? If yes, submit a separate DEGREE OR CERTIFICATE REVISION PROPOSAL. If the course is required for a new program, submit a separate NEW DEGREE, OPTION OR CERTIFICATE PROPOSAL. Please list all affected programs here.

N/A

Expected enrollment per term: **100s**

Expected enrollment per year: **100s**

Will any of the following be required:

Additional staff ☒ Additional space ☐ Additional equipment ☐ Additional library resources ☐

Provide a rationale for any needs indicated above and include approximate cost of equipment.

Students taking this course are assumed to be mathematically non-college ready, since this course serves as a remedial corequisite for MAT 122 Statistics. With this assumption, student support is critical. Embedded (peer) tutors in the classroom will be an important contribution towards the type of support these students will need. The plan is to incorporate Math Center tutors as embedded tutors in each corequisite section of MAT 122 Statistics.

Course Materials

| | | |
|---|-------------------------|--|
| Lecture Hours: 2 hours | Lab Hours: | Clinic Hours: |
| <p>General course description and prerequisites as it will appear in the college catalog (including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites):</p> <p>MAT 052 Statistics Corequisite This course covers various topics in developmental mathematics to support students enrolled in MAT 122. Students apply remedial mathematics topics such as fractions, decimals, percent, proportion, scientific notation, coordinates, slope, graphing of linear equations, and mathematical phrasing just-in-time to strengthen comprehension of statistics concepts. This course requires co-enrollment with MAT 122.</p> <p>Credits: 2 Corequisite: MAT 122 Semester Offered: F/S/SU</p> | | |
| Lecture Hours per semester: (e.g., 45 hr. for 3 credit course) 30 hours | Lab Hours per semester: | Clinic Hours or Internship Hours per semester: |
| <p>Provide the following course information selected from the E-2 checklist for course materials. Provide your dean with a syllabus that includes all of the checklist course materials.</p> <ul style="list-style-type: none"> All required course readings (whether written or electronic), including information on publisher and edition used or website address or link Student Learning Outcomes (list) Teaching procedures (briefly describe) Course topics and/or assignments and/or required and/or supplemental reading Tentative test schedule/assignment(s) schedule Basis for student grading and calculation of final grade as well as criteria for evaluating student performance <p>This course is not a stand-alone math course. Instead, it must be taken concurrently with MAT 122 Statistics. Therefore, its course material will be incorporated directly into a MAT 122 Statistics syllabus (see below for an example).</p> <p>Note: Students will receive a final course grade of “Q” for MAT 052, which will not affect a student’s GPA.</p> | | |

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

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

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

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

NA – Not Applicable: This is not a learning outcome for this course.

| CONNECTION TO GENERAL EDUCATION STUDENT LEARNING OUTCOMES | I, M, E, NA |
|--|-------------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | NA |
| Communication Skills: Students will read, write, and speak effectively to build knowledge and convey meaning. | NA |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | NA |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals.. | NA |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | NA |

(Gen. Ed. Goals adopted 2022).

****CIVIC LITERACY**

If civic learning or civic literacy is a component of this course (within the course description, course topics and/or student learning outcomes), please consult the “Guide for Designating Civic Learning Courses” from the Department of Higher Education, available on Frequently Used Forms (with the other Academic Governance Forms). Utilizing the DHE definitions, please indicate whether this course can be designated as one of the following:

___ Civic Learning (CL)

___ Civic Learning with Engagement Required (CLER)

___ Civic Learning with Engagement Optional (CLEO)

X Civic Learning is not a component of this course (NA)

Quinsigamond Community College School of Math and Science

Instructor's Information

Instructor: Professor XX (she/her/hers)
Office: 200A
Email: xxxxx@qcc.mass.edu
Telephone: 508-854-xxxx

Course Information

Course: MAT 122 Statistics – Section XX + MAT 052 Statistics Corequisite
Meets: Mondays, Wednesdays from 9:30am – 10:50am and
Fridays from 9:10am – 10:40am
Room: 180A
Credits: 3 credits for MAT 122 + 2 credits of MAT 052 corequisite remediation
Semester: Spring 2023

Course Descriptions

MAT 122: This introductory statistics course covers descriptive statistics, probability, and inferential statistics. Statistical content includes sampling, graphical summaries of data, measures of center and variability, probability theory and distributions, standard and non-standard normal distributions, the Central Limit Theorem, confidence intervals, one-sample hypothesis tests, linear correlation and regression. Statistical technology is used.

MAT 052: This course covers various topics in developmental mathematics to support students enrolled in MAT 122 Statistics. Students apply remedial mathematics topics such as fractions, decimals, percent, proportion, scientific notation, coordinates, slope, graphing of linear equations, and mathematical phrasing just-in-time to strengthen comprehension of statistics concepts. This course requires co-enrollment with MAT 122 Statistics.

Prerequisite or Corequisite

Prerequisite: College-level math or appropriate MAT 122 placement score or
Corequisite: MAT 052 Statistics Corequisite

Required Textbook/Materials/Website

Textbook: *Elementary Statistics*, by Navidi and Monk, McGraw Hill Publishing, 4th edition
© 2022

Materials: Graphing calculator or MS Excel or Statistical software

Website: Access to ALEKS: www.aleks.com

Student Learning Outcomes

Students will be able to:

1. Accurately differentiate between population and sample.
2. Use graphs to summarize data.
3. Apply measures of center, spread, and position to describe data.
4. Interpret the linear relationship between bivariate data.
5. Describe and interpret a discrete probability distribution.
6. Use the Central Limit Theorem to estimate a confidence interval of a population mean or proportion.
7. Use the Central Limit Theorem to test a hypothesis of a population mean or proportion.

Corequisite Model

This particular course contains the college-level Statistics course along with just-in-time remediation of particular developmental math topics to support the necessary learning of Statistics. For example, before probability is covered in Statistics, students will spend time learning/reviewing how to appropriately round decimals, or how to convert values in scientific notation to their equivalent non-scientific notation decimals. The topics of remediation are specifically chosen to help students be successful in Statistics. To cover these remediation topics, extra time is required in class. Therefore, two (2) extra credit hours are required as a corequisite to the 3-credit Statistics course.

Just-in-Time Remediation Topics Include, but are not limited to:

- Relationship between Decimals, Percents, Fractions, Proportions
- Rounding Decimals
- Scientific Notation
- Simplifying Fractions
- Order of Operations
- Reading/Understanding/Plugging Values into and Using Statistical Formulas
- Solving an Equation for an Unknown
- Evaluating Factorials
- Determine Intersection, Union, and Complement of Two Sets
- Inequality symbols and notation
- Reading Comprehension, specifically regarding phrases such as
 - "at least two"
 - "at most two"
 - complement of none
 - complement of at most three
- Find the distance from the middle value of an interval to its endpoints
- Interpret \pm notation
- Graph ordered pairs (coordinates)
- Find and interpret slope
- Graph a line from ordered pairs and/or from a linear equation

Course Topics & Required Assignments/Readings

Basic Ideas

- Sampling
- Types of Data
- Design of Experiments

Graphical Summaries of Data

- Graphical Summaries for Qualitative Data
- Frequency Distributions and Their Graphs
- More Graphs for Quantitative Data
- Graphs Can Be Misleading

Numerical Summaries of Data

- Measures of Center
- Measures of Spread
- Measures of Position

Summarizing Bivariate Data

- Correlation
- The Least-Squares Regression Line

Probability

- Basic Concepts of Probability
- The Addition Rule and the Rule of Complements
- Conditional Probability and the Multiplication Rule
- Counting

Discrete Probability Distributions

- Random Variables
- The Binomial Distribution
- The Poisson Distribution (if time permits)

The Normal Distribution

- The Standard Normal Curve
- Applications of the Normal Distribution
- Sampling Distributions and the Central Limit Theorem
- The Central Limit Theorem for Proportions

Confidence Intervals

- Confidence Intervals for a Population Mean, Standard Deviation Known
- Confidence Intervals for a Population Mean, Standard Deviation Unknown
- Confidence Intervals for a Population Proportion
- Confidence Intervals for a Standard Deviation (if time permits)
- Determining Which Method to Use

Hypothesis Testing

- Basic Principles of Hypothesis Testing
- Hypothesis Tests for a Population Mean, Standard Deviation Known
- Hypothesis Tests for a Population Mean, Standard Deviation Unknown
- Hypothesis Tests for Proportions
- Hypothesis Tests for a Standard Deviation (if time permits)

Teaching Procedures

Most classes will be a combination of lecture, group activities, and in-class assignments. You will be given homework assignments to be completed outside of class, with due dates/times. There will occasionally be a quiz or exam given in class. This course contains a statistics project and presentation.

Grading Breakdown for MAT 122 Statistics

| | |
|-----|------------------------------|
| 20% | Homework |
| 10% | Quizzes |
| 10% | Stats Project & Presentation |
| 35% | Exams |
| 25% | Final Exam |

| Grade | Range | Grade | Range | Grade | Range |
|-------|----------|-------|---------|-------|---------|
| A | 95 – 100 | B – | 80 – 82 | D + | 67 – 69 |
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Attendance Policy

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MAT 122 Statistics (w/ Stats Coreq) – Assignment and Test Schedule

| | | |
|-------------|--|---|
| Week 1 & 2: | Syllabus Review Growth Mindset Class expectations | ALEKS introduction Embedded tutor Course management – anxiety, time management, support |
| Week 3: | <u>MAT 122</u> Sections 1.1, 1.2 Sections 2.1, 2.2 Sections 2.3, 3.1 | <u>MAT 052 (just-in-time remediation)</u> Rounding decimals Change decimals to/from fractions, percents, proportions |
| Week 4: | Quiz 1 Sections 3.2, 3.3 Exam Review | Order of operations Solving simple equations |
| Week 5: | Exam 1 (Ch 1, 2, 3) Sections 5.1, 5.2 | Review fractions, decimals, proportions, percents Simplify fractions, Scientific Notation |
| Week 6: | Quiz 2 Section 5.4 Sections 6.1, 6.2 | Evaluate factorials Discrete phrasing Review scientific notation |
| Week 7: | Quiz 3 Sections 7.1, 7.2 Exam Review | Inequality symbols and notation |
| Week 8: | Exam 2 (Ch 5, 6, 7) Sections 7.3, 7.4 | Interpret \pm notation, Interval distance |
| Week 9: | Quiz 4 Sections 8.1, 8.2, 8.3 | |
| Week 10: | Quiz 5 Sections 9.1, 9.2, 9.3 | |
| Week 11: | Quiz 6 Section 9.4 Exam Review Exam 3 (Ch 7, 8, 9) | |
| Week 12: | Section 4.1 Section 4.2 | Ordered pairs (coordinates) Slope and graphing lines |
| Week 13: | Quiz 7 Stats Projects | |
| Week 14: | Stats Projects Final Exam Review | |

Week 15: **Final Exam**

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name: (from current AY22/23 catalog)** MAT 121 Topics in Mathematics

2. **Originator:** Sheiba Mas-Oud, Math Dept. **Date:** November 12, 2022

3. **School Dean:** Ben Benton, Math & Science **Date:** November 14, 2022

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:** November 7, 2022

1. **Recommended by the School of** Math and Science **Date:** 01/19/2023
Comments: Unanimously approved

2. **AA Leadership Team:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments: _____

3. **VP/Academic Affairs:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments: _____

4. **Learning Council:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments: _____

5. **VP/Academic Affairs:** _____ **Date:** _____

Approved: _____ **Not Approved:** _____
Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

| | |
|--|-----------------------------------|
| Type of Revision: ___ Description <input checked="" type="checkbox"/> Prerequisite <input checked="" type="checkbox"/> Corequisite ___ Number ___ Name ___ # Credits ___ Elective Type ___ Other (explain) | |
| Course Discipline or Department: Math | School: Math & Science |
| Current Course Number: MAT 121 | |
| Current Course Name: Topics in Mathematics | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): MAT 121 Topics in Mathematics This course explores a variety of topics in contemporary mathematics. These topics include problem solving and critical thinking, personal finance, numeration systems, set theory, counting principles and probability theory, and voting methods. Credits: 3 Prerequisite: MAT 095 with a grade of "C" or higher or appropriate placement Semester Offered: F/S/SU | |
| Proposed Description (include all proposed changes): MAT 121 Topics in Mathematics This course explores a variety of topics in contemporary mathematics. These topics include problem solving and critical thinking, personal finance, numeration systems, set theory, counting principles and probability theory, and voting methods. Credits: 3 Prerequisite: College level mathematics course or QMAT placement score > 21 or appropriate multiple measures placement or Corequisite: MAT 051 Semester Offered: F/S/SU | |
| Rationale for the change: <ul style="list-style-type: none"> • The prerequisite/corequisite change is necessary to reflect the removal of the stand-alone course of MAT 095 as a prerequisite and to reflect the addition of a corequisite modality for students who do not place into the non-corequisite MAT 121 course. • Two different "versions" of MAT 121 will be offered: <ul style="list-style-type: none"> ○ <i>Version 1</i>: 3-credit "traditional" course, which does not cover remediation topics ○ <i>Version 2</i>: 3-credit + 2-credit corequisite course (MAT 051), which includes just-in-time remediation topics • Placement into MAT 121: <ul style="list-style-type: none"> ○ Students are eligible to take "Version 1" of MAT 121 (3 credits only) and are not required to take the corequisite course MAT 051 (but are allowed to if they so choose) if: <ul style="list-style-type: none"> ▪ the student passes a college-level math course <i>or</i> ▪ the student has a QMAT placement score > 21 <i>or</i> ▪ the student meets the appropriate multiple-measure placement ○ Students who do not meet the criteria to take "Version 1" should register for "Version 2". These students must also register for MAT 051 Topics in Mathematics Corequisite and will pay for 2 extra credit hours of just-in-time remediation. | |
| Provide a description of any change in course content. <ul style="list-style-type: none"> • The course content of MAT 121 does <i>not</i> change. However, if a student takes a corequisite section of MAT 121 (concurrent with MAT 051 Topics in Mathematics Corequisite), then | |

remediation topics will be provided in a just-in-time modality in addition to the course content of MAT 121.

- Students taking the corequisite “Version 2” of this course will cover the following remediation topics:
 - Rounding decimals
 - Simplify fractions
 - Change fractions to decimals and vice versa
 - Learn the relationship between percents, decimals, and fractions
 - Slope as rate of change
 - Number sense
 - Exponential notation
 - Order of operations
 - Solve an equation for an unknown variable
 - Inequality notation
 - Discrete phrasing
- For example:
 - inequality notation and discrete phrasing will be covered immediately before set theory
 - rounding decimals and simplifying fractions will be covered immediately before probability
 - order of operations and solving equations will be covered immediately before personal finance
 - number sense and exponential notation will be covered immediately before number bases and computation in positional systems
 - rounding decimals and changing fractions to decimals will be covered/review immediately before apportionment methods

List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):

Programs that specifically mention MAT 121 as part of their curriculum:

| Code | Program Name |
|-------------|---|
| GS | General Studies |
| GSDS | General Studies – Deaf Studies Option |
| LASO | Liberal Arts – Sociology Option |
| RT | Radiologic Technology |
| CJTR | Criminal Justice – Transfer Option (mentioned only in Milestones as MAT Elective recommendation) |

Please confer with the coordinator of the affected department.

Attach current and proposed academic maps (with changes in bold) for all affected programs. You can obtain academic maps from Barb Zabka.

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

Quinsigamond Community College School of Math and Science

Instructor's Information

Instructor: Professor XX (she/her/hers)
Office: 403A
Email: xxxxx@qcc.mass.edu
Telephone: 508-854-xxxx

Course Information

Course: MAT 121 Topics in Mathematics – Section XX
+ MAT 051 Topics in Mathematics Corequisite
Meets: Tuesdays, Thursdays from 11:00am – 12:20pm and
Fridays from 11:00am – 12:30pm
Room: 178A
Credits: 3 credits for MAT 121 + 2 credits of MAT 051 corequisite remediation
Semester: Spring 2023

Course Descriptions

MAT 121: This course explores a variety of topics in contemporary mathematics. These topics include problem solving and critical thinking, personal finance, numeration systems, set theory, counting principles and probability theory, and voting methods.

MAT 051: This course covers various topics in developmental mathematics to support students enrolled in MAT 121 Topics in Mathematics. Students apply remedial mathematics topics such as fractions, decimals, percent, order of operations, scientific notation, exponential notation, and solving equations to strengthen comprehension of college-level topics in MAT 121. This course requires co-enrollment with MAT 121 Topics in Mathematics.

MAT 121 Prerequisite or Corequisite

Prerequisite: College-level mathematics course or QMAT placement score > 21 or appropriate multiple measures placement OR

Corequisite: MAT 051 Topics in Mathematics Corequisite

Required Textbook/Materials/Website

Textbook: Thinking Mathematically, Blitzer, 7th Edition, Pearson Education, © 2019.
Materials: Graphing calculator (recommended) or scientific calculator
Website: MyLabMath (required)

Student Learning Outcomes

Students will be able to:

1. Apply deductive or inductive reasoning appropriately to solve mathematical problems.
2. Apply set theory to perform operations with sets and model them using Venn diagrams.
3. Convert numbers from one base to another and perform operations with numbers in different bases.
4. Evaluate factorial expressions, permutations, combinations, and compute probabilities.
5. Determine present value, future value, value of an annuity and apply them to real-life situations like finding mortgage payments, car payments, and pension plans.
6. Apply different voting methods to determine an election's winner.

Corequisite Model

This particular course contains college-level math topics along with just-in-time remediation of particular developmental math topics to support the necessary learning of these math topics. For example, before probability is covered, students will spend time learning/reviewing how to appropriately round decimals, simplify fractions, and perform math operations with fractions. The remediation topics are specifically chosen to help students be successful in the college-level math material. To cover these remediation topics, extra time is required in class. Therefore, two (2) extra credit hours are required as a corequisite to the 3-credit Topics in Mathematics course.

Just-in-Time Remediation Topics Include:

- Rounding decimals
- Simplify fractions
- Change fractions to decimals and vice versa
- Learn the relationship between percents, decimals, and fractions
- Slope as rate of change
- Number sense
- Exponential notation
- Order of operations
- Solve an equation for an unknown variable
- Inequality notation
- Discrete phrasing, specifically regarding phrases such as
 - "at least two"
 - "at most two"

Course Topics & Required Assignments/Readings

Problem Solving and Critical Thinking

- Inductive and Deductive Reasoning
- Estimation, Graphs, and Mathematical Models
- Problem Solving

Set Theory

- Basic Set Concepts
- Subsets
- Venn Diagrams and Set Operations
- Set Operations and Venn Diagrams with Three Sets
- Survey Problems

Counting Methods and Probability Theory

- The Fundamental Counting Principle
- Permutations
- Combinations
- Fundamentals of Probability
- Probability with the Fundamental Counting Principle, Permutations, and Combinations
- Events Involving *Not* and *Or*; Odds

Personal Finance

- Percent, Sales Tax, and Discounts
- Simple Interest
- Compound Interest
- Annuities, Methods of Saving, and Investments
- Cars
- The Cost of Home Ownership
- Credit Cards

Number Representation and Calculation

- Number Bases in Positional Systems
- Computation in Positional Systems

Voting and Apportionment

- Voting Methods
- Apportionment Methods

Teaching Procedures

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Grading Breakdown

| | |
|-----|------------|
| 20% | Homework |
| 10% | Quizzes |
| 5% | Attendance |
| 40% | Exams |
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| Grade | Range | Grade | Range | Grade | Range |
|-------|----------|-------|---------|-------|---------|
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MAT 121 Topics in Mathematics (w/ Coreq Topics) – Assignment and Test Schedule

| | | |
|-------------|---|--|
| Week 1 & 2: | Syllabus Review Growth Mindset Class expectations | MyLab introduction Embedded tutor Course management – anxiety, time management, support |
| Week 3: | <u>MAT 121</u> Sections 1.1, 1.2 Sections 1.2, 1.3 | <u>MAT 051 (just-in-time remediation)</u> Rounding decimals Slope as Rate of Change |
| Week 4: | Quiz 1 Sections 2.1, 2.2 | Inequality notation Determine intersection, union, and complement of two sets |
| Week 5: | Sections 2.3, 2.4 Section 2.5 Quiz 2 | Discrete Phrasing |
| Week 6: | Exam Review Exam 1 (Ch 1, 2) Section 4.2 | Exponential notation and scientific notation |
| Week 7: | Section 4.3 Quiz 3 Section 13.1 | Inequality symbols and notation Review rounding decimals |
| Week 8: | Section 13.2 Exam Review Exam 2 (Ch 4, 13) | Change fractions to decimals |
| Week 9: | Sections 8.1, 8.3 Sections 8.4, 8.5 Section 8.6 | Reading/understanding/plugging values into financial formulas Order of operations Solving an equation for an unknown |

| | | |
|----------|---|--|
| Week 10: | Quiz 5 Section 8.7, 8.8 Exam Review | |
| Week 11: | Exam 3 (Ch 8) Sections 11.1, 11.2 | Relationship between decimals and fractions |
| Week 12: | Sections 11.3, 11.4 Sections 11.5, 11.6 | Simplifying fractions Review plugging values into formulas and solving for an unknown |
| Week 13: | Quiz 6 Exam Review | |
| Week 14: | Exam 4 (Ch 11) Final Exam Review | |
| Week 15: | Final Exam | |

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Room: 179A
Credits: 3 credits
Semester: Spring 2023

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- Probability with the Fundamental Counting Principle, Permutations, and Combinations.

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|---------|---|---|----------------|
| Week 1: | Syllabus Review Class expectations | MyLab introduction Course management – anxiety, time management, support | Growth Mindset |
| Week 2: | Sections 1.1, 1.2, 1.3 | | |
| Week 3: | Quiz 1 Sections 2.1, 2.2 | | |
| Week 4: | Sections 2.3, 2.4, 2.5 Quiz 2 | | |
| Week 5: | Exam Review Exam 1 (Ch 1, 2) Section 4.2 | | |
| Week 6: | Section 4.3 Quiz 3 Section 13.1 | | |

| | |
|----------|---|
| Week 7: | Section 13.2 Exam Review Exam 2 (Ch 4, 13) |
| Week 8: | Sections 8.1, 8.3, 8.4 |
| Week 9: | Quiz 5 Sections 8.5, 8.6, 8.7 |
| Week 10: | Section 8.8 Quiz 6 Exam Review |
| Week 11: | Exam 3 (Ch 8) Sections 11.1, 11.2 |
| Week 12: | Sections 11.3, 11.4, 11.5 |
| Week 13: | Section 11.6 Quiz 6 Exam Review |
| Week 14: | Exam 4 (Ch 11) Final Exam Review |
| Week 15: | Final Exam |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** MAT 122 Statistics
(from current AY22/23 catalog)

2. **Originator:** Ulises Poyser, Math Dept.

Date: Sept. 23, 2022

3. **School Dean:** Ben Benton, Math & Science

Date: October 1, 2022

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)**

Date: November 7, 2022

1. **Recommended by the School of** Math and Science
Comments: Unanimously approved

Date: 01/19/2023

2. **AA Leadership Team:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

3. **VP/Academic Affairs:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

4. **Learning Council:** _____ **Date:** _____

Recommended: _____ **Not Recommended:** _____
Comments:

5. **VP/Academic Affairs:** _____ **Date:** _____

Approved: _____ **Not Approved:** _____
Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

| | |
|--|-----------------------------------|
| Type of Revision: <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisite <input checked="" type="checkbox"/> Corequisite ____ Number ____ Name ____ # Credits <input type="checkbox"/> Elective Type ____ Other (explain) | |
| Course Discipline or Department: Math | School: Math & Science |
| Current Course Number: MAT 122 | |
| Current Course Name: Statistics | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): 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 | |
| Proposed Description (include all proposed changes): MAT 122 Statistics This introductory statistics course covers descriptive statistics, probability, and inferential statistics. Statistical content includes sampling, graphical summaries of data, measures of center and variability, probability theory and distributions, standard and non-standard normal distributions, the Central Limit Theorem, confidence intervals, one-sample hypothesis tests, linear correlation and regression. Statistical technology is used. Credits: 3 Prerequisite: College level mathematics course or QMAT placement score > 21 or Corequisite: MAT 052 Semester Offered: F/S/SU | |
| Rationale for the change: <ul style="list-style-type: none"> • The course description for MAT 122 needs updating. Portions of it are too specific, forcing the offering of the course to cover outdated topics. • The new course description is in line with the recommended topics outlined by the MA Board of Higher Education in 2018 (see attached document), ensuring its transferability. • The new course description allows for consistency of the use of statistical technology across all sections of the course. • The prerequisite/corequisite change is necessary to reflect the removal of the stand-alone course of MAT 095 as a prerequisite and to reflect the addition of a corequisite modality for students who do not place into the non-corequisite MAT 122 course. • Two different "versions" of MAT 122 will be offered: <ul style="list-style-type: none"> ○ <i>Version 1:</i> 3-credit "traditional" course, which does not cover remediation topics ○ <i>Version 2:</i> 3-credit + 2-credit corequisite course (MAT 052), which includes just-in-time remediation topics • Placement into MAT 122: | |

| <ul style="list-style-type: none">○ Students are eligible to take “Version 1” of MAT 122 (3 credits only) and are not required to take the corequisite course MAT 052 (but are allowed to if they so choose) if:<ul style="list-style-type: none">▪ the student passes a college-level math course <i>or</i>▪ the student has a QMAT placement score > 21○ Students who do not meet the criteria to take “Version 1” should register for “Version 2”. These students must also register for MAT 052 Statistics Corequisite and will pay for 2 extra credit hours of just-in-time remediation. | | | | | | | | | | | | | | | | | | | | |
|---|--|--------------|----|--------------------------------|------|---|-----|-------------------------------------|------|------------------------------------|----|--------------------------|------|--------------|----|----------------------------------|------|--|------|--|
| <p>Provide a description of any change in course content.</p> <ul style="list-style-type: none">• The course content of MAT 122 does <i>not</i> change. However, if a student takes a corequisite MAT 122 section (with MAT 052 Statistics Corequisite), then remediation topics will be provided in a just-in-time modality in addition to the course content of MAT 122.• Students taking the corequisite “Version 2” of this course will cover the following remediation topics:<ul style="list-style-type: none">○ Rounding decimals○ Simplify fractions○ Change fractions to decimals and vice versa○ Learn the relationship between percents, decimals, fractions, and proportions○ Order of operations○ Solve a simple linear equation○ Graphing ordered pairs (coordinates) and graphing linear equations○ Scientific notation○ Inequality notation○ Discrete phrasing○ Interpret \pm notation and interval distance• For example:<ul style="list-style-type: none">○ rounding decimals will be covered immediately before finding a mean and/or a standard deviation○ simplifying fractions and scientific notation will be covered immediately before probability○ graphing coordinates and linear equations will be covered immediately before linear correlation and regression○ discrete phrasing will be covered immediately before discrete probability distributions○ scientific notation will be reviewed before covering discrete and normal probabilities○ proportions will be covered/reviewed immediately before confidence intervals and hypothesis testing○ \pm notation will be covered immediately before confidence intervals | | | | | | | | | | | | | | | | | | | | |
| <p>List the programs that are affected by this change (list program names and program codes as they appear in the college catalog):</p> <p>Programs that <i>mention</i> MAT 122 as a recommendation to meet the Mathematics Elective requirement, but are not affected by the proposed changes to MAT 122.</p> <table><tr><th>Code</th><th>Program Name</th></tr><tr><td>BB</td><td>Business Administration Career</td></tr><tr><td>BBAP</td><td>Business Administration Career – Administrative Professional Option</td></tr><tr><td>BAC</td><td>Business Administration Certificate</td></tr><tr><td>CJTR</td><td>Criminal Justice – Transfer Option</td></tr><tr><td>MP</td><td>Manufacturing Technology</td></tr></table> <p>Programs that specifically mention MAT 122 as part of their curriculum:</p> <table><tr><th>Code</th><th>Program Name</th></tr><tr><td>BT</td><td>Business Administration Transfer</td></tr><tr><td>CIES</td><td>Computer Information Systems – Career – Enterprise Information Systems</td></tr><tr><td>CIHI</td><td>Computer Information Systems – Health Information Option</td></tr></table> | Code | Program Name | BB | Business Administration Career | BBAP | Business Administration Career – Administrative Professional Option | BAC | Business Administration Certificate | CJTR | Criminal Justice – Transfer Option | MP | Manufacturing Technology | Code | Program Name | BT | Business Administration Transfer | CIES | Computer Information Systems – Career – Enterprise Information Systems | CIHI | Computer Information Systems – Health Information Option |
| Code | Program Name | | | | | | | | | | | | | | | | | | | |
| BB | Business Administration Career | | | | | | | | | | | | | | | | | | | |
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| BAC | Business Administration Certificate | | | | | | | | | | | | | | | | | | | |
| CJTR | Criminal Justice – Transfer Option | | | | | | | | | | | | | | | | | | | |
| MP | Manufacturing Technology | | | | | | | | | | | | | | | | | | | |
| Code | Program Name | | | | | | | | | | | | | | | | | | | |
| BT | Business Administration Transfer | | | | | | | | | | | | | | | | | | | |
| CIES | Computer Information Systems – Career – Enterprise Information Systems | | | | | | | | | | | | | | | | | | | |
| CIHI | Computer Information Systems – Health Information Option | | | | | | | | | | | | | | | | | | | |

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|---|--|
| DS | Data Science Certificate (new certificate, eff. FA23 – see Academic Matters 11/08/2022) |
| GS | General Studies |
| GSBT | General Studies – Biotechnology Option |
| GSDS | General Studies – Deaf Studies Option |
| GSPH | General Studies – Pre-Pharmacy Option |
| HLC | Healthcare |
| HCPN | Healthcare – Practical Nursing |
| HCNU | Healthcare – Pre-Nursing Option |
| HCPL | Healthcare – Public Health Option |
| LABI | Liberal Arts – Biology Option |
| LAES | Liberal Arts – Environmental Science Option |
| LAPY | Liberal Arts – Psychology Option |
| LASO | Liberal Arts – Sociology Option |
| LOGC | Logistics/Supply Chain Management Certificate |
| MPQ | Manufacturing Technology – Quality Control Option |
| MSMA | Medical Support Specialist – Medical Assisting Option |
| RT | Radiologic Technology |
| Please confer with the coordinator of the affected department. | |
| Attach current and proposed academic maps (<u>with changes in bold</u>) for all affected programs. You can obtain academic maps from Barb Zabka. | |
| Please submit a generic syllabus to your dean with all of the revisions included. | |

Quinsigamond Community College School of Math and Science

Instructor's Information

Instructor: Professor XX (she/her/hers)
Office: 200A
Email: xxxxx@qcc.mass.edu
Telephone: 508-854-xxxx

Course Information

Course: MAT 122 Statistics – Section XX + MAT 052 Statistics Corequisite
Meets: Mondays, Wednesdays from 9:30am – 10:50am and
Fridays from 9:10am – 10:40am
Room: 180A
Credits: 3 credits for MAT 122 + 2 credits of MAT 052 corequisite remediation
Semester: Spring 2023

Course Descriptions

MAT 122: This introductory statistics course covers descriptive statistics, probability, and inferential statistics. Statistical content includes sampling, graphical summaries of data, measures of center and variability, probability theory and distributions, standard and non-standard normal distributions, the Central Limit Theorem, confidence intervals, one-sample hypothesis tests, linear correlation and regression. Statistical technology is used.

MAT 052: This course covers various topics in developmental mathematics to support students enrolled in MAT 122 Statistics. Students apply remedial mathematics topics such as fractions, decimals, percent, proportion, scientific notation, coordinates, slope, graphing of linear equations, and mathematical phrasing just-in-time to strengthen comprehension of statistics concepts. This course requires co-enrollment with MAT 122 Statistics.

Prerequisite or Corequisite

Prerequisite: College-level math or appropriate MAT 122 placement score or
Corequisite: MAT 052 Statistics Corequisite

Required Textbook/Materials/Website

Textbook: *Elementary Statistics*, by Navidi and Monk, McGraw Hill Publishing, 4th edition
© 2022
Materials: Graphing calculator or MS Excel or Statistical software
Website: Access to ALEKS: www.aleks.com

Student Learning Outcomes

Students will be able to:

1. Accurately differentiate between population and sample.
2. Use graphs to summarize data.
3. Apply measures of center, spread, and position to describe data.
4. Interpret the linear relationship between bivariate data.
5. Describe and interpret a discrete probability distribution.
6. Use the Central Limit Theorem to estimate a confidence interval of a population mean or proportion.
7. Use the Central Limit Theorem to test a hypothesis of a population mean or proportion.

Corequisite Model

This particular course contains the college-level Statistics course along with just-in-time remediation of particular developmental math topics to support the necessary learning of Statistics. For example, before probability is covered in Statistics, students will spend time learning/reviewing how to appropriately round decimals, or how to convert values in scientific notation to their equivalent non-scientific notation decimals. The topics of remediation are specifically chosen to help students be successful in Statistics. To cover these remediation topics, extra time is required in class. Therefore, two (2) extra credit hours are required as a corequisite to the 3-credit Statistics course.

Just-in-Time Remediation Topics Include, but are not limited to:

- Relationship between Decimals, Percents, Fractions, Proportions
- Rounding Decimals
- Scientific Notation
- Simplifying Fractions
- Order of Operations
- Reading/Understanding/Plugging Values into and Using Statistical Formulas
- Solving an Equation for an Unknown
- Evaluating Factorials
- Determine Intersection, Union, and Complement of Two Sets
- Inequality symbols and notation
- Reading Comprehension, specifically regarding phrases such as
 - "at least two"
 - "at most two"
 - complement of none
 - complement of at most three
- Find the distance from the middle value of an interval to its endpoints
- Interpret \pm notation
- Graph ordered pairs (coordinates)
- Find and interpret slope
- Graph a line from ordered pairs and/or from a linear equation

Course Topics & Required Assignments/Readings

Basic Ideas

- Sampling
- Types of Data
- Design of Experiments

Graphical Summaries of Data

- Graphical Summaries for Qualitative Data
- Frequency Distributions and Their Graphs
- More Graphs for Quantitative Data
- Graphs Can Be Misleading

Numerical Summaries of Data

- Measures of Center
- Measures of Spread
- Measures of Position

Summarizing Bivariate Data

- Correlation
- The Least-Squares Regression Line

Probability

- Basic Concepts of Probability
- The Addition Rule and the Rule of Complements
- Conditional Probability and the Multiplication Rule
- Counting

Discrete Probability Distributions

- Random Variables
- The Binomial Distribution
- The Poisson Distribution (if time permits)

The Normal Distribution

- The Standard Normal Curve
- Applications of the Normal Distribution
- Sampling Distributions and the Central Limit Theorem
- The Central Limit Theorem for Proportions

Confidence Intervals

- Confidence Intervals for a Population Mean, Standard Deviation Known
- Confidence Intervals for a Population Mean, Standard Deviation Unknown
- Confidence Intervals for a Population Proportion
- Confidence Intervals for a Standard Deviation (if time permits)
- Determining Which Method to Use

Hypothesis Testing

- Basic Principles of Hypothesis Testing
- Hypothesis Tests for a Population Mean, Standard Deviation Known
- Hypothesis Tests for a Population Mean, Standard Deviation Unknown
- Hypothesis Tests for Proportions
- Hypothesis Tests for a Standard Deviation (if time permits)

Teaching Procedures

Most classes will be a combination of lecture, group activities, and in-class assignments. You will be given homework assignments to be completed outside of class, with due dates/times. There will occasionally be a quiz or exam given in class. This course contains a statistics project and presentation.

Grading Breakdown for MAT 122 Statistics

| | |
|-----|------------------------------|
| 20% | Homework |
| 10% | Quizzes |
| 10% | Stats Project & Presentation |
| 35% | Exams |
| 25% | Final Exam |

| Grade | Range | Grade | Range | Grade | Range |
|-------|----------|-------|---------|-------|---------|
| A | 95 – 100 | B – | 80 – 82 | D + | 67 – 69 |
| A – | 90 – 94 | C + | 77 – 79 | D | 63 – 66 |
| B + | 87 – 89 | C | 73 – 76 | D – | 60 – 62 |
| B | 83 – 86 | C – | 70 – 72 | F | 0 – 59 |

Attendance Policy

Students are expected to attend all classes, for the entire period. Attendance will be taken during every class and counts towards your final course grade. If you are absent from class, proper documentation will excuse your absence.

Accessibility Statement

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Contact Information for Student Accessibility Services (SAS):

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Sorenson Video Phone: 508-502-7647

Email: disabilityservices@qcc.mass.edu

Services for Veterans

If you are a veteran of the US Armed Forces, please visit the Veteran Affairs Office located in 258A (Administration Building) or contact them at veteranaffairs@qcc.mass.edu.

Diversity, Equity, and Inclusion Statement for the School of Math & Science

The School of Math and Science is motivated to teach and learn from the diverse community we have at QCC. In Science, Technology, Engineering, and Mathematics (STEM), it is advantageous to approach problems from multiple perspectives. The power of diversity, equity and inclusion allows us to persevere and overcome challenges.

The faculty of the School of Math and Science pledge to help students meet the demands of STEM regardless of race/ethnicity, gender identity and expression, sexual orientation, faith, abilities/disabilities, age, socioeconomic background, political leaning, ancestry, national origin, home language and all other identities. We are dedicated to nurturing a culture of collaboration, mutual respect and understanding; and to empowering members of our community to embrace their full potential.

Academic Honesty and Plagiarism

Our purpose of education is to seek the truth; this work requires trust and honesty between teacher and student. If we are not honest about what we know and don't know, our learning will always be impaired. Because our teaching and learning depends on this honest communication, we expect all students to understand what plagiarism is and why it is unacceptable.

Plagiarism means taking someone else's ideas or words and presenting them as one's own. The offense can take many forms including cheating on a test, passing in a paper taken from the Internet or from another student, or failing to properly use and credit sources in an essay. Sometimes the issue is subtle, involving getting too much help on an assignment from someone else. In every instance, plagiarism means cheating both oneself and the owner of the source. Since cheating sabotages a student's learning experience, consequences range from no credit for the assignment to failure for the course and possible expulsion from the college.

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MAT 122 Statistics (w/ Stats Coreq) – Assignment and Test Schedule

| | | |
|-------------|--|---|
| Week 1 & 2: | Syllabus Review Growth Mindset Class expectations | ALEKS introduction Embedded tutor Course management – anxiety, time management, support |
| Week 3: | <u>MAT 122</u> Sections 1.1, 1.2 Sections 2.1, 2.2 Sections 2.3, 3.1 | <u>MAT 052 (just-in-time remediation)</u> Rounding decimals Change decimals to/from fractions, percents, proportions |
| Week 4: | Quiz 1 Sections 3.2, 3.3 Exam Review | Order of operations Solving simple equations |
| Week 5: | Exam 1 (Ch 1, 2, 3) Sections 5.1, 5.2 | Review fractions, decimals, proportions, percents Simplify fractions, Scientific Notation |
| Week 6: | Quiz 2 Section 5.4 Sections 6.1, 6.2 | Evaluate factorials Discrete phrasing Review scientific notation |
| Week 7: | Quiz 3 Sections 7.1, 7.2 Exam Review | Inequality symbols and notation |
| Week 8: | Exam 2 (Ch 5, 6, 7) Sections 7.3, 7.4 | Interpret \pm notation, Interval distance |
| Week 9: | Quiz 4 Sections 8.1, 8.2, 8.3 | |
| Week 10: | Quiz 5 Sections 9.1, 9.2, 9.3 | |
| Week 11: | Quiz 6 Section 9.4 Exam Review Exam 3 (Ch 7, 8, 9) | |
| Week 12: | Section 4.1 Section 4.2 | Ordered pairs (coordinates) Slope and graphing lines |
| Week 13: | Quiz 7 Stats Projects | |
| Week 14: | Stats Projects | |

Final Exam Review

Week 15: **Final Exam**

Quinsigamond Community College School of Math and Science

Instructor's Information

Instructor: Professor XX (she/her/hers)
Office: 200A
Email: xxxxx@qcc.mass.edu
Telephone: 508-854-xxxx

Course Information

Course: MAT 122 Statistics – Section XX
Meets: Mondays and Wednesdays from 9:30am – 10:45am
Room: 174A
Credits: 3 credits
Semester: Spring 2023

Course Description

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MAT 122 Statistics – Assignment and Test Schedule

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| Week 4: | Quiz 1 Sections 3.2, 3.3 Exam Review | |
| Week 5: | Exam 1 (Ch 1, 2, 3) Sections 5.1, 5.2 | |
| Week 6: | Quiz 2 Section 5.4, 6.1, 6.2 | |
| Week 7: | Quiz 3 Sections 7.1, 7.2 Exam Review | |
| Week 8: | Exam 2 (Ch 5, 6, 7) Sections 7.3, 7.4 | |
| Week 9: | Quiz 4 Sections 8.1, 8.2, 8.3 | |
| Week 10: | Quiz 5 Sections 9.1, 9.2, 9.3 | |
| Week 11: | Quiz 6 Section 9.4 Exam Review | |
| Week 12: | Exam 3 (Ch 7, 8, 9) Section 4.1 | |
| Week 13: | Section 4.2 Quiz 7 Stats Projects | |
| Week 14: | Stats Projects Final Exam Review | |
| Week 15: | Final Exam | |

Business, Financial & Hospitality Management**Business Administration Transfer - Associate in Science (Program Code: BT)****CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------------|---------------|--------------|--|---|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: BT).</p> <p>Register for and successfully complete all courses to graduate in four semesters.</p> <p>Attend Transfer Services events. For information see www.QCC.edu/transfer.</p> <p>Complete ENG 101.</p> <p>Complete MAT 123 or MAT 231.</p> |
| 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 | |
| Introduction to Microcomputer Applications OR | CIS 111 | F/S/SU | 3 | | |
| Advanced Microcomputer Applications | CIS 112 | | | CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Principles of Macroeconomics | ECO 215 | F/S/SU | 3 | Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| College Mathematics I: Pre-Calculus OR | MAT 123 | F/S/SU | 3 | MAT 100 or approp place score | |
| Applied Calculus | MAT 231 | S | | MAT 123 or approp place score | |
| | | Total | 15 | | |
| Semester 2 | | | | | <p>Meet with Academic Advisor to choose Program Electives (Semesters 3 and 4); must be selected from ACC, BSL, FIN, MGT, or MRK course designations.</p> <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> |
| Financial Accounting II | ACC 102 | F/S/SU | 3 | ACC 101, CIS 111 | |
| Principles of Microeconomics | ECO 216 | F/S/SU | 3 | 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 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 3 | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> <p>Students planning to transfer to WSU should choose MGT 211 as one of the Program Electives.</p> <p>Students in the Commonwealth Commitment program should choose MRK 201 as one of the Program Electives.</p> |
| Managerial Accounting | ACC 222 | F/S/SU | 3 | ACC 102 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | <p>Continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| Science Elective or Lab Science Elective | --- | F/S/SU | 3-4 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 15-16 | | |
| Total Credits Required | | | 61-62 | | |

Business, Financial & Hospitality Management**Business Administration Transfer - Associate in Science (Program Code: BT)****PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------------|---------------|--------------|--|---|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: BT). Register for and successfully complete all courses to graduate in four semesters. Attend Transfer Services events. For information see www.QCC.edu/transfer . Complete ENG 101. Complete MAT 123 or MAT 231. |
| 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 | |
| Introduction to Microcomputer Applications OR | CIS 111 | F/S/SU | 3 | CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Advanced Microcomputer Applications | CIS 112 | | | | |
| Principles of Macroeconomics | ECO 215 | F/S/SU | 3 | Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| College Mathematics I: Pre-Calculus OR | MAT 123 | F/S/SU | 3 | MAT 100 or approp place score | |
| Applied Calculus | MAT 231 | S | | MAT 123 or approp place score | |
| | | Total | 15 | | |
| Semester 2 | | | | | Meet with Academic Advisor to choose Program Electives (Semesters 3 and 4); must be selected from ACC, BSL, FIN, MGT, or MRK course designations. Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Financial Accounting II | ACC 102 | F/S/SU | 3 | ACC 101, CIS 111 | |
| Principles of Microeconomics | ECO 216 | F/S/SU | 3 | Coreq: ENG 101 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 3 | | | | | Meet with representatives of four-year schools to discuss/begin the transfer application process. Students planning to transfer to WSU should choose MGT 211 as one of the Program Electives. Students in the Commonwealth Commitment program should choose MRK 201 as one of the Program Electives. |
| Managerial Accounting | ACC 222 | F/S/SU | 3 | ACC 102 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | Continue with/complete the transfer application process. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| Science Elective or Lab Science Elective | --- | F/S/SU | 3-4 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 15-16 | | |
| Total Credits Required | | | 61-62 | | |

Business, Financial & Hospitality Management**Logistics/Supply Chain Management Certificate (Program Code: LOGC)****CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------------|---------------|-----------|--|---|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: LOGC).</p> <p>Register for and successfully complete all courses to graduate in two semesters.</p> <p>If choosing BUS 299 for one of the Program Electives (Semester 2), meet with Career Services to discuss the co-op process and leads for co-op placements.</p> <p>If choosing BUS 299 for one of the Program Electives (Semester 2), contact Career Services to complete all requirements of CPS 298 (required prior to registration for BUS 299). See www.QCC.edu/career-services.</p> <p>Meet with Academic Advisor to discuss associate degree (Program Code: BB); or create an account on the QCC job board to search for internships, co-ops and jobs.</p> <p>Complete prerequisite(s) for MAT 122.</p> |
| Financial Accounting I OR | ACC 101 | F/S/SU | 3 | Placement into college level English, MAT 090 with a grade of "C" or higher or approp place score | |
| Principles of Macroeconomics | ECO 215 | | | Coreq: ENG 101 | |
| Introduction to Microcomputer Applications OR | CIS 111 | F/S/SU | 3 | | |
| Advanced Microcomputer Applications | CIS 112 | | | CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Introduction to Business Logistics | LOG 105 | F | 3 | Placement into college level English, MAT 090 with a grade of "C" or higher or approp place score | |
| Principles of Management | MGT 211 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 15 | | |
| Semester 2 | | | | | <p>For the Program Electives, choose: BUS 299, LOG 106, LOG 107, LOG 208, or MNT 100 (see individual course descriptions for semester offerings and prerequisites).</p> <p>Apply to associate degree (Program Code: BB); or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Integrated Communications for Business | BUS 201 | F/S/SU | 3 | CIS 111, Placement into college level English | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| Program Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| | | Total | 12 | | |
| Total Credits Required | | | 27 | | |

Business, Financial & Hospitality Management
Logistics/Supply Chain Management Certificate (Program Code: LOGC)

PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------------|---------------|-----------|--|---|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: LOGC).</p> <p>Register for and successfully complete all courses to graduate in two semesters.</p> <p>If choosing BUS 299 for one of the Program Electives (Semester 2), meet with Career Services to discuss the co-op process and leads for co-op placements.</p> <p>If choosing BUS 299 for one of the Program Electives (Semester 2), contact Career Services to complete all requirements of CPS 298 (required prior to registration for BUS 299). See www.QCC.edu/career-services.</p> <p>Meet with Academic Advisor to discuss associate degree (Program Code: BB); or create an account on the QCC job board to search for internships, co-ops and jobs.</p> <p>Complete prerequisite(s) for MAT 122.</p> |
| Financial Accounting I OR | ACC 101 | F/S/SU | 3 | Placement into college level English, MAT 090 with a grade of "C" or higher or approp place score | |
| Principles of Macroeconomics | ECO 215 | | | Coreq: ENG 101 | |
| Introduction to Microcomputer Applications OR | CIS 111 | F/S/SU | 3 | | |
| Advanced Microcomputer Applications | CIS 112 | | | CIS 111, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Introduction to Business Logistics | LOG 105 | F | 3 | Placement into college level English, MAT 090 with a grade of "C" or higher or approp place score | |
| Principles of Management | MGT 211 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 15 | | |
| Semester 2 | | | | | <p>For the Program Electives, choose: BUS 299, LOG 106, LOG 107, LOG 208, or MNT 100 (see individual course descriptions for semester offerings and prerequisites).</p> <p>Apply to associate degree (Program Code: BB); or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Integrated Communications for Business | BUS 201 | F/S/SU | 3 | CIS 111, Placement into college level English | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| Program Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| | | Total | 12 | | |
| Total Credits Required | | | 27 | | |

Computer & Information Technology

CURRENT

Computer Information Systems - Career - Enterprise Information Systems - Associate in Science (Program Code: CIES)

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------|--------------|--------------|--|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: CIES).</p> <p>Register for and successfully complete all courses to graduate in five semesters.</p> <p>Contact Program Coordinator for laptop requirements.</p> <p>Complete CIS 105 or CIS 111.</p> <p>Complete CIS 121, CIS 134, ENG 101, and MAT 122.</p> |
| Introduction to Information Technology OR | CIS 105 | F/S | 3 | | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | | | |
| 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 105 or CIS 111 | |
| 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 105 or CIS 111 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| | | Total | 15 | | |
| Semester 2 | | | | | <p>Meet with Career Services to discuss the co-op process and leads for co-op placements.</p> <p>Complete CIS 223 and ENG 102.</p> |
| .NET Programming I | CIS 223 | S | 3 | CIS 105 or CIS 111, CIS 121 or CSC 108 | |
| SQL Programming | CIS 228 | 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 | |
| Web Page Development II | CIS 234 | S | 3 | CIS 121 or CSC 108, CIS 134 | |
| Database Management Application Development | CIS 243 | 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 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Liberal Arts Elective | --- | F/S/SU | 3 | | |
| | | Total | 18 | | |
| Semester 3 (Summer) | | | | | |
| Introduction to Data Communication & Networks OR | CIS 141 | S/SU | 3-4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 105 or CIS 111 | |
| Networking Technologies | CSC 234 | F/S/SU | | Coreq: CSC 141 | |
| Liberal Arts Elective | --- | F/S/SU | 3 | | |
| | | Total | 6-7 | | |
| Semester 4 | | | | | <p>Meet with Program Coordinator to discuss readiness for CIS 299.</p> <p>Contact Career Services to complete all requirements of CPS 298 (required prior to registration for CIS 299). See www.QCC.edu/career-services.</p> <p>Create an account on the QCC job board to search for internships, co-ops and jobs.</p> <p>Complete CIS 232 and CIS 241.</p> |
| Management of Data Analytics | CIS 206 | F/S | 3 | CIS 105 or CIS 111 or CIS 243, MAT 122 | |
| .NET Programming II | CIS 232 | F | 3 | CIS 223 | |
| Systems Analysis & Design | CIS 241 | F | 3 | CIS 121 or CIS 223 or CIS 226 or CIS 230 or CSC 108 | |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | |
| CIS Elective (200-level) | --- | F/S/SU | 3 | | |
| CIS Elective (200-level) | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 5 | | | | | <p>If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| .NET Programming III | CIS 246 | S | 3 | CIS 134, CIS 232 | |
| Quality Assurance Foundations | CIS 251 | S | 1 | CIS 121 or CSC 108 or CSC 201 | |
| Information Architecture/User Interface Foundations | CIS 252 | S | 1 | CIS 121 or CSC 108, CIS 134 | |
| Security Techniques in Programming | CIS 253 | S | 1 | CIS 121 or CSC 108, CIS 134 | |
| Cooperative Work Experience & Seminar | CIS 299 | S | 3 | CIS 241, CPS 298, Approval of Program Coordinator | |
| Technical and Workplace Writing | ENG 205 | F/S/SU | 3 | ENG 102, Computer Literacy | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 15 | | |
| Total Credits Required | | | 69-70 | | |

| Suggested CIS Electives Course Sequence | | | |
|---|---------------------|--------------------------------|---------------------|
| Semester | Database Focus | Programming Focus | Web Design Focus |
| 4 | CIS 229 and CIS 244 | CIS 225 and CIS 226 or CIS 229 | CIS 226 and CIS 230 |

Computer & Information Technology**PROPOSED****Computer Information Systems - Career - Enterprise Information Systems - Associate in Science (Program Code: CIES)**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------------|---------------|--------------|--|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: CIES). |
| Introduction to Information Technology OR | CIS 105 | F/S | 3 | | Register for and successfully complete all courses to graduate in five semesters. |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | | | |
| 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 105 or CIS 111 | Contact Program Coordinator for laptop requirements. |
| 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 105 or CIS 111 | Complete CIS 105 or CIS 111. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Complete CIS 121, CIS 134, ENG 101, and MAT 122. |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| | | Total | 15 | | |
| Semester 2 | | | | | Meet with Career Services to discuss the co-op process and leads for co-op placements. |
| .NET Programming I | CIS 223 | S | 3 | CIS 105 or CIS 111, CIS 121 or CSC 108 | Complete CIS 223 and ENG 102. |
| SQL Programming | CIS 228 | 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 | |
| Web Page Development II | CIS 234 | S | 3 | CIS 121 or CSC 108, CIS 134 | |
| Database Management Application Development | CIS 243 | 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 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Liberal Arts Elective | --- | F/S/SU | 3 | | |
| | | Total | 18 | | |
| Semester 3 (Summer) | | | | | |
| Introduction to Data Communication & Networks OR | CIS 141 | S/SU | 3-4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 105 or CIS 111 | |
| Networking Technologies | CSC 234 | F/S/SU | | Coreq: CSC 141 | |
| Liberal Arts Elective | --- | F/S/SU | 3 | | |
| | | Total | 6-7 | | |
| Semester 4 | | | | | Meet with Program Coordinator to discuss readiness for CIS 299. |
| Management of Data Analytics | CIS 206 | F/S | 3 | CIS 105 or CIS 111 or CIS 243, MAT 122 | Contact Career Services to complete all requirements of CPS 298 (required prior to registration for CIS 299). See www.QCC.edu/career-services . |
| .NET Programming II | CIS 232 | F | 3 | CIS 223 | |
| Systems Analysis & Design | CIS 241 | F | 3 | CIS 121 or CIS 223 or CIS 226 or CIS 230 or CSC 108 | |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | Create an account on the QCC job board to search for internships, co-ops and jobs. |
| CIS Elective (200-level) | --- | F/S/SU | 3 | | Complete CIS 232 and CIS 241. |
| CIS Elective (200-level) | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 5 | | | | | If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| .NET Programming III | CIS 246 | S | 3 | CIS 134, CIS 232 | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Quality Assurance Foundations | CIS 251 | S | 1 | CIS 121 or CSC 108 or CSC 201 | |
| Information Architecture/User Interface Foundations | CIS 252 | S | 1 | CIS 121 or CSC 108, CIS 134 | |
| Security Techniques in Programming | CIS 253 | S | 1 | CIS 121 or CSC 108, CIS 134 | |
| Cooperative Work Experience & Seminar | CIS 299 | S | 3 | CIS 241, CPS 298, Approval of Program Coordinator | |
| Technical and Workplace Writing | ENG 205 | F/S/SU | 3 | ENG 102, Computer Literacy | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 15 | | |
| Total Credits Required | | | 69-70 | | |

| Suggested CIS Electives Course Sequence | | | |
|--|-----------------------|--------------------------------|-------------------------|
| Semester | Database Focus | Programming Focus | Web Design Focus |
| 4 | CIS 229 and CIS 244 | CIS 225 and CIS 226 or CIS 229 | CIS 226 and CIS 230 |

Computer & Information Technology**CURRENT****Computer Information Systems - Health Information Option - Associate in Science (Program Code: CIHI)**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------------|---------------|--------------|--|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: CIHI). Register for and successfully complete all courses to graduate in five semesters. Complete ALH 102, CIS 111, ENG 101, and MAT 100. |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| College Algebra | MAT 100 | F/S/SU | 3 | MAT 099 with a grade of "C" or higher or approp place score | |
| Liberal Arts Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 2 | | | | | Meet with Career Services to discuss the co-op process and leads for co-op placements. Complete CIS 121 and ENG 102. |
| Medical Law and Ethics | ALH 106 | F/S | 3 | Placement into college level English | |
| 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 105 or CIS 111 | |
| 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 105 or CIS 111 | |
| Introduction to Data Communication & Networks OR | CIS 141 | S/SU | 3-4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 105 or CIS 111 | |
| Networking Technologies | CSC 234 | F/S/SU | | Coreq: CSC 141 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| | | Total | 15-16 | | |
| Semester 3 (Summer) | | | | | |
| Principles of Human Biology | BIO 100 | F/S/SU | 4 | Placement into college level English | |
| Liberal Arts Elective | --- | F/S/SU | 3 | | |
| | | Total | 7 | | |
| Semester 4 | | | | | Meet with Program Coordinator to discuss readiness for CIS 299. Contact Career Services to complete all requirements of CPS 298 (required prior to registration for CIS 299). See www.QCC.edu/career-services . Create an account on the QCC job board to search for internships, co-ops and jobs. Complete CIS 241. |
| Medical/Dental Billing and Insurance | BSS 112 | F/S | 3 | ALH 102 | |
| 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 | |
| Electronic Health Records | CIS 212 | F/S | 3 | ALH 102, CIS 111 | |
| Systems Analysis & Design | CIS 241 | F | 3 | CIS 121 or CIS 223 or CIS 226 or CIS 230 or CSC 108 | |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| | | Total | 15 | | |
| Semester 5 | | | | | If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| SQL Programming | CIS 228 | 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 | 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, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Cooperative Work Experience & Seminar | CIS 299 | S | 3 | CIS 241, CPS 298, Approval of Program Coordinator | |
| Technical and Workplace Writing | ENG 205 | F/S/SU | 3 | ENG 102, Computer Literacy | |
| | | Total | 15 | | |
| Total Credits Required | | | 67-68 | | |

Computer & Information Technology**PROPOSED****Computer Information Systems - Health Information Option - Associate in Science (Program Code: CIHI)**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------------|---------------|--------------|--|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: CIHI). Register for and successfully complete all courses to graduate in five semesters. Complete ALH 102, CIS 111, ENG 101, and MAT 100. |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| College Algebra | MAT 100 | F/S/SU | 3 | MAT 099 with a grade of "C" or higher or approp place score | |
| Liberal Arts Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 2 | | | | | Meet with Career Services to discuss the co-op process and leads for co-op placements. Complete CIS 121 and ENG 102. |
| Medical Law and Ethics | ALH 106 | F/S | 3 | Placement into college level English | |
| 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 105 or CIS 111 | |
| 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 105 or CIS 111 | |
| Introduction to Data Communication & Networks OR | CIS 141 | S/SU | 3-4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score, Coreq: CIS 105 or CIS 111 | |
| Networking Technologies | CSC 234 | F/S/SU | | Coreq: CSC 141 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| | | Total | 15-16 | | |
| Semester 3 (Summer) | | | | | |
| Principles of Human Biology | BIO 100 | F/S/SU | 4 | Placement into college level English | |
| Liberal Arts Elective | --- | F/S/SU | 3 | | |
| | | Total | 7 | | |
| Semester 4 | | | | | Meet with Program Coordinator to discuss readiness for CIS 299. Contact Career Services to complete all requirements of CPS 298 (required prior to registration for CIS 299). See www.QCC.edu/career-services . Create an account on the QCC job board to search for internships, co-ops and jobs. Complete CIS 241. |
| Medical/Dental Billing and Insurance | BSS 112 | F/S | 3 | ALH 102 | |
| 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 | |
| Electronic Health Records | CIS 212 | F/S | 3 | ALH 102, CIS 111 | |
| Systems Analysis & Design | CIS 241 | F | 3 | CIS 121 or CIS 223 or CIS 226 or CIS 230 or CSC 108 | |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| | | Total | 15 | | |
| Semester 5 | | | | | If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| SQL Programming | CIS 228 | 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 | 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, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Cooperative Work Experience & Seminar | CIS 299 | S | 3 | CIS 241, CPS 298, Approval of Program Coordinator | |
| Technical and Workplace Writing | ENG 205 | F/S/SU | 3 | ENG 102, Computer Literacy | |
| | | Total | 15 | | |
| Total Credits Required | | | 67-68 | | |

Computer & Information Technology (New certificate, eff. Fall 2023, approved via Academic Matters 11/08/2022)
Data Science Certificate (Program Code: DS) CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|--|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: DS). Register for and successfully complete all courses to graduate in two semesters. Complete CIS 111 and CIS 121. |
| 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 105 or CIS 111 | |
| Introduction to Programming Using Python | CSC 101 | F/S | 3 | MAT 099 with a grade of "C" or higher or approp place score | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| | | Total | 12 | | |
| Semester 2 | | | | | If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| 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 | |
| Management of Data Analytics | CIS 206 | F/S | 3 | CIS 105 or CIS 111 or CIS 243, MAT 122 | |
| .NET Programming I | CIS 223 | S | 3 | CIS 105 or CIS 111, CIS 121 or CSC 108 | |
| SQL Programming | CIS 228 | 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, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| | | Total | 15 | | |
| Total Credits Required | | | 27 | | |

Computer & Information Technology (New certificate, eff. Fall 2023, approved via Academic Matters 11/08/2022)
Data Science Certificate (Program Code: DS) PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|--|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: DS). Register for and successfully complete all courses to graduate in two semesters. Complete CIS 111 and CIS 121. |
| 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 105 or CIS 111 | |
| Introduction to Programming Using Python | CSC 101 | F/S | 3 | MAT 099 with a grade of "C" or higher or approp place score | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| | | Total | 12 | | |
| Semester 2 | | | | | If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| 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 | |
| Management of Data Analytics | CIS 206 | F/S | 3 | CIS 105 or CIS 111 or CIS 243, MAT 122 | |
| .NET Programming I | CIS 223 | S | 3 | CIS 105 or CIS 111, CIS 121 or CSC 108 | |
| SQL Programming | CIS 228 | 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, Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| | | Total | 15 | | |
| Total Credits Required | | | 27 | | |

Engineering & Engineering Technology**CURRENT****Manufacturing Technology - Quality Control Option - Associate in Science (Program Code: MPQ)**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------------|---------------|--------------|---|---|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: MPQ). |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | Register for and successfully complete all courses to graduate in four semesters. Complete MNT 101. Complete MNT 108 (includes certification exam). |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| College Algebra | MAT 100 | F/S/SU | 3 | MAT 099 with a grade of "C" or higher or approp place score | |
| Mechanical CAD I | MNT 101 | F/S | 3 | MAT 095 with a grade of "C" or higher or approp place score | |
| Basic Machine Operation | MNT 108 | F/S | 3 | MAT 095 with a grade of "C" or higher or approp place score | |
| | | Total | 15 | | |
| Semester 2 | | | | | Meet with Career Services to discuss the co-op process and leads for co-op placements. |
| College Mathematics I: Pre-Calculus | MAT 123 | F/S/SU | 3 | MAT 100 or approp place score | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Complete MNT 103 and MNT 106. |
| Solid Modeling | MNT 103 | F/S | 3 | ERG 101 or MNT 101 | |
| Quality | MNT 106 | S | 3 | | |
| Manufacturing Materials and Processes | MNT 110 | S | 3 | MAT 095 with a grade of "C" or higher or approp place score | |
| Maintenance and Instrumentation in Manufacturing | MNT 115 | S | 3 | | |
| | | Total | 15 | | |
| Semester 3 | | | | | Meet with Program Coordinator to discuss readiness for MNT 299. |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | Contact Career Services to complete all requirements of CPS 298 (required prior to registration for MNT 299). See www.QCC.edu/career-services . If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. Complete MNT 100 (includes certification exam). Complete MNT 210. For the Program Electives (Semesters 3 and 4), for an alternative professional option, choose from ACC, BUS, ELT, HUM, LOG, MGT, MNT, SOC, or any MAT 200-level course. |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| Manufacturing Safety | MNT 100 | F/S | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| CNC Programming | MNT 210 | F | 4 | Coreq: MNT 101, MNT 108 | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| Program Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Manufacturing Capstone Project | MNT 216 | S | 4 | MNT 102 or MNT 103, MNT 210 | Complete MNT 216, which offers SME CMfgT exam. Complete MNT 299 (with Program Coordinator approval), which introduces students to employers. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Lean Manufacturing and Six Sigma | MNT 218 | S | 3 | MNT 106 | |
| Cooperative Work Experience & Seminar | MNT 299 | F/S/SU | 3 | CPS 298, Approval of Program Coordinator | |
| Program Elective | --- | F/S/SU | 3 | | |
| Science Elective | --- | F/S/SU | 3-4 | | |
| | | Total | 16-17 | | |
| Total Credits Required | | | 62-63 | | |

Engineering & Engineering Technology**PROPOSED****Manufacturing Technology - Quality Control Option - Associate in Science (Program Code: MPQ)**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|--------------|---|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: MPQ). |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | Register for and successfully complete all courses to graduate in four semesters. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| College Algebra | MAT 100 | F/S/SU | 3 | MAT 099 with a grade of "C" or higher or approp place score | Complete MNT 101. |
| Mechanical CAD I | MNT 101 | F/S | 3 | MAT 095 with a grade of "C" or higher or approp place score | |
| Basic Machine Operation | MNT 108 | F/S | 3 | MAT 095 with a grade of "C" or higher or approp place score | Complete MNT 108 (includes certification exam). |
| | | Total | 15 | | |
| Semester 2 | | | | | Meet with Career Services to discuss the co-op process and leads for co-op placements. |
| College Mathematics I: Pre-Calculus | MAT 123 | F/S/SU | 3 | MAT 100 or approp place score | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . |
| Solid Modeling | MNT 103 | F/S | 3 | ERG 101 or MNT 101 | |
| Quality | MNT 106 | S | 3 | | Complete MNT 103 and MNT 106. |
| Manufacturing Materials and Processes | MNT 110 | S | 3 | MAT 095 with a grade of "C" or higher or approp place score | |
| Maintenance and Instrumentation in Manufacturing | MNT 115 | S | 3 | | |
| | | Total | 15 | | |
| Semester 3 | | | | | Meet with Program Coordinator to discuss readiness for MNT 299. |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | Contact Career Services to complete all requirements of CPS 298 (required prior to registration for MNT 299). See www.QCC.edu/career-services . |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| Manufacturing Safety | MNT 100 | F/S | 3 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| CNC Programming | MNT 210 | F | 4 | Coreq: MNT 101, MNT 108 | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | Complete MNT 100 (includes certification exam). |
| Program Elective | --- | F/S/SU | 3 | | Complete MNT 210. |
| | | Total | 16 | | For the Program Electives (Semesters 3 and 4), for an alternative professional option, choose from ACC, BUS, ELT, HUM, LOG, MGT, MNT, SOC, or any MAT 200-level course. |
| Semester 4 | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Manufacturing Capstone Project | MNT 216 | S | 4 | MNT 102 or MNT 103, MNT 210 | Complete MNT 216, which offers SME CMfgT exam. |
| Lean Manufacturing and Six Sigma | MNT 218 | S | 3 | MNT 106 | |
| Cooperative Work Experience & Seminar | MNT 299 | F/S/SU | 3 | CPS 298, Approval of Program Coordinator | Complete MNT 299 (with Program Coordinator approval), which introduces students to employers. |
| Program Elective | --- | F/S/SU | 3 | | |
| Science Elective | --- | F/S/SU | 3-4 | | Submit an Intent to Graduate Form, located on The Q. |
| | | Total | 16-17 | | |
| Total Credits Required | | | 62-63 | | |

Healthcare**Healthcare - Medical Sales/Marketing Option - Associate in Science (Program Code: HCSM)****CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|---|
| Semester 1 (Fall) | | | | | Apply and get accepted to this program (Program Code: HCSM). |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. |
| General Biology: Core Concepts | BIO 101 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | Complete BIO 101; or AP Biology, with AP Exam grade of "3" or higher, to count as BIO 107, then petition for BIO 107 to count as BIO 101. |
| 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. |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | Complete FYE 102. |
| 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 | 16 | | |
| Semester 2 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Anatomy & Physiology I OR | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Healthcare Elective | --- | | | | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Principles of Marketing | MRK 201 | F/S/SU | 3 | Placement into college level English | |
| Mathematics Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 3 (Fall) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Medical Law and Ethics | ALH 106 | F/S | 3 | Placement into college level English | Consider taking Humanities Elective to complete MassTransfer block. |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | Meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Anatomy & Physiology II | BIO 112 | | | BIO 111 | Complete CPS 298. |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | |
| Sales & Sales Management | MRK 221 | S | 3 | Placement into college level English | |
| Healthcare Elective or Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 4 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Healthcare Externship | ALH 299 | F/S/SU | 3 | ACC 101 or MRK 201, ALH 106, BSS 112 or MRK 221, CPS 298 | Consider taking Humanities and Social Science Electives to complete MassTransfer block. |
| Human Relations in Organizations | PSY 158 | F/S/SU | 3 | Placement into college level English | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Healthcare Elective or Humanities Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective or Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Total Credits Required | | | 60 | | |

Healthcare**Healthcare - Medical Sales/Marketing Option - Associate in Science (Program Code: HCSM)****PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|--|---|
| Semester 1 (Fall) | | | | | Apply and get accepted to this program (Program Code: HCSM). |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. |
| General Biology: Core Concepts | BIO 101 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | Complete BIO 101; or AP Biology, with AP Exam grade of "3" or higher, to count as BIO 107, then petition for BIO 107 to count as BIO 101. |
| 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. |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | Complete FYE 102. |
| 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 | 16 | | |
| Semester 2 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Anatomy & Physiology I OR | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Healthcare Elective | --- | | | | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Principles of Marketing | MRK 201 | F/S/SU | 3 | Placement into college level English | |
| Mathematics Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 3 (Fall) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Medical Law and Ethics | ALH 106 | F/S | 3 | Placement into college level English | Consider taking Humanities Elective to complete MassTransfer block. |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | Meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Anatomy & Physiology II | BIO 112 | | | BIO 111 | Complete CPS 298. |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | |
| Sales & Sales Management | MRK 221 | S | 3 | Placement into college level English | |
| Healthcare Elective or Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 4 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Healthcare Externship | ALH 299 | F/S/SU | 3 | ACC 101 or MRK 201, ALH 106, BSS 112 or MRK 221, CPS 298 | Consider taking Humanities and Social Science Electives to complete MassTransfer block. |
| Human Relations in Organizations | PSY 158 | F/S/SU | 3 | Placement into college level English | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Healthcare Elective or Humanities Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective or Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Total Credits Required | | | 60 | | |

Healthcare**Healthcare - Pre-Dental Hygiene Option - Associate in Science (Program Code: HCDH)****CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|---|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: HCDH).</p> <p>Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714.</p> <p>Complete BIO 101; or AP Biology, with AP Exam grade of "3" or higher, to count as BIO 107, then petition for BIO 107 to count as BIO 101.</p> <p>Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101.</p> <p>Complete FYE 102.</p> <p>Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101.</p> |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| 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 | 16 | | |
| Semester 2 (Spring) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Meet with Dental Hygiene Program Coordinator to discuss associate degree (Program Code: DH); or if considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> <p>Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102.</p> |
| Introduction to Pharmacology for Allied Health Professionals | ALH 103 | F/S/SU | 3 | Placement into college level English | |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| Introduction to the Chemistry of Living Systems | CHM 101 | F/S/SU | 4 | CHM 090 or one year of HS Chemistry, MAT 095 with a grade of "C" or higher or approp place score | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| | | Total | 14 | | |
| Semester 3 (Fall) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process.</p> |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 (Spring) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Consider taking Humanities, Mathematics, and Social Science Electives to complete MassTransfer block.</p> <p>Apply to associate degree (Program Code: DH); or continue with/ complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Healthcare Elective or Humanities Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective or Mathematics Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective or Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Total Credits Required | | | 62 | | |

Healthcare**Healthcare - Pre-Dental Hygiene Option - Associate in Science (Program Code: HCDH)****PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|--|---|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: HCDH).</p> <p>Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714.</p> <p>Complete BIO 101; or AP Biology, with AP Exam grade of "3" or higher, to count as BIO 107, then petition for BIO 107 to count as BIO 101.</p> <p>Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101.</p> <p>Complete FYE 102.</p> <p>Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101.</p> |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | |
| 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 | 16 | | |
| Semester 2 (Spring) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Meet with Dental Hygiene Program Coordinator to discuss associate degree (Program Code: DH); or if considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> <p>Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102.</p> |
| Introduction to Pharmacology for Allied Health Professionals | ALH 103 | F/S/SU | 3 | Placement into college level English | |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| Introduction to the Chemistry of Living Systems | CHM 101 | F/S/SU | 4 | CHM 090 or one year of HS Chemistry, MAT 095 with a grade of "C" or higher or approp place score | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| | | Total | 14 | | |
| Semester 3 (Fall) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process.</p> |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 (Spring) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Consider taking Humanities, Mathematics, and Social Science Electives to complete MassTransfer block.</p> <p>Apply to associate degree (Program Code: DH); or continue with/ complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Healthcare Elective or Humanities Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective or Mathematics Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective or Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Total Credits Required | | | 62 | | |

Healthcare**Emergency Medical Technician Certificate (Program Code: EMT)****CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: EMT). Register for and successfully complete all courses to graduate in two semesters. |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | |
| | | Total | 12 | | |
| Semester 2 | | | | | EMT 101 may be taken as a free-standing course or as part of the entire certificate. If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Sit for NREMT written exam. Sit for NREMT/MA psychomotor exam. Apply for MA EMT certification. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | | | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Basic Emergency Medical Technology | EMT 101 | F/S/SU | 7 | | |
| | | Total | 11 | | |
| Total Credits Required | | | 23 | | |

Healthcare**Emergency Medical Technician Certificate (Program Code: EMT)****PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: EMT). Register for and successfully complete all courses to graduate in two semesters. |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | |
| | | Total | 12 | | |
| Semester 2 | | | | | EMT 101 may be taken as a free-standing course or as part of the entire certificate. If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Sit for NREMT written exam. Sit for NREMT/MA psychomotor exam. Apply for MA EMT certification. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | | | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | |
| Basic Emergency Medical Technology | EMT 101 | F/S/SU | 7 | | |
| | | Total | 11 | | |
| Total Credits Required | | | 23 | | |

Healthcare
Nursing Assistant Certificate (Program Code: NA)

CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|---|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: NA), in order to take ALH 131.</p> <p>Register for and successfully complete all courses to graduate in two semesters.</p> <p>Complete BIO 100 or BIO 101.</p> |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Introductory Nursing Assistant | ALH 131 | F/S/SU | 5 | Placement into college level English | |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | | | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 2 | | | | | <p>If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| 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 | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 8 | | |
| Total Credits Required | | | 23 | | |

Healthcare
Nursing Assistant Certificate (Program Code: NA)

PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|---|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: NA), in order to take ALH 131.</p> <p>Register for and successfully complete all courses to graduate in two semesters.</p> <p>Complete BIO 100 or BIO 101.</p> |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Introductory Nursing Assistant | ALH 131 | F/S/SU | 5 | Placement into college level English | |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | | | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 2 | | | | | <p>If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| 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 | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 8 | | |
| Total Credits Required | | | 23 | | |

Healthcare**Pharmacy Technician Certificate (Program Code: PT)****CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: PT), in order to take ALH 137.</p> <p>Register for and successfully complete all courses to graduate in two semesters.</p> <p>Complete ALH 137 with a grade of "C" or higher.</p> <p>Complete BIO 100 or BIO 101.</p> |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Pharmacy Technician | ALH 137 | F | 3 | Placement into college level English, MAT 090 with a grade of "C" or higher or approp place score | |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | | | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 2 | | | | | <p>If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> <p>Complete ALH 138 with a grade of "C" or higher.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Pharmacy Technician Clinical Co-Operative Externship | ALH 138 | S | 6 | ALH 137 | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 12 | | |
| Total Credits Required | | | 25 | | |

Healthcare**Pharmacy Technician Certificate (Program Code: PT)****PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: PT), in order to take ALH 137.</p> <p>Register for and successfully complete all courses to graduate in two semesters.</p> <p>Complete ALH 137 with a grade of "C" or higher.</p> <p>Complete BIO 100 or BIO 101.</p> |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Pharmacy Technician | ALH 137 | F | 3 | Placement into college level English, MAT 090 with a grade of "C" or higher or approp place score | |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | | | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Semester 2 | | | | | <p>If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> <p>Complete ALH 138 with a grade of "C" or higher.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Pharmacy Technician Clinical Co-Operative Externship | ALH 138 | S | 6 | ALH 137 | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 12 | | |
| Total Credits Required | | | 25 | | |

Healthcare**Phlebotomy/EKG Technician Certificate (Program Code: PEKG)****CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|---|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: PEKG), in order to take ALH 125. Register for and successfully complete all courses to graduate in two semesters. Complete BIO 100 or BIO 101. |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | | | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| 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 | 13 | | |
| Semester 2 | | | | | If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Complete ALH 125 with a grade of "C" or higher. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Phlebotomy/EKG Technician Principles and Application | ALH 125 | F/S/SU | 9 | Placement into college level English | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| | | Total | 12 | | |
| Total Credits Required | | | 25 | | |

Healthcare**Phlebotomy/EKG Technician Certificate (Program Code: PEKG)****PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|---|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: PEKG), in order to take ALH 125. Register for and successfully complete all courses to graduate in two semesters. Complete BIO 100 or BIO 101. |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | | | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | |
| 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 | 13 | | |
| Semester 2 | | | | | If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Complete ALH 125 with a grade of "C" or higher. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Phlebotomy/EKG Technician Principles and Application | ALH 125 | F/S/SU | 9 | Placement into college level English | |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| | | Total | 12 | | |
| Total Credits Required | | | 25 | | |

Healthcare**Healthcare - Associate in Science (Program Code: HLC)****CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: HLC).</p> <p>Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714.</p> <p>Complete BIO 101; or AP Biology, with AP Exam grade of "3" or higher, to count as BIO 107, then petition for BIO 107 to count as BIO 101.</p> <p>Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101.</p> <p>Complete FYE 102.</p> <p>Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101.</p> |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| 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 | 16 | | |
| Semester 2 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Meet with Program Coordinator of desired QCC healthcare field (e.g., Dental Hygiene, etc.); or if considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> <p>Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102.</p> <p>Complete prerequisite(s) for MAT 122.</p> |
| Introduction to Pharmacology for Allied Health Professionals | ALH 103 | F/S/SU | 3 | Placement into college level English | |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, 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 | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 16 | | |
| Semester 3 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process.</p> |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Apply to desired QCC healthcare field associate degree; or continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| History Elective | --- | F/S/SU | 3 | | |
| Humanities Elective (200-level) | --- | F/S/SU | 3 | | |
| | | Total | 12 | | |
| Total Credits Required | | | 60 | | |

Healthcare**Healthcare - Associate in Science (Program Code: HLC)****PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|--|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: HLC).</p> <p>Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714.</p> <p>Complete BIO 101; or AP Biology, with AP Exam grade of "3" or higher, to count as BIO 107, then petition for BIO 107 to count as BIO 101.</p> <p>Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101.</p> <p>Complete FYE 102.</p> <p>Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101.</p> |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| General Biology: Core Concepts | BIO 101 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | |
| 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 | 16 | | |
| Semester 2 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Meet with Program Coordinator of desired QCC healthcare field (e.g., Dental Hygiene, etc.); or if considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> <p>Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102.</p> <p>Complete prerequisite(s) for MAT 122.</p> |
| Introduction to Pharmacology for Allied Health Professionals | ALH 103 | F/S/SU | 3 | Placement into college level English | |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, 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 | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 16 | | |
| Semester 3 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process.</p> |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Apply to desired QCC healthcare field associate degree; or continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective | --- | F/S/SU | 3 | | |
| History Elective | --- | F/S/SU | 3 | | |
| Humanities Elective (200-level) | --- | F/S/SU | 3 | | |
| | | Total | 12 | | |
| Total Credits Required | | | 60 | | |

Healthcare**Healthcare - Medical Office Management Option - Associate in Science (Program Code: HCMO) CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|---|
| Semester 1 (Fall) | | | | | Apply and get accepted to this program (Program Code: HCMO). |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. |
| General Biology: Core Concepts | BIO 101 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | Complete BIO 101; or AP Biology, with AP Exam grade of "3" or higher, to count as BIO 107, then petition for BIO 107 to count as BIO 101. |
| 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. |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | Complete FYE 102. |
| 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 | 16 | | |
| Semester 2 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Anatomy & Physiology I OR | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Healthcare Elective | --- | | | | |
| Medical/Dental Billing and Insurance | BSS 112 | F/S | 3 | ALH 102 | Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102. |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| | | Total | 13 | | |
| Semester 3 (Fall) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| 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 | Consider taking Humanities Elective to complete MassTransfer block. |
| Medical Law and Ethics | ALH 106 | F/S | 3 | Placement into college level English | |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | Meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Anatomy & Physiology II | BIO 112 | | | BIO 111 | |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | Complete CPS 298. |
| Human Relations in Organizations | PSY 158 | F/S/SU | 3 | Placement into college level English | |
| Healthcare Elective or Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Healthcare Externship | ALH 299 | F/S/SU | 3 | ACC 101 or MRK 201, ALH 106, BSS 112 or MRK 221, CPS 298 | Consider taking Humanities, Mathematics, and Social Science Electives to complete MassTransfer block. |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Healthcare Elective or Humanities Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective or Mathematics Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective or Social Science Elective | --- | F/S/SU | 3 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| | | Total | 15 | | |
| Total Credits Required | | | 60 | | |

Healthcare

Healthcare - Medical Office Management Option - Associate in Science (Program Code: HCMO) **PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|---|---|
| Semester 1 (Fall) | | | | | Apply and get accepted to this program (Program Code: HCMO). |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. |
| General Biology: Core Concepts | BIO 101 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | Complete BIO 101; or AP Biology, with AP Exam grade of "3" or higher, to count as BIO 107, then petition for BIO 107 to count as BIO 101. |
| 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. |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | Complete FYE 102. |
| 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 | 16 | | |
| Semester 2 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Anatomy & Physiology I OR | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| Healthcare Elective | --- | | | | |
| Medical/Dental Billing and Insurance | BSS 112 | F/S | 3 | ALH 102 | Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102. |
| Introduction to Microcomputer Applications | CIS 111 | F/S/SU | 3 | | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| | | Total | 13 | | |
| Semester 3 (Fall) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| 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 | Consider taking Humanities Elective to complete MassTransfer block. |
| Medical Law and Ethics | ALH 106 | F/S | 3 | Placement into college level English | |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 4 | Placement into college level English | Meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Anatomy & Physiology II | BIO 112 | | | BIO 111 | |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | Complete CPS 298. |
| Human Relations in Organizations | PSY 158 | F/S/SU | 3 | Placement into college level English | |
| Healthcare Elective or Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Healthcare Externship | ALH 299 | F/S/SU | 3 | ACC 101 or MRK 201, ALH 106, BSS 112 or MRK 221, CPS 298 | Consider taking Humanities, Mathematics, and Social Science Electives to complete MassTransfer block. |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Healthcare Elective or Humanities Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective or Mathematics Elective | --- | F/S/SU | 3 | | |
| Healthcare Elective or Social Science Elective | --- | F/S/SU | 3 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| | | Total | 15 | | |
| Total Credits Required | | | 60 | | |

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

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|--|---------|-----------|--|--|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: MSMA).</p> <p>Meet with Career Services to credential 22 credits for CMA or RMA.</p> <p>Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714.</p> |
| 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: MSS 111 MSS 112 MSS 121 MSS 122 MSS 199 | | 22 | | |
| | Total | | 22 | | |
| Semester 2 (Spring) | | | | | <p>Meet with Program Coordinator of desired QCC healthcare field (e.g., Nurse Education, etc.); or if considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> <p>Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101.</p> <p>Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101.</p> |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| 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 | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | Total | | 12 | | |
| Semester 3 (Fall) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process.</p> <p>Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102.</p> |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, 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) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Apply to desired QCC healthcare field associate degree; or continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| 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 | | |

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

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|--|---------|-----------|--|--|
| Semester 1 (Fall) | | | | | <p>Apply and get accepted to this program (Program Code: MSMA).</p> <p>Meet with Career Services to credential 22 credits for CMA or RMA.</p> <p>Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714.</p> |
| 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: MSS 111 MSS 112 MSS 121 MSS 122 MSS 199 | | 22 | | |
| | Total | | 22 | | |
| Semester 2 (Spring) | | | | | <p>Meet with Program Coordinator of desired QCC healthcare field (e.g., Nurse Education, etc.); or if considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> <p>Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101.</p> <p>Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101.</p> |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Healthcare First Year Experience | FYE 102 | F/S/SU | 3 | | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | Total | | 12 | | |
| Semester 3 (Fall) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process.</p> <p>Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102.</p> |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, 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) | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Apply to desired QCC healthcare field associate degree; or continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| 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 | | |

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

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|---|--------------|-----------|--|---|
| Semester 1 (Summer) | | | | | Apply and get accepted to this program (Program Code: HCPN). |
| 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 210 PNP 233 PNP 235 (or any combination of PNP courses) | | 17 | | Meet with Career Services to credential up to 17 Healthcare Elective credits for current LPN certification. |
| | | Total | 17 | | Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. |
| Semester 2 (Fall) | | | | | Apply and get accepted to a QCC nurse education program (e.g., Program Code: NUR, NUL, etc.) as these high demand programs have waitlists; or if considering transfer (LPN to BSN), meet with a Transfer Services Advisor. See www.QCC.edu/transfer . |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| 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 | 9 | | |
| Semester 3 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Monitor status on waitlist for selected QCC nurse education program. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | Complete BIO 111 with a grade of "C" or higher. |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | Complete ENG 102; or AP English/Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102. |
| | | Total | 10 | | |
| Semester 4 (Fall) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | Monitor status on waitlist for selected QCC nurse education program; or if considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| History Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | Complete BIO 112 with a grade of "C" or higher. |
| Semester 5 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | Monitor status on waitlist for selected QCC nurse education program; or continue with/complete the transfer application process for LPN to BSN; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | Complete BIO 232 with a grade of "C" or higher. |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | Submit an Intent to Graduate Form, located on The Q. |
| Total Credits Required | | | 62 | | |

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

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|---|--------------|-----------|--|---|
| Semester 1 (Summer) | | | | | Apply and get accepted to this program (Program Code: HCPN). |
| 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 210 PNP 233 PNP 235 (or any combination of PNP courses) | | 17 | | Meet with Career Services to credential up to 17 Healthcare Elective credits for current LPN certification. |
| | | Total | 17 | | Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714. |
| Semester 2 (Fall) | | | | | Apply and get accepted to a QCC nurse education program (e.g., Program Code: NUR, NUL, etc.) as these high demand programs have waitlists; or if considering transfer (LPN to BSN), meet with a Transfer Services Advisor. See www.QCC.edu/transfer . |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| 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 | 9 | | |
| Semester 3 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Monitor status on waitlist for selected QCC nurse education program. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | Complete BIO 111 with a grade of "C" or higher. |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | Complete ENG 102; or AP English/Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102. |
| | | Total | 10 | | |
| Semester 4 (Fall) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | Monitor status on waitlist for selected QCC nurse education program; or if considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Survey of Life Span Development | PSY 121 | F/S/SU | 3 | PSY 101 | |
| History Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | Complete BIO 112 with a grade of "C" or higher. |
| Semester 5 (Spring) | | | | | Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed. |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | Monitor status on waitlist for selected QCC nurse education program; or continue with/complete the transfer application process for LPN to BSN; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | Complete BIO 232 with a grade of "C" or higher. |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | Submit an Intent to Graduate Form, located on The Q. |
| | | Total | 13 | | |
| Total Credits Required | | | 62 | | |

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

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|-------------------------------------|----------|--------------|--------------|---|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: HCNU).</p> <p>Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714.</p> <p>Complete BIO 101; or AP Biology, with AP Exam grade of "3" or higher, to count as BIO 107, then petition for BIO 107 to count as BIO 101.</p> <p>Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101.</p> <p>Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101.</p> |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 3-4 | Placement into college level English | |
| General Biology: Core Concepts OR | BIO 101 | | | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | |
| Introduction to Public Health | PHA 101 | | | Placement into college level English | |
| 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 | 12-13 | | |
| Semester 2 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Apply and get accepted to a QCC nurse education program (e.g., Program Code: NUR, NUE, etc.) as these high demand programs have waitlists.</p> <p>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).</p> |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Introductory Nursing Assistant | ALH 131 | F/S/SU | 5 | Placement into college level English | |
| 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 | |
| | | Total | 10 | | |
| Semester 3 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Monitor status on waitlist for selected QCC nurse education program.</p> <p>Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102.</p> |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, 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 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Monitor status on waitlist for selected QCC nurse education program.</p> <p>Complete prerequisite(s) for MAT 122.</p> |
| 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 | | |
| Semester 5 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Monitor status on waitlist for selected QCC nurse education program.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| 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 | | |
| Total Credits Required | | | 61-62 | | |

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

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------------|---------------|--------------|---|--|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: HCNU).</p> <p>Contact Career Services (www.QCC.edu/APexams) to receive credit for High School (HS) Advanced Placement (AP) Exams. QCC School Code: 3714.</p> <p>Complete BIO 101; or AP Biology, with AP Exam grade of "3" or higher, to count as BIO 107, then petition for BIO 107 to count as BIO 101.</p> <p>Complete ENG 101; or AP English/ Language and Composition, with AP Exam grade of "3" or higher, to count as ENG 101.</p> <p>Complete PSY 101; or AP Psychology, with AP Exam grade of "3" or higher, to count as PSY 101.</p> |
| Principles of Human Biology OR | BIO 100 | F/S/SU | 3-4 | Placement into college level English | |
| General Biology: Core Concepts OR | BIO 101 | | | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | |
| Introduction to Public Health | PHA 101 | | | Placement into college level English | |
| 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 | 12-13 | | |
| Semester 2 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Apply and get accepted to a QCC nurse education program (e.g., Program Code: NUR, NUE, etc.) as these high demand programs have waitlists.</p> <p>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).</p> |
| Introduction to Medical Terminology | ALH 102 | F/S/SU | 3 | Placement into college level English | |
| Introductory Nursing Assistant | ALH 131 | F/S/SU | 5 | Placement into college level English | |
| 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 | |
| | | Total | 10 | | |
| Semester 3 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Monitor status on waitlist for selected QCC nurse education program.</p> <p>Complete ENG 102; or AP English/ Literature and Composition, with AP Exam grade of "3" or higher, to count as ENG 102.</p> |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, 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 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Monitor status on waitlist for selected QCC nurse education program.</p> <p>Complete prerequisite(s) for MAT 122.</p> |
| 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 | | |
| Semester 5 | | | | | <p>Follow Academic Plan from FYE 102; adjust with Academic Advisor, as needed.</p> <p>Monitor status on waitlist for selected QCC nurse education program.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| Introduction to Global Health | PHA 102 | F/S/SU | 3 | Placement into college level English | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 13 | | |
| Total Credits Required | | | 61-62 | | |

Healthcare**Healthcare - Public Health Option - Associate in Science (Program Code: HCPL) CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------------|---------------|-----------|--|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: HCPL). Register for and successfully complete all courses to graduate in six semesters. Complete BIO 111 and ENG 101. Complete prerequisite(s) for CHM 101. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Survey of Personal Health | PHA 100 | F/S | 3 | Placement into college level English | |
| Introduction to Public Health | PHA 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 13 | | |
| Semester 2 | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Introduction to the Chemistry of Living Systems | CHM 101 | F/S/SU | 4 | CHM 090 or one year of HS Chemistry, MAT 095 with a grade of "C" or higher or approp place score | |
| Introduction to Global Health | PHA 102 | F/S/SU | 3 | Placement into college level English | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 14 | | |
| Semester 3 (Summer) | | | | | Complete prerequisite(s) for MAT 122. |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 7 | | |
| Semester 4 | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| 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 | |
| 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 | 12 | | |
| Semester 5 | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Complete CPS 298. |
| Nutrition | BIO 241 | F/S/SU | 3 | BIO 101 or BIO 111 | |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | |
| Public Health Epidemiology | PHA 103 | F | 3 | CHM 101, MAT 122, PHA 100, PHA 101, PHA 102 | |
| United States Government | PSC 201 | F/S/SU | 3 | ENG 101 | |
| Humanities Elective (200-level) | --- | F/S/SU | 3 | | |
| | | Total | 12 | | |
| Semester 6 (Summer) | | | | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Public Health Co-Operative Externship | PHA 299 | S | 3 | BIO 241, CPS 298, PHA 103, PSC 201 | |
| | | Total | 3 | | |
| Total Credits Required | | | 61 | | |

Healthcare**Healthcare - Public Health Option - Associate in Science (Program Code: HCPL) PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---|----------------|---------------|-----------|--|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: HCPL). Register for and successfully complete all courses to graduate in six semesters. Complete BIO 111 and ENG 101. Complete prerequisite(s) for CHM 101. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Survey of Personal Health | PHA 100 | F/S | 3 | Placement into college level English | |
| Introduction to Public Health | PHA 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 13 | | |
| Semester 2 | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | |
| Introduction to the Chemistry of Living Systems | CHM 101 | F/S/SU | 4 | CHM 090 or one year of HS Chemistry, MAT 095 with a grade of "C" or higher or approp place score | |
| Introduction to Global Health | PHA 102 | F/S/SU | 3 | Placement into college level English | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 14 | | |
| Semester 3 (Summer) | | | | | Complete prerequisite(s) for MAT 122. |
| Medical Microbiology | BIO 232 | F/S/SU | 4 | BIO 112 or CHM 105 or CHM 123 | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| | | Total | 7 | | |
| Semester 4 | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| 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 | 12 | | |
| Semester 5 | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Complete CPS 298. |
| Nutrition | BIO 241 | F/S/SU | 3 | BIO 101 or BIO 111 | |
| Pre Cooperative Education Seminar | CPS 298 | F/S | 0 | | |
| Public Health Epidemiology | PHA 103 | F | 3 | CHM 101, MAT 122, PHA 100, PHA 101, PHA 102 | |
| United States Government | PSC 201 | F/S/SU | 3 | ENG 101 | |
| Humanities Elective (200-level) | --- | F/S/SU | 3 | | |
| | | Total | 12 | | |
| Semester 6 (Summer) | | | | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Public Health Co-Operative Externship | PHA 299 | S | 3 | BIO 241, CPS 298, PHA 103, PSC 201 | |
| | | Total | 3 | | |
| Total Credits Required | | | 61 | | |

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|---------|---------|--|---|
| Semester 1 (Summer I & II) | | | | | Attend Program and Clinical Orientation sessions (mandatory). |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Complete BIO 111 with a grade of "C" or higher. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Complete ENG 101. |
| Topics in Mathematics OR | MAT 121 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | Complete either MAT 121 (recommended) or MAT 122 with a grade of "C" or higher. |
| Statistics | MAT 122 | | | | |
| | | Total | 10 | | |
| Semester 2 (Fall) | | | | | Successfully complete six pre-clinical and three competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| Introduction to Psychology OR | PSY 101 | F/S/SU | 3 | Placement into college level English | Complete all RDT courses each semester with grades of "C" or higher. |
| Psychology of Interpersonal Relations | PSY 118 | F/S | | | |
| Patient Care & Ethics in Radiology | RDT 102 | F | 3 | Accepted to RT Program | |
| Radiographic Medical Terminology | RDT 104 | F | 1 | Accepted to RT Program | |
| Fundamentals of Radiographic Equipment and Medical Imaging | RDT 110 | F | 3 | Accepted to RT Program, MAT 121 or MAT 122 with a grade of "C" or higher | |
| Radiographic Positioning & Anatomy I | RDT 121 | F | 3 | Coreq: RDT 102, RDT 104 | |
| Medical Radiography Clinic I | RDT 131 | F | 2 | Coreq: RDT 110, RDT 121 | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 18 | | |
| Semester 3 (Spring) | | | | | Successfully complete five pre-clinical and 16 competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | Complete BIO 112 with a grade of "C" or higher. |
| Medical Imaging II | RDT 112 | S | 3 | RDT 110 | |
| Radiographic Positioning & Anatomy II | RDT 122 | S | 3 | RDT 121, SPH 101 | |
| Medical Radiography Clinic II | RDT 132 | S | 3 | RDT 131 | |
| Radiation Science | RDT 141 | S | 2 | RDT 110 | |
| | | Total | 15 | | |
| Semester 4 (Summer I) | | | | | Successfully complete four competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| Medical Radiography Summer Clinic II | RDT 133 | SU | 2 | RDT 132 | Successfully complete three pre-clinical and two competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| | | Total | 2 | | |
| Semester 5 (Summer II) | | | | | Successfully complete 18 initial and four continued competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| Medical Radiography Summer Clinic III | RDT 230 | SU | 2 | RDT 133 | Successfully complete two pre-clinical, 12 initial and four continued competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| | | Total | 2 | | |
| Semester 6 (Fall) | | | | | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Medical Radiography Clinic III | RDT 231 | F | 3 | RDT 230 | |
| Imaging Applications | RDT 240 | F | 4 | RDT 112, RDT 122 | |
| Medical Radiographic Equipment & Quality Assurance | RDT 245 | F | 3 | RDT 112 | |
| | | Total | 13 | | |
| Semester 7 (Spring) | | | | | If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Medical Radiography Clinic IV | RDT 232 | S | 3 | RDT 231 | Apply for ARRT certification exam (www.arrt.org) and MA-RCP temporary license (www.mass.gov/how-to/apply-for-a-temporary-radiologic-technologist-license). |
| Radiology Seminar | RDT 252 | S | 4 | BIO 112, RDT 231, RDT 240 | |
| Radiologic Pharmacology and Pathology | RDT 254 | S | 3 | BIO 112, RDT 231, RDT 240 | |
| CT & Cross-Section Anatomy | RDT 260 | S | 2 | ARRT Certification in Radiography and current license by the State of Massachusetts Radiation Control Program, Department of Public Health; or BIO 112 and RDT 231 and RDT 240 | Successfully complete two pre-clinical, 12 initial and four continued competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| | | Total | 12 | | Submit an Intent to Graduate Form, located on The Q. |
| Total Credits Required | | | 72 | | |

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|--|---|
| Semester 1 (Summer I & II) | | | | | Attend Program and Clinical Orientation sessions (mandatory). |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Complete BIO 111 with a grade of "C" or higher. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Complete ENG 101. |
| Topics in Mathematics OR | MAT 121 | F/S/SU | 3 | College level math course or QMAT place score > 21 or approp multiple measures place or Coreq: MAT 051 | Complete either MAT 121 (recommended) or MAT 122 with a grade of "C" or higher. |
| Statistics | MAT 122 | | | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| | | Total | 10 | | |
| Semester 2 (Fall) | | | | | Successfully complete six pre-clinical and three competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| Introduction to Psychology OR | PSY 101 | F/S/SU | 3 | Placement into college level English | Complete all RDT courses each semester with grades of "C" or higher. |
| Psychology of Interpersonal Relations | PSY 118 | F/S | | | |
| Patient Care & Ethics in Radiology | RDT 102 | F | 3 | Accepted to RT Program | |
| Radiographic Medical Terminology | RDT 104 | F | 1 | Accepted to RT Program | |
| Fundamentals of Radiographic Equipment and Medical Imaging | RDT 110 | F | 3 | Accepted to RT Program, MAT 121 or MAT 122 with a grade of "C" or higher | |
| Radiographic Positioning & Anatomy I | RDT 121 | F | 3 | Coreq: RDT 102, RDT 104 | |
| Medical Radiography Clinic I | RDT 131 | F | 2 | Coreq: RDT 110, RDT 121 | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 18 | | |
| Semester 3 (Spring) | | | | | Successfully complete five pre-clinical and 16 competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| Anatomy & Physiology II | BIO 112 | F/S/SU | 4 | BIO 111 | Complete BIO 112 with a grade of "C" or higher. |
| Medical Imaging II | RDT 112 | S | 3 | RDT 110 | |
| Radiographic Positioning & Anatomy II | RDT 122 | S | 3 | RDT 121, SPH 101 | |
| Medical Radiography Clinic II | RDT 132 | S | 3 | RDT 131 | |
| Radiation Science | RDT 141 | S | 2 | RDT 110 | |
| | | Total | 15 | | |
| Semester 4 (Summer I) | | | | | Successfully complete four competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| Medical Radiography Summer Clinic II | RDT 133 | SU | 2 | RDT 132 | |
| | | Total | 2 | | |
| Semester 5 (Summer II) | | | | | Successfully complete three pre-clinical and two competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| Medical Radiography Summer Clinic III | RDT 230 | SU | 2 | RDT 133 | |
| | | Total | 2 | | |
| Semester 6 (Fall) | | | | | Successfully complete 18 initial and four continued competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Medical Radiography Clinic III | RDT 231 | F | 3 | RDT 230 | |
| Imaging Applications | RDT 240 | F | 4 | RDT 112, RDT 122 | |
| Medical Radiographic Equipment & Quality Assurance | RDT 245 | F | 3 | RDT 112 | |
| | | Total | 13 | | |
| Semester 7 (Spring) | | | | | If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. |
| Medical Radiography Clinic IV | RDT 232 | S | 3 | RDT 231 | Apply for ARRT certification exam (www.arrt.org) and MA-RCP temporary license (www.mass.gov/how-to/apply-for-a-temporary-radiologic-technologist-license). |
| Radiology Seminar | RDT 252 | S | 4 | BIO 112, RDT 231, RDT 240 | |
| Radiologic Pharmacology and Pathology | RDT 254 | S | 3 | BIO 112, RDT 231, RDT 240 | |
| CT & Cross-Section Anatomy | RDT 260 | S | 2 | ARRT Certification in Radiography and current license by the State of Massachusetts Radiation Control Program, Department of Public Health; or BIO 112 and RDT 231 and RDT 240 | Successfully complete two pre-clinical, 12 initial and four continued competency evaluations; demonstrate professional attributes and compliance with policies in the clinical setting. |
| | | Total | 12 | | Submit an Intent to Graduate Form, located on The Q. |
| Total Credits Required | | | 72 | | |

Liberal Arts & General Studies
General Studies - Associate in Arts (Program Code: GS)
CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---------------------------------------|----------|--------------|-----------|---|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: GS). Register for and successfully complete all courses to graduate in four semesters. Complete ENG 101, FYE 101, and HUM 101. Complete MAT 100 or MAT 121 or MAT 122. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| First Year Experience | FYE 101 | F/S/SU | 3 | | |
| Critical Thinking and Problem Solving | HUM 101 | F/S/SU | 3 | Placement into college level English | |
| College Algebra OR | MAT 100 | F/S/SU | 3 | MAT 099 with a grade of "C" or higher or approp place score | |
| Topics in Mathematics OR | MAT 121 | | | MAT 095 with a grade of "C" or higher or approp place | |
| Statistics | MAT 122 | | | | |
| Behavioral Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 2 | | | | | Meet with Academic Advisor to choose Electives consistent with academic and career plan. If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Complete ENG 102. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Elective | --- | F/S/SU | 3 | | |
| Elective | --- | F/S/SU | 3 | | |
| Elective | --- | F/S/SU | 3 | | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 3 | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. Confirm that MassTransfer 34-credit general education transfer block can be completed. |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Elective | --- | F/S/SU | 3 | | |
| Elective (200-level) | --- | F/S/SU | 3 | | |
| Humanities Elective (200-level) | --- | F/S/SU | 3 | | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Total Credits Required | | | 62 | | |

Liberal Arts & General Studies
General Studies - Associate in Arts (Program Code: GS)
PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---------------------------------------|----------|--------------|-----------|--|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: GS). Register for and successfully complete all courses to graduate in four semesters. Complete ENG 101, FYE 101, and HUM 101. Complete MAT 100 or MAT 121 or MAT 122. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| First Year Experience | FYE 101 | F/S/SU | 3 | | |
| Critical Thinking and Problem Solving | HUM 101 | F/S/SU | 3 | Placement into college level English | |
| College Algebra OR | MAT 100 | F/S/SU | 3 | MAT 099 with a grade of "C" or higher or approp place score | |
| Topics in Mathematics OR | MAT 121 | | | College level math course or QMAT place score > 21 or approp multiple measures place or Coreq: MAT 051 | |
| Statistics | MAT 122 | | | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| Behavioral Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 2 | | | | | Meet with Academic Advisor to choose Electives consistent with academic and career plan. If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Complete ENG 102. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Elective | --- | F/S/SU | 3 | | |
| Elective | --- | F/S/SU | 3 | | |
| Elective | --- | F/S/SU | 3 | | |
| History Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 3 | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. Confirm that MassTransfer 34-credit general education transfer block can be completed. |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| Elective | --- | F/S/SU | 3 | | |
| Humanities Elective | --- | F/S/SU | 3 | | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Elective | --- | F/S/SU | 3 | | |
| Elective (200-level) | --- | F/S/SU | 3 | | |
| Humanities Elective (200-level) | --- | F/S/SU | 3 | | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Total Credits Required | | | 62 | | |

Liberal Arts & General Studies
General Studies - Deaf Studies Option - Associate in Arts (Program Code: GSDS)
CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|--------------------|--------------|--------------|---|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: GSDS). Register for and successfully complete all courses to graduate in four semesters. Complete ENG 101. Complete prerequisite(s) for MAT 121 or MAT 122. |
| Beginning American Sign Language I | ASL 111 | F/S/SU | 3 | | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Critical Thinking and Problem Solving | HUM 101 | F/S/SU | 3 | Placement into college level English | |
| 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 | 15 | | |
| Semester 2 | | | | | If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Complete MAT 121 or MAT 122. |
| Beginning American Sign Language II | ASL 112 | F/S/SU | 3 | ASL 111 | |
| Introduction to Deaf Studies | ASL 113 | S | 3 | ASL 111 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Topics in Mathematics OR Statistics | MAT 121 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 | | |
| Semester 3 | | | | | If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs. Confirm that MassTransfer 34-credit general education transfer block can be completed. |
| Issues in Deaf Society | ASL 114 | F/S | 3 | | |
| Career Signing | ASL 119 | F/S | 3 | ASL 112, ASL 113 | |
| Intermediate American Sign Language I | ASL 211 | F/S | 3 | ASL 112 | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Deaf Community Practicum | ASL 200 | F/S | 3 | ASL 112, ASL 113, CORI/SORI Check | |
| Intermediate American Sign Language II | ASL 212 | S | 3 | ASL 211 | |
| Social Psychology | PSY 253 | F/S | 3 | ENG 101, PSY 101 | |
| History Elective | --- | F/S/SU | 3 | | |
| Science Elective or Lab Science Elective | --- | F/S/SU | 3-4 | | |
| | | Total | 15-16 | | |
| Total Credits Required | | | 61-62 | | |

Liberal Arts & General Studies
General Studies - Deaf Studies Option - Associate in Arts (Program Code: GSDS)
PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------------|--------------|--------------|--|---|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: GSDS).</p> <p>Register for and successfully complete all courses to graduate in four semesters.</p> <p>Complete ENG 101.</p> <p>Complete prerequisite(s) for MAT 121 or MAT 122.</p> |
| Beginning American Sign Language I | ASL 111 | F/S/SU | 3 | | |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| Critical Thinking and Problem Solving | HUM 101 | F/S/SU | 3 | Placement into college level English | |
| 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 | 15 | | |
| Semester 2 | | | | | <p>If considering transfer, meet with a Transfer Services Advisor. See www.QCC.edu/transfer.</p> <p>Complete MAT 121 or MAT 122.</p> |
| Beginning American Sign Language II | ASL 112 | F/S/SU | 3 | ASL 111 | |
| Introduction to Deaf Studies | ASL 113 | S | 3 | ASL 111 | |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | |
| Topics in Mathematics OR | MAT 121 | F/S/SU | 3 | College level math course or QMAT place score > 21 or approp multiple measures place or Coreq: MAT 051 | |
| Statistics | MAT 122 | | | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| Speech Communication Skills | SPH 101 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 15 | | |
| Semester 3 | | | | | <p>If considering transfer, meet with representatives of four-year schools to discuss/begin the transfer application process; or create an account on the QCC job board to search for internships, co-ops and jobs.</p> <p>Confirm that MassTransfer 34-credit general education transfer block can be completed.</p> |
| Issues in Deaf Society | ASL 114 | F/S | 3 | | |
| Career Signing | ASL 119 | F/S | 3 | ASL 112, ASL 113 | |
| Intermediate American Sign Language I | ASL 211 | F/S | 3 | ASL 112 | |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| Social Science Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | <p>Continue with/complete the transfer application process; or if seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Deaf Community Practicum | ASL 200 | F/S | 3 | ASL 112, ASL 113, CORI/SORI Check | |
| Intermediate American Sign Language II | ASL 212 | S | 3 | ASL 211 | |
| Social Psychology | PSY 253 | F/S | 3 | ENG 101, PSY 101 | |
| History Elective | --- | F/S/SU | 3 | | |
| Science Elective or Lab Science Elective | --- | F/S/SU | 3-4 | | |
| | | Total | 15-16 | | |
| Total Credits Required | | | 61-62 | | |

Liberal Arts & General Studies

Liberal Arts - Psychology Option - Associate in Arts (Program Code: LAPY)

CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---------------------------------------|----------|--------------|-----------|---|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: LAPY). |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Register for and successfully complete all courses to graduate in four semesters. |
| Critical Thinking and Problem Solving | HUM 101 | F/S/SU | 3 | Placement into college level English | |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| 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 | | Attend Transfer Services events. For information see www.QCC.edu/transfer . |
| Semester 2 | | | | | Complete ENG 101 and MAT 122. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | Meet with Academic Advisor to choose Program Electives consistent with academic and career plan. |
| Research Methods in Psychology | PSY 251 | F/S | 3 | ENG 101, MAT 122, PSY 101 | For the Program Electives (Semesters 2 and 4), choose: PSY 123, PSY 124, PSY 252, PSY 253, PSY 261, or PSY 262. |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Program Elective | --- | F/S/SU | 3 | | |
| U.S. or World History Survey Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 3 | | | | | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| General Biology: Core Concepts | BIO 101 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place score | Meet with Academic Advisor to discuss Foreign Language requirement at potential transfer institution(s). |
| Psychological Statistics | PSY 250 | F/S/SU | 3 | ENG 101, MAT 122, PSY 101 | Meet with representatives of four-year schools to discuss/begin the transfer application process. |
| Creative Arts Elective | --- | F/S/SU | 3 | | |
| Foreign Language Elective | --- | F/S/SU | 3 | | |
| Multiple Perspectives Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | Confirm that MassTransfer 34-credit general education transfer block can be completed. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Register for second Foreign Language Elective course (should be next level in same language as completed in Semester 3). |
| Elective | --- | F/S/SU | 3 | | Continue with/complete the transfer application process. |
| Foreign Language Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Total Credits Required | | | 62 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |

Liberal Arts & General Studies

Liberal Arts - Psychology Option - Associate in Arts (Program Code: LAPY)

PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|---------------------------------------|----------|--------------|-----------|--|--|
| Semester 1 | | | | | Apply and get accepted to this program (Program Code: LAPY). |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | Register for and successfully complete all courses to graduate in four semesters. |
| Critical Thinking and Problem Solving | HUM 101 | F/S/SU | 3 | Placement into college level English | |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| 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 | | Attend Transfer Services events. For information see www.QCC.edu/transfer . |
| Semester 2 | | | | | Complete ENG 101 and MAT 122. |
| Composition II | ENG 102 | F/S/SU | 3 | ENG 101 | Meet with Academic Advisor to choose Program Electives consistent with academic and career plan. |
| Research Methods in Psychology | PSY 251 | F/S | 3 | ENG 101, MAT 122, PSY 101 | For the Program Electives (Semesters 2 and 4), choose: PSY 123, PSY 124, PSY 252, PSY 253, PSY 261, or PSY 262. |
| Introductory Sociology (Principles) | SOC 101 | F/S/SU | 3 | Placement into college level English | |
| Program Elective | --- | F/S/SU | 3 | | |
| U.S. or World History Survey Elective | --- | F/S/SU | 3 | | |
| | | Total | 15 | | |
| Semester 3 | | | | | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. |
| General Biology: Core Concepts | BIO 101 | F/S/SU | 4 | Placement into college level English, MAT 095 with a grade of "C" or higher or approp place | Meet with Academic Advisor to discuss Foreign Language requirement at potential transfer institution(s). |
| Psychological Statistics | PSY 250 | F/S/SU | 3 | ENG 101, MAT 122, PSY 101 | Meet with representatives of four-year schools to discuss/begin the transfer application process. |
| Creative Arts Elective | --- | F/S/SU | 3 | | |
| Foreign Language Elective | --- | F/S/SU | 3 | | |
| Multiple Perspectives Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Semester 4 | | | | | Confirm that MassTransfer 34-credit general education transfer block can be completed. |
| Anatomy & Physiology I | BIO 111 | F/S/SU | 4 | BIO 101 or BIO 107 or HS AP Biology or PNP 240 with a grade of "C" or higher, Coreq: ENG 101 | Register for second Foreign Language Elective course (should be next level in same language as completed in Semester 3). |
| Elective | --- | F/S/SU | 3 | | Continue with/complete the transfer application process. |
| Foreign Language Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| Program Elective | --- | F/S/SU | 3 | | |
| | | Total | 16 | | |
| Total Credits Required | | | 62 | | Submit an Intent to Graduate Form, located on <i>The Q</i> . |

Liberal Arts & General Studies

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

CURRENT

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|---------|--------------|---|---|
| Semester 1 | | | | | <p>Apply and get accepted to this program (Program Code: LASO).</p> <p>Register for and successfully complete all courses to graduate in four semesters.</p> <p>Complete ENG 101 and MAT 121.</p> |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| 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 | | | | | <p>Meet with a Transfer Services Advisor. See www.QCC.edu/transfer. Attend Transfer Services events.</p> <p>Complete ENG 102.</p> |
| Cultural Anthropology OR | ANT 111 | F/S/SU | 3 | Placement into college level English | |
| Introduction to Psychology | PSY 101 | F/S/SU | 3 | ENG 101 | |
| 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 | Placement into college level English | |
| Science Elective or Lab Science Elective | --- | F/S/SU | 3-4 | | |
| | | | Total | 15-16 | |
| Semester 3 | | | | | <p>Meet with representatives of four-year schools to discuss/begin the transfer application process.</p> <p>Confirm that MassTransfer 34-credit general education transfer block can be completed.</p> <p>Complete MAT 122.</p> |
| Statistics | MAT 122 | F/S/SU | 3 | MAT 095 with a grade of "C" or higher or approp place | |
| 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 | | | | | <p>Consult with transfer institution regarding selection of Liberal Arts Electives.</p> <p>Continue with/complete the transfer application process.</p> <p>Submit an Intent to Graduate Form, located on <i>The Q</i>.</p> |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| 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 | | |

Liberal Arts & General Studies

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

PROPOSED

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|---------|---------|--|--|
| Semester 1 | | | | | 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. |
| Composition I | ENG 101 | F/S/SU | 3 | Placement into college level English | |
| 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 | College level math course or QMAT place score > 21 or approp multiple measures place or Coreq: MAT 051 | |
| 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 | | | | | Meet with a Transfer Services Advisor. See www.QCC.edu/transfer . Attend Transfer Services events. Complete ENG 102. |
| Cultural Anthropology OR | ANT 111 | F/S/SU | 3 | Placement into college level English | |
| Introduction to Psychology | PSY 101 | | | | |
| 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 | Placement into college level English | |
| Science Elective or Lab Science Elective | --- | F/S/SU | 3-4 | | |
| | | Total | 15-16 | | |
| Semester 3 | | | | | 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. |
| Statistics | MAT 122 | F/S/SU | 3 | College level math course or QMAT place score > 21 or Coreq: MAT 052 | |
| 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 | | | | | 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> . |
| Lab Science Elective | --- | F/S/SU | 4 | | |
| 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 | | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

**DEGREE PROGRAM OR CERTIFICATE
PROPOSAL FOR CLOSURE**

1. Degree or Certificate Name and Code to be closed: Technician in Applied Behavior Analysis (TABC)
2. Originator: Meghan Martin Date: 12/20/2022
3. School Dean: Melissa Fama Date:
4. Rationale for the proposed program or certificate closure: *The training and preparation needed to become a Registered Behavior Technician has become easily accessible for free through direct employers and well as online vendors. The need for the training as a college certificate has decreased significantly and the program is no longer sustainable with low enrollment numbers.*
5. Effective Date: Fall 2023
6. Reviewed by Program and Process (if applicable) Date:
7. Recommended by the School of PSESS Date: _____
Comments: _____
_____ 01/23/23
8. AA Leadership Team: Kevin Li
Recommended: X Not Recommended: _____
Comments: _____
9. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23
Recommended: _____ Not Recommended: _____
X
Comments: _____
10. Learning Council: John Stazinski Date: 02/14/23
Recommended: X Not Recommended: _____
Comments: _____
11. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23
Approved: X Not Approved: _____
Comments: _____

FOR PROGRAM/CERTIFICATE CLOSURE

President: _____

Date: _____

Approved: _____

Not Approved: _____

Board of Trustees: _____

Date: _____

Approved: _____

Not Approved: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** ECE 101 Introduction to Early Childhood Education
(from current AY22/23 catalog)

2. **Originator:** Greg E. Mullaney **Date:** 11/14/2022

3. **School Dean:** Melissa Fama **Date:** 11/14/2022

4. **Effective Date:** Fall 2023

5. **Reviewed by Program and Process (if applicable)** **Date:**

6. **Recommended by the School of** PSESS **Date:** 12/15/2022
Comments:

7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23

Recommended: X **Not Recommended:** _____
Comments:

8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23

Recommended: X **Not Recommended:** _____
Comments:

9. **Learning Council:** John Stazinski **Date:** 02/14/23

Recommended: X **Not Recommended:** _____
Comments:

10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23

Approved: X **Not Approved:** _____
Comments:

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

| | |
|---|----------------------|
| Type of Revision: <input checked="" type="checkbox"/> Description <input type="checkbox"/> Prerequisite <input type="checkbox"/> Corequisite <input type="checkbox"/> Number <input type="checkbox"/> Name <input type="checkbox"/> # Credits <input type="checkbox"/> Elective Type <input type="checkbox"/> Other (explain) | |
| Course Discipline or Department: ECE | School: PSESS |
| Current Course Number: ECE 101 | |
| Current Course Name: Introduction to Early Childhood Education | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): ECE 101 Introduction to Early Childhood Education This course is an introduction to early childhood education. Students study the history and contributing theories of the field and the basic aspects important to quality programs for young children. Course content includes studies of child development, the types of programs available; qualifications for teachers and staff; state regulations monitoring programs, state Guidance Policy, the Massachusetts Early Childhood Standards; career opportunities; special education considerations, and current issues in early childhood education. During a 10-hour field experience students make observations in the Children's School: QCC's Early Childhood Education Lab School and focus on guidance practices; children's play; integrated curriculum practices; transitions and routines; and appropriate methods for addressing special needs of young children. Credits: 3 Prerequisite: Placement into college level English Semester Offered: F/S/SU | |
| Proposed Description (include all proposed changes): ECE 101 Introduction to Early Childhood Education This course is an introduction to early childhood education. Students study the history and contributing theories of the field and the basic aspects important to quality programs for young children. Course content includes studies of child development, the types of programs available; qualifications for teachers and staff; state regulations monitoring programs, state Guidance Policy, the Massachusetts Early Childhood Standards; career opportunities; special education considerations, and current issues in early childhood education. During a 10-hour field experience, students make observations in the Children's School: QCC's Early Childhood Education Lab School, or local licensed Child Care program, or public school that focuses on guidance practices; children's play; integrated curriculum practices; transitions and routines; and appropriate methods for addressing students of differing abilities. Credits: 3 Prerequisite: Placement into college level English Semester Offered: F/S/SU | |
| Rationale for the change: This change is made to address the needs of working students who may not be able to come to the Children's School to do observations. It also helps to clarify which students will need to go through the CORI/SORI process (only those doing observations at the Children's School). | |
| Provide a description of any change in course content. None | |
| List the programs that are affected by this change (list program names and program codes as they appear in the college catalog): Description wording changes only – no program grids affected. | |

| |
|---|
| Please confer with the coordinator of the affected department. |
| Attach current and proposed academic maps (<u>with changes in bold</u>) for all affected programs. You can obtain academic maps from Barb Zabka. |
| Please submit a generic syllabus to your dean with all of the revisions included. |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

1. **Course Number and Name:** ECE 202 Fieldwork with Young Children I
(from current AY22/23 catalog)
2. **Originator:** Greg Mullaney **Date:** 11/18/2022
3. **School Dean:** Melissa Fama **Date:** 11/18/2022
4. **Effective Date:** Fall 2023
5. **Reviewed by Program and Process (if applicable)** **Date:**
6. **Recommended by the School of** PSESS **Date:** 12/15/2022
Comments
7. **AA Leadership Team:** Kevin Li **Date:** 01/23/23
Recommended: X **Not Recommended:** _____
Comments: _____
8. **VP/Academic Affairs:** Mr. James M. Keane **Date:** 01/23/23
Recommended: X **Not Recommended:** _____
Comments: _____
9. **Learning Council:** John Stazinski **Date:** 02/14/23
Recommended: X **Not Recommended:** _____
Comments: _____
10. **VP/Academic Affairs:** Dr. James M. Keane **Date:** 02/14/23
Approved: X **Not Approved:** _____
Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

COURSE REVISION PROPOSAL

| | |
|---|----------------------|
| Type of Revision: ___ Description <u> X </u> Prerequisite ___ Corequisite ___ Number ___ Name ___ # Credits ___ Elective Type ___ Other (explain) | |
| Course Discipline or Department: ECE | School: PSESS |
| Current Course Number: ECE 202 | |
| Current Course Name: Fieldwork with Young Children I | |
| Current Course Description (as it appears in the college catalog including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites): ECE 202 Fieldwork with Young Children I This course provides onsite supervision and consultation for students who are developing skills and competencies as they work directly with young children in a school setting (ages 2.9-under seven years old and not yet enrolled in first grade). Early Childhood Education faculty observe and consult with students during this process. Students demonstrate and document competence in the following areas: setting up and maintaining a safe, healthy learning environment for children; providing positive guidance for children; implementing an age appropriate, culturally sensitive curricula; providing appropriate social experiences for young children; communicating and cooperating with team members appropriately; documenting self-growth over time; and demonstrating awareness of the total classroom at all times. Credits: 3 Semester Offered: F/S | |
| Proposed Description (include all proposed changes): ECE 202 Fieldwork with Young Children I This course provides onsite supervision and consultation for students who are developing skills and competencies as they work directly with young children in a school setting (ages 2.9-under seven years old and not yet enrolled in first grade). Early Childhood Education faculty observe and consult with students during this process. Students demonstrate and document competence in the following areas: setting up and maintaining a safe, healthy learning environment for children; providing positive guidance for children; implementing an age appropriate, culturally sensitive curricula; providing appropriate social experiences for young children; communicating and cooperating with team members appropriately; documenting self-growth over time; and demonstrating awareness of the total classroom at all times. Credits: 3 Prerequisite: ECE 102 Semester Offered: F/S | |
| Rationale for the change: This course comes at the end of the ECE certificate and requires students to understand child development as they are working directly with children. | |
| Provide a description of any change in course content. None | |
| List the programs that are affected by this change (list program names and program codes as they appear in the college catalog): Early Childhood Education Certificate (Program Code: ED) | |
| Please confer with the coordinator of the affected department. | |
| Attach current and proposed academic maps (with changes in bold) for all affected programs. You can obtain academic maps from Barb Zabka. | |
| Please submit a generic syllabus to your dean with all of the revisions included. | |

Education**Early Childhood Education Certificate (Program Code: ED)****CURRENT**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|--------------------------------------|---|
| Semester 1 (Fall) | | | | | Apply and get accepted to this program (Program Code: ED). Register for and successfully complete all courses to graduate in two semesters. Meet with ECE Advisor to discuss requirements of program. Take College Placement Test for English, as needed. |
| Introduction to Early Childhood Education | ECE 101 | F/S/SU | 3 | Placement into college level English | |
| Growth & Development of the Young Child | ECE 102 | F/S/SU | 3 | Placement into college level English | |
| Family Issues & Dynamics | ECE 112 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 9 | | |
| Semester 2 (Spring) | | | | | Meet with ECE Advisor to register and complete paperwork for field placement. If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Fieldwork with Infants and Toddlers (Observation and Experience) OR | ECE 123 | S | 3 | Placement into college level English | |
| Fieldwork with Young Children I | ECE 202 | F/S | | | |
| Infant & Toddler Curriculum and Development | ECE 221 | F/S | 3 | ECE 102 | |
| Discipline: Guiding Children's Behavior | ECE 255 | F/S | 3 | ECE 102 | |
| | | Total | 9 | | |
| Total Credits Required | | | 18 | | |

Education**Early Childhood Education Certificate (Program Code: ED)****PROPOSED**

| Course Title | Course # | Offered | Credits | Prerequisites | Milestones |
|--|----------|--------------|-----------|--------------------------------------|---|
| Semester 1 (Fall) | | | | | Apply and get accepted to this program (Program Code: ED). Register for and successfully complete all courses to graduate in two semesters. Meet with ECE Advisor to discuss requirements of program. Take College Placement Test for English, as needed. |
| Introduction to Early Childhood Education | ECE 101 | F/S/SU | 3 | Placement into college level English | |
| Growth & Development of the Young Child | ECE 102 | F/S/SU | 3 | Placement into college level English | |
| Family Issues & Dynamics | ECE 112 | F/S/SU | 3 | Placement into college level English | |
| | | Total | 9 | | |
| Semester 2 (Spring) | | | | | Meet with ECE Advisor to register and complete paperwork for field placement. If seeking employment, meet with Career Services for career readiness preparation and to learn more about QCC's job board. Submit an Intent to Graduate Form, located on <i>The Q</i> . |
| Fieldwork with Infants and Toddlers (Observation and Experience) OR | ECE 123 | S | 3 | Placement into college level English | |
| Fieldwork with Young Children I | ECE 202 | F/S | | ECE 102 | |
| Infant & Toddler Curriculum and Development | ECE 221 | F/S | 3 | ECE 102 | |
| Discipline: Guiding Children's Behavior | ECE 255 | F/S | 3 | ECE 102 | |
| | | Total | 9 | | |
| Total Credits Required | | | 18 | | |

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

NEW COURSE PROPOSAL

1. Course Number and Name: ENG 101L Composition I with Lab

2. Originator: John Stazinski Date: Sept 7, 2022

3. School Dean: Brady Hammond Date:

4. Effective Date: Fall 2023

5. Reviewed by Program and Process (if applicable) Date:

6. Recommended by the School of English & Humanities Date: _____
Comments:

7. AA Leadership Team: Kevin Li Date: 01/23/23

Recommended: ☒ Not Recommended: _____

Comments: _____

8. VP/Academic Affairs: Mr. James M. Keane Date: 01/23/23

Recommended: _____ Not Recommended: _____

☒

Comments: _____

9. Learning Council: John Stazinski Date: 02/14/23

Recommended: ☒ Not Recommended: _____

Comments: _____

remove a.k.a. Placement by Advising language in prerequisite wording

10. VP/Academic Affairs: Dr. James M. Keane Date: 02/14/23

Approved: ☒ Not Approved: _____

Comments: _____

2022 - 2023
QUINSIGAMOND COMMUNITY COLLEGE

NEW COURSE PROPOSAL

| | |
|--|---------------------------------------|
| Course Discipline/Department: English | School: English and Humanities |
| Course Number: ENG 101L | |
| Course Name: Composition I with Lab | |
| Prerequisites and/or corequisites (confer with affected department coordinator): Appropriate Placement based on GPA (2.4-2.89) and Self-Placement Test and/or Conference with Advisor (a.k.a., Placement by Advising) | |
| CIP code (check with IRaP Office): | |
| Effective Term/year: Fall 2023 | |
| <p>Give a rationale for the new course. Be sure to indicate whether this course replaces another course. Is the course transferable?</p> <p>Because some students—based on high school GPA and self-placement test scores—are not quite prepared for ENG 101 but also not likely to require a full semester of developmental English, an ENG 101 course that provides additional supports and resources is necessary. This allows students to enroll directly into college-level courses while also limiting the number of non-credit courses students are required to take. The lab will be limited to twelve students in a 22-student ENG 101 class, six meet with the writing coach on alternating days in a week so that each student can receive individualized attention and so the writing coach can understand the needs of individual students. The writing coach is expected to attend the ENG 101 class once a week and to be familiar with the course syllabus, assignments, and expectations. While the ENG 101 course is fully transferable, credit for the lab section would not be.</p> | |
| <p>Is the course content similar to other courses now offered? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, attach a statement from the coordinator of the department offering the similar course.</p> <p>In essence, this is an ENG 101 course with additional lab support.</p> | |
| <p>Please indicate if this course will serve as any of the following types of electives</p> <p><input type="checkbox"/> Elective (any college level course can serve as an elective)</p> <p><input type="checkbox"/> Specific Type (indicate Business, Multiple Perspectives*, Liberal Arts, Humanities, Foreign Language, Social Science, Behavioral Science, Mathematics, Science, Lab Science, Social Science Foundational*, Literature, Philosophy or Language*, Creative Arts*)</p> <p><input type="checkbox"/> Program specific (name the program)</p> <p>*confer with the Liberal Arts Coordinator</p> | |
| <p>Is this course required for a program? If yes, submit a separate DEGREE OR CERTIFICATE REVISION PROPOSAL. If the course is required for a new program, submit a separate NEW DEGREE, OPTION OR CERTIFICATE PROPOSAL. Please list all affected programs here.</p> <p>N/A</p> | |
| Expected enrollment per term: UNK | Expected enrollment per year: UNK |
| <p>Will any of the following be required:</p> <p>Additional staff <input checked="" type="checkbox"/> Additional space <input checked="" type="checkbox"/> Additional equipment <input checked="" type="checkbox"/> Additional library resources <input type="checkbox"/></p> <p>Provide a rationale for any needs indicated above and include approximate cost of equipment.</p> <p>The goal is to pilot the lab section of the course with an instructor who will create a training program so that the lab section can be staffed by writing tutors going forward. The lab course will also need to be held in a computer room or students will be required to have laptops or, if feasible, may be held in the Writing Center.</p> | |

Course Materials

| | | |
|--|-------------------------------------|--|
| Lecture Hours: | Lab Hours: | Clinic Hours: |
| <p>General course description and prerequisites as it will appear in the college catalog (including course three letter designation and number, title, credits, semesters offered and prerequisites/corequisites):</p> <p>ENG 101L Composition I with Lab</p> <p>The course focuses on theme-based argument. Students practice and develop critical reading, thinking, and writing skills necessary for college. Students read, analyze, and summarize college level analytic arguments from various genres (popular, academic, etc.) and compose research-based analytic arguments based on the course's theme. Students become aware of writing decisions made for different audiences, purposes, and genres, with a focus on academic writing conventions. Students also learn beginning research skills, including appropriate quotation, summary, paraphrase, and documentation skills. At the end of the semester, students compile a portfolio of 15-25 pages, to include their summary, synthesis, and analysis projects. This section of the course includes a two-hour lab component where an academic coach will support students with planning, organizing, and revising assignments, focusing on sentence and paragraph-level revision as well as the rhetorical content of the ENG 101 course.</p> <p>Credits: 3</p> <p>Prerequisite: Placement by Advising</p> <p>Semester Offered: F/S/SU</p> | | |
| Lecture Hours per semester (e.g., 45 hr. for 3 credit course): 45 | Lab Hours per semester: 22.5 | Clinic Hours or Internship Hours per semester: |
| <p>Provide the following course information selected from the E-2 checklist for course materials. Provide your dean with a syllabus that includes all of the checklist course materials.</p> <ul style="list-style-type: none"> All required course readings (whether written or electronic), including information on publisher and edition used or website address or link Student Learning Outcomes (list) Teaching procedures (briefly describe) Course topics and/or assignments and/or required and/or supplemental reading Tentative test schedule/assignment(s) schedule Basis for student grading and calculation of final grade as well as criteria for evaluating student performance <p>The lab section of the course follows the course schedule of the ENG 101 course attached.</p> | | |

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

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

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

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

NA – Not Applicable: This is not a learning outcome for this course.

| CONNECTION TO GENERAL EDUCATION STUDENT LEARNING OUTCOMES | I, M, E, NA |
|--|-------------|
| Civic Learning & Engagement: Students will develop civic knowledge, skills and dispositions through learning and practice. | |
| Communication Skills: Students will read, write, and speak effectively to build knowledge and convey meaning. | |
| Information and Digital Literacy: Students will engage in a reflective process of information discovery, use information responsibly and employ digital technologies to learn, communicate and collaborate. | |
| Intercultural Knowledge and Competence: Students will demonstrate intercultural knowledge within a variety of cultural contexts and with culturally different ideas and individuals.. | |
| Quantitative and Scientific Reasoning: Students will apply concepts and methods of mathematics and science to acquire knowledge and solve problems. | |

(Gen. Ed. Goals adopted 2022).

****CIVIC LITERACY**

If civic learning or civic literacy is a component of this course (within the course description, course topics and/or student learning outcomes), please consult the “Guide for Designating Civic Learning Courses” from the Department of Higher Education, available on Frequently Used Forms (with the other Academic Governance Forms). Utilizing the DHE definitions, please indicate whether this course can be designated as one of the following:

___ Civic Learning (CL)

___ Civic Learning with Engagement Required (CLER)

___ Civic Learning with Engagement Optional (CLEO)

___ Civic Learning is not a component of this course (NA)