

**QUEENSBOROUGH COMMUNITY COLLEGE**  
**CITY UNIVERSITY OF NEW YORK**  
**CURRICULUM COMMITTEE**

**To:** Emily Tai, Academic Senate Steering Committee

**From:** Philip A. Pecorino, Chairperson, Committee on Curriculum

**Date:** February 28, 2012

**Subject: Monthly Report**

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The Committee on Curriculum has acted to send the following recommendation to the Academic Senate.

- I. New Courses
- II. Removal of Course
- III. Course Revisions
- IV. Changes to Degree Programs

**I. New Courses**

**DEPARTMENT of MATHEMATICS and COMPUTER SCIENCE**

**MA-119 College Algebra** 4 class hours 3 credits

**Prerequisites:** MA-010 or exempt from remedial mathematics, or permission of the department.

**Co-requisites:** May be taken as a co-requisite to MA-121

**Description:** A basic presentation of the fundamental concepts of college algebra. Systems of linear equations, inequalities, linear, quadratic, exponential and logarithmic functions.

**Rationale:**

This course will replace MA 120 for non-STEM students. STEM students will take MA 119 (this course – College Algebra) plus MA 121 (Trigonometry). Looking at the statistics for Spring and Fall 2011, approximately 80% of QCC students taking MA 120 are non-STEM students. These students do not need trigonometry for their curriculum. The trend in mathematics education is to allow different tracks for students with different educational goals. Baruch, CSI, Hunter, John Jay, Queens, and York do not include trigonometry in their College Algebra courses, therefore MA 119 should satisfy their requirements for a College Algebra course. Students who complete MA 119 with a C or better will be able to take MA 336 (Statistics) and MA 303 (Number Systems). The goal is to improve students' chances of succeeding in College Algebra and increase the pipeline for MA 336 and MA 303.

**DEPARTMENT of ELECTRICAL and COMPUTER ENGINEERING TECHNOLOGY**

**ET-375 Introduction to Robotics** 3-Hours Lecture, 3-Hours Laboratory, 4-Credits

**Prerequisite:** ET-510 or ET 540 or ET-110 or permission of the ECET Department

**Co-requisite:** None

**Description:**

This course is designed to introduce robotic construction, programming, operation and basic theory to the students. Topics included are electronic components, analog and digital signals, CPU, microcontroller, I/O ports, continuous rotation and servo motors, light sensors, ultrasonic sensors, IR sensors, encoders, robot controllers, structure and motion of a

robot, power, and programming of robots. Also covered are building a gear formation, speed and torque, transmitter and receiver, and autonomous mobile robots. Students will construct and test microcontroller based robots in the laboratory.

**Rationale:** The field of robotics is one of the fastest growing fields in engineering and technology around the world. Students desire this course to stay informed with this emerging technology and the demand for a course in robotics is high. The field of robotics utilizes electronics, mechanics, and computer programming concepts to design and build a mobile robotic system, which is capable of autonomous behavior. Teamwork is essential in order to successfully construct a functioning robot. An exciting aspect of robotics is that it offers activities for everyone on the team including electronic design, mechanical design, electronic construction, mechanical construction, and computer programming. Robotics provides a unique opportunity for students and teachers to apply their knowledge of mathematics and science, along with their hands on skills, to build a practical autonomous robot. One of the best parts of the experience of designing and building a robot is that the team members learn from and help each other. Therefore, all of the team members can make positive contributions to the project whether they enjoy applying their theoretical knowledge, hands on skills, artistic abilities, or management skills. The expected enrollment for this course will be about 20 students per semester.

## **DEPARTMENT of SPEECH and THEATRE**

**TH134 Stage Makeup** 1 lecture hour & 2 studio hours/week 2 credits

**Prerequisites:** (and/or) co-requisites: none

**Description:**

Theory and practice of theatrical stage makeup. Project based learning with a concentration on the design and practical application of stage makeup for a variety of characters. Proper use of tools and materials used in the application of stage makeup techniques. Comprehension of terminology and function used in makeup design.

**Rationale:**

The creation of this course addresses a concern voiced by our external reviewers during programmatic review. Additionally, the skills taught in this course are supportive of student work in practicum courses and enhances their employability in the theatre. During the two semesters during which the course was offered as an experimental course, we discovered that students were able to grasp and employ the elemental design concepts covered in the course enthusiastically and with more ease than in some other design offerings. Students took great pride in the creative work accomplished in this course, often choosing to publish their work electronically. TH 134 should go on to serve as a foundational course to other theatre design courses. The course had strong enrollment and ran successfully as devised. The scheduling of the course will be adjusted so that it is offered in one 3 hour segment rather than across two days to allow for a lab period that will better support the lecture.

## **II. Removal of Courses**

## **DEPARTMENT of MATHEMATICS and COMPUTER SCIENCE**

### **MA-120 COLLEGE ALGEBRA AND TRIGONOMETRY**

**Pre-requisite:** MA-010 or MA-013 or satisfactory score on the Mathematics Placement Test

**Hours:** 3 Class Hours 2 Recitation Hours 3 Credits

## **III. Course Revisions**

## **DEPARTMENT of HEALTH , PHYSICAL EDUCATION and DANCE**

**HE-102 Critical Issues in Health Education:** Change in Title and Description

**From:** HE 102 [Critical Issues in Health Education]

**Description:**

This is a [concentrated] course [of study involving research and discussion of critical health issues dealing with] mental health, addictions and [dependencies], exercise, [diet], human sexuality, major diseases and their [relation

to morbidity and longevity]. [Students are also required to attend Health Lecture Series programs and/or related field experiences as a complement to classroom activities].

**To:** HE 102 Health, Behavior and Society

**Description:**

This fundamental course focuses on the relationship between health and human behavior by exploring the psychological, biological, and socio-cultural perspectives of health. Topics for discussion emphasize disease prevention and lifelong health promotion for the individual and the community. Learning experiences are designed to enable students to develop analytical reasoning skills in order to make informed health decisions and to promote and maintain wellness across diverse cultures. This course will examine major health areas of importance to the individual and society including nutrition, mental health, stress, sexuality, exercise science and addictions.

**Rationale:** The revised title and description expands and updates the current health areas.

**IS-151 Health of the Nation** Change in Title and Description

**From:** IS-151 **Health of the Nation** *2 hours, 2 credits*

Prerequisites and/or co-requisites: *none*

**Description:**

This course provides an examination of the health status of different populations in the United States. Concepts of epidemiology, health promotion and disease prevention are discussed. The characteristics of special populations are addressed, as are some of the major threats to the health, safety and welfare of individuals and society.

**To:** **HE-151** Health and the Nations *2 hours, 2 credits*

**Description:**

This course examines global public health issues throughout the world. The health status of diverse populations as well as the major threats to the health, safety and welfare of society will be discussed. Strategies to control the spread of major diseases and the impact of local, national and international policy decisions on individuals and communities will be explored. Topics for discussion include food ecology, health disparities, access to health care, controlling infectious disease, and reducing environmental hazards.

**Rationale:**

The proposed title will more precisely describe this course. The focus of the course has shifted from a wholly domestic health perspective to a more global health approach.

**PE-540** Introduction to Physical Fitness *1 credit, 2 hours*

Prerequisites and/or co-requisites: *none*

**From:**

**Description:**

[This course is designed to introduce the importance of lifetime physical activity. This course uses non-competitive, cooperative games, lead-up activities and traditional sports, to implement major fitness components in an environment that puts the emphasis on fun. ]

**To:**

**Description:**

A comprehensive approach to preparation of a physically active lifestyle, this course focuses on building sound exercise and activity habits that can carry on throughout one's lifetime. Emphasis will be on an extensive review of physical fitness components, design and initiation of a personal fitness plan, and active engagement during fitness activities

**Rationale:**

The revised description (and subsequent course program) is needed to adequately reflect current trends regarding health, physical education and physical fitness. The prevalence of obesity in our society speaks to the importance of physical fitness knowledge and practice among our student body. Contrary to the original course description, physical fitness does not necessarily need to be acquired through sports, lead-up activities nor cooperative games. The new course direction will focus on personal physical fitness assessment, programming, and practice. It will also be designed as a complementary course to HE-102 Health, Behavior and Society.

## **DEPARTMENT of CHEMISTRY**

### **CH-151 General Chemistry I**

**FROM:** Prerequisite: MA-120 or satisfactory score on the Mathematics Placement Test.

**TO:** Prerequisite: MA-119 and MA-121 or satisfactory score on the Mathematics Placement Test.

## **DEPARTMENT of MATHEMATICS and COMPUTER SCIENCE**

### **MA-121 ELEMENTARY TRIGONOMETRY**      Hours: 1 Class Hours      1 Credit

**FROM:** Co-requisite: May be taken as a co-requisite to MA-119. May be taken as a co-requisite to MA-440 for students who have passed an intermediate algebra or college algebra course that has no trigonometry with a C or better.

**TO:** Co-requisite: May be taken as a co-requisite to MA-119. May be taken as a co-requisite to MA-440 for students who have passed with a grade of C or better an intermediate algebra or college algebra course that has no trigonometry.

### **MA-128 Calculus for Technical and Business Students**

**FROM:** Prerequisite: MA-114 or MA-120 with a grade of C or better, or the equivalent.

**TO:** Prerequisite: MA-114 with a grade of C or better or MA-119 and MA-121 with a grade of C or better in both courses, or the equivalent.

### **MA-240**

**FROM:** Prerequisite: MA-120 or MA-114, or satisfactory score on the Mathematics Placement Test.

**TO:** Prerequisite: MA-119 and MA-121 or MA-114, or satisfactory score on the Mathematics Placement Test, Level II.

### **MA-250**

**FROM:** Prerequisite: MA-120 or MA-114, or satisfactory score on the Mathematics Placement Test, Level II.

**TO:** Prerequisite: MA-119 and MA-121 or MA-114, or satisfactory score on the Mathematics Placement Test Level II.

### **MA-260**

**FROM:** Prerequisite: MA-120 or MA-114.

**TO:** Prerequisite: MA-119 and MA-121 with a grade of C or better in both courses or MA-114 with a grade of C or better.

### **MA-303**

**FROM:** Prerequisite: MA-120.

**TO:** Prerequisite: MA-119 with a grade of C or better.

## **MA-336**

### **FROM: COMPUTER-ASSISTED STATISTICS**

Computer Assisted Statistics

Prerequisite: MA-120 or MA-114 with a grade of C or better or satisfactory score on the Mathematics Placement Test, Level II.

### **TO: STATISTICS**

Prerequisite: MA-119 with a grade of C or better or MA-114 with a grade of C or better or satisfactory score on the Mathematics Placement Test, Level II.

### **Description:**

This course is an introduction to statistics and the use of a professional statistical software package. Topics include: descriptive statistics; probability; binomial and normal distributions; sampling; confidence intervals and tests of hypotheses.

## **MA-440**

**FROM:** Prerequisite: MA-114 or MA-120 with a grade of C or better, or satisfactory score on the Mathematics Placement Test, Level II.

**TO:** Prerequisite: MA-119 and MA-121 with a grade of C or better in both courses, or MA-114 with a grade of C or better, or satisfactory score on the Mathematics Placement Test, Level II.

## **DEPARTMENT of PHYSICS**

### **PH-140**

**FROM:** Co requisite: MA-321 or MA-120 or MA-114, or the equivalent

**TO:** Co requisite: MA-321 or MA-119 and MA-121 or MA-114, or the equivalent

### **PH-201**

**FROM:** Prerequisite: MA-114 or MA-120 or the equivalent, or satisfactory score on the Mathematics Placement Test, Level II.

**TO:** Prerequisite: MA-114, or MA-119 and MA-121 or the equivalent, or satisfactory score on the Mathematics Placement Test, Level II.

### **PH-240**

**FROM:** Prerequisite: Permission of the Department based on one laboratory course in science or technology; MA-114, MA-120 or the equivalent; and ET-501, PH-303, BU-500 or the equivalent.

**TO:** Prerequisite: Permission of the Department based on one laboratory course in science or technology; MA-114, MA-119 and MA-121 or the equivalent; and ET-501, PH-303, BU-500 or the equivalent.

### **PH-301**

**FROM:** Prerequisite: MA-120 or MA-114 or equivalent or permission of the department.

**TO:** Prerequisite: MA-119 and MA-121 or MA-114 or equivalent or permission of the department.

## **IV. Changes to Degree Programs [to be removed] to be added**

Changes resulting from the removal of MA 120 and its replacement with MA-119 and MA-121

## 1. ) Understanding the Sequence of Remedial Coursework

### Mathematics Courses:

Math **[120]** **119** the Math requirement for the A.A. degree in Liberal Arts and Sciences and the A.S. meets Degree in Visual and Performing Arts.

It is STRONGLY advised that students planning to transfer to Queens College take 120] 119 prior to transferring.

Students planning to transfer into business programs at Baruch College are strongly advised to complete **[120]** **119** and **MA 121** (if required) and MA-440 and MA-441.

## 2.) Courses with remedial Contact Hours or Credit Equivalent

Math **[120]** **-119** Credits 3.0 equated credits **[5.0]** **4.0**

MA-114\*, 119, **[120]**, 121

APPLIED AND SPECIALIZED COURSES: Mathematics (Page 70)

MA-114\*, 120, 119 and 121, ...

\*MA-114, 120, 119 and 121, ...

## 3.) Requirements for the Associate in Arts (A.A.) degree component for the Dual Joint Degree program with Queens College, Liberal Arts and Sciences and Education

MA-303 number systems

NOTE: If required based upon QCC/CUNY Math Placement Test, Math **[120]** **-119** must be completed prior to MA-303.

## 4.) Liberal Arts and Sciences –Associate in Arts (A.A.) Degree

Mathematics 3-4

Students may select from one of the following:

Math **[120]** **-119\***, 301,303,315,321,336,440,441,442

\*Math **[120]** **-119\*** fulfills the mathematics requirement only for the A.A. in Liberal Arts and Sciences and for the A.S. in Visual and Performing Arts.

## 5.) QCC/John Jay Dual/Joint Degree Program: A.S. in Criminal justice . (catalogue page 107)

**[MA-120 College Algebra and Trigonometry 3]**

**MA-119 College Algebra 3**

**MA-121 Trigonometry 1**

### SUGGESTED SEQUENCE OF COURSES

**MA-119 College Algebra 3**

**MA-121 Trigonometry 1**

Note: Students who place out of MA-**[120]** **-119** should take BU-203 (John Jay equivalent is STA 250), which means junior year skills course requirement in the B.A. in Criminal Justice program at John Jay College.

## 6.) Liberal Arts and Sciences (Mathematics and Science) A.S. (Page 110 in catalogue)

**Notes box** changes

Mathematics MA-114, **119**, 120, **121**,128, 321, 240, 250,260, 261.

## 7.) Gallery and Museum Studies-Associate in Science A.S. Degree

MA-301 or -**[120]** **-119** Mathematics.....3

MA-301 or -[120] -119 Foundations of Mathematics or [College Algebra and Trigonometry.....3]  
College Algebra 3

### 8.) Visual and Performing Arts - Associate in Science A.S. Degree

Math [120] -119, 301,303,321,336,440,441.....3-4

### 9.) Chemistry

CH-151 General Chemistry I

Prerequisite: MA-[120] -119 and MA-121 or satisfactory score on the Mathematics Placement Test.

### 10.) Mathematics

MA-128 Calculus for Technical and Business Students

Prerequisite: MA-114 **with a grade of C or better** or MA--[120] -119 and MA-121 with a grade of C or better **in both courses**, or the equivalent.

MA-240

Prerequisite: MA-[120] -119 and MA-121 or or MA-114, or satisfactory score on the Mathematics Placement Test.

MA-250

Prerequisite: MA-[120] -119 and MA-121 or MA-114, or satisfactory score on the Mathematics Placement Test, Level II.

MA-260

Prerequisite: MA-[120] -119 and MA-121 with a grade of C or better in both courses or MA-114 **with a grade of C or better**.

MA-303

Prerequisite: MA-[120] -119 **with a grade of C or better**.

MA-336 [Computer Assisted Statistics] **Statistics**

Prerequisite: MA--[120] -119 with a grade of C or better in both courses or MA-114 with a grade of C or better or satisfactory score on the Mathematics Placement Test, Level II.

MA-440

Prerequisite: MA--[120] -119 and MA-121 with a grade of C or better **in both courses**, or MA-114 **with a grade of C or better, or** satisfactory score on the Mathematics Placement Test, Level II.

### 11.) Physics

PH-140

Corequisite: MA-321 or MA-[120] -119 and MA-121 with a grade of C or better in both courses or MA-114 , or the equivalent

PH-201

Prerequisite: MA-114 or MA-[120] -119 and MA-121 with a grade of C or better in both courses or the equivalent, or satisfactory score on the Mathematics Placement Test, Level II.

PH-240

Prerequisite: Permission of the Department based on one laboratory course in science or technology; MA-114, MA-[120] **119 and MA-121** with a grade of C or better in both courses or the equivalent; and ET-501, PH-303, BU-500 or the equivalent.

PH-301

Prerequisite: MA-[120] **-119 and MA-121** with a grade of C or better in both courses or MA-114 or equivalent or permission of the department.

Note: Students may not receive credit for both MA-114 and MA-[120] **-119**.

**Students who pass MA-114 may not also receive credit for MA-119, MA-120 or MA-121.**  
**Neither MA-119 nor MA-121 may be used as part of the 20-25 credit concentration in the A.S. in Liberal Arts and Sciences (Mathematics).**