# 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: August 20, 2012

## Subject: ANNUAL Report 2011-2012

CC: C. Williams, College Archives
COMMITTEE MEMBERS
M. Chauhan (Committee Secretary, Chemistry)
D. Klarberg (Biology and Geology)
A. Kolios (Business)
D. McKay (Library)
P. Pecorino (Committee Chairperson, Social Sciences)
R. Yuster (ECET)
J. Matiminu and Rene Yang (student members)
A. Corradetti (Ex-Officio, President's Designee, Office of Academic Affairs)
C. Dowlah (ex officio, Steering Committee Designee, Social Sciences)

## Meetings:

The Committee on Curriculum meets on Tuesday afternoons, from approximately 2:00 to 3:30 P.M. The committee met 18 times during the 2011-2012 academic year. It did not conclude all matters on its agenda before the May meeting of the Academic Senate.

## PATHWAYS Activities:

The Committee will be submitting separate reports to the Academic Senate on Activities related to the CUNY BOT Policy on Transfer and actions of the CUNY Chancellery related thereto.

## Acknowledgements:

The Committee wishes to thank the QCC Office of Academic Affairs for a number of ways ion which it has supported the work of the committee this year.

The Committee also thanks the interim President, Dr. Diane Bova Call, for the support extended to the committee in a variety of ways in consideration for the work related to the PATHWAYS resolutions and actions of the chancellery. In particular, reassigned time and technical support were given to the Committee. The Committee has made extensive use of the technologies in its operations including: basic communications to the Committee and the faculty community, use of the Blackboard LMS for Committee
documents and archives, use of netbooks for documents transfer and reading, use of software as service (SASE) cloud technology for document storage and retrieval by committee members. There was an enormous amount of files generated in relation to the work of the committee this academic year and without the technologies the handling of all the information would have been much more difficult and time consuming and expensive.

The Committee appreciates the burdens placed on academic departments and faculty by the PATHWAYS resolutions and actions of the chancellery. It expresses its gratitude for their efforts to meet the imposed and unreasonable set of deadlines for the submission of materials related to PATHWAYS.

The Committee also thanks the Academic Steering Committee for their understanding and support throughout the year and their continuing support as the College deals with consequences of the PATHWAYS resolutions and actions of the chancellery.

The Chairperson of the Committee thanks the Committee members for their work this academic year and in the annual leave period and their willingness to continue on for another academic year to assist the College in dealing with the consequences of the PATHWAYS resolutions and actions of the chancellery.

## Committee for 2012-2013

For the next academic year (2012-2013) the following shall be members of the Committee.

## COMMITTEE MEMBERS

M. Chauhan (Committee Secretary, Chemistry)
D. Klarberg (Biology and Geology)
A. Kolios (Business)
D. McKay (Library)
P. Pecorino (Committee Chairperson, Social Sciences)
R. Yuster (ECET)
A. Corradetti (ex-officio, President's Designee, Office of Academic Affairs)
A. Borrachero (ex-officio, Steering Committee Designee, Foreign Languages and Literature)

## Actions of the Committee

The committee took the following actions (sections 1 to 6 ), all adopted by the Academic Senate during the 2011-2012 academic year unless otherwise noted (section 7).

1. NEW COURSES
2. NEW COURSES- EXPERIMENTAL
3. CHANGES in COURSES
4. REMOVAL OF COURSES
5. NEW PROGRAMS
6. CHANGES in PROGRAMS-CURRICULA
7. ITEMS Approved by the Committee not yet approved by the Academic Senate

## I. NEW COURSES

## DEPARTMENT of BUSINESS

## BU-812 Transcription and Dictation of Business Documents

## 2 credits; 1 class hour, 3 laboratory hours

Prerequisite: BU-801 Typewriting/Keyboarding I or equivalent
Through the use of audio and word processing software, students will transcribe business documents that are used in corporate, government, and professional environments. Students will become familiar with business terminology used in the fields of advertising, education, real estate, accounting, banking, insurance, engineering, entertainment, marketing, travel, medicine, and law

## Rationale:

This course is needed to:

- improve keyboarding skill
- improve listening skills (especially valuable for English as a Second Language students)
- become familiar with vocabulary used in business environments (advertising, education, government, public service, real estate, accounting, finance/banking, insurance, engineering, entertainment, restaurant services, marketing, travel, transportation)
- improve English mechanics
- become familiar with documents produced in the corporate, professional and government office environments.

Student demand:
BU-812 (Transcription and Dictation of Business Documents) will be required in the A.A.S.(Office Administration and Technology) two-year degree program.
Students may select either BU-812 (Transcription and Dictation of Business Documents) or BU-802 (Typewriting/Keyboarding II) in the A.A.S. (Medical Office Assistant) two-year degree program.

Students may select either BU-812 (Transcription and Dictation of Business Documents) or BU802 (Typewriting/Keyboarding II) in the following certificate programs:
Health Care Office Administration: Managing, Coding, and Billing
Medical Office Assistant
Microsoft Office Applications Proficiency Preparation
School Secretary

## BU-917 Healthcare Information Management

3 class hours, 1 laboratory hour 3 credits
Prerequisites and/or) co-requisites: None

## Description:

This course covers the development, evolution and use of healthcare information technology in the healthcare industry. It is also designed to show how healthcare information management professionals serve the patient, physician, and the public by using the highest ethical standards to manage healthcare information through the use of both database software and paper formats.

## Rationale :

This course is needed to teach those enrolled in these curricula:

Certificate Programs:
Medical Office Assistant
Health Care Office Administration: Managing, Coding, and Billing

- To identify problems and to make informed decisions when handling healthcare records in both the public and private healthcare sectors.
- To always incorporate medical and legal ethics in the field of healthcare information management and technology
- To have hands-on experience with database software and Internet research by using state-of-the-art technology
- To integrate the knowledge and skills learned in this course for entry-level positions and to advance up career ladders in the healthcare field.


## DEPARTMENT of HEALTH , PHYSICAL EDUCATION and DANCE (15)

## PE 611 Beginning Ballet for Majors

1. Course prefix and number: PE 611
2. Course title: Beginning Ballet for Majors
3. Course description for the college catalog: Beginning Ballet for Majors is an introduction to Ballet. It places emphasis on preparing our dance majors with little experience or no background in dance to be able to develop technique.
4. Prerequisites: dance majors
(and/or) co-requisites: permission of instructor
5. Hours and credits:

2 class hours, 1 credit

## Rationale

Beginning Ballet for Majors is designed to accommodate students who come in as freshmen and want to be dance majors although they have no previous dance experience. By offering beginning level ballet specifically for these students, we will be able to better prepare them for the advanced beginning levels. If they are in beginning ballet classes, they are in class with 30 other students who have no desire to pursue dance as a career. The Beginning level classes for majors will allow them to be in a class with other focused dance majors, which will allow them the attention that they need. Since their needs are quite different from the student taking a dance course to fulfill a physical education requirement, it would serve both populations better if these two populations were separated from one another.

## PE 619 Advanced Beginning Ballet II

1. Course prefix and number: PE 619
2. Course title: Advanced Beginning Ballet II
3. Course description for the college catalog: Advanced Beginning Ballet II is a continuation of Advanced Beginning Ballet. It places greater emphasis on building technique at a low intermediate level to prepare dance majors for Advanced Beginning Ballet III and intermediate Ballet as well as to transfer into fouryear Degree programs.
4. Prerequisites: PE 619
(and/or) co-requisites: permission of instructor
5. Hours and credits:

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2 \text { class hours, } 1 \text { credit }
$$

14. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:

Not only is the dance program growing in numbers, it is also growing in the technical level of the dancers. QCC's dance program is becoming a prominent dance program. In order to sustain this reputation and offer the students the level of technique that will be required of them to transfer into prominent four-year colleges, we must raise the level of technique offered to them. Without this, they cannot compete as transfer students or in the dance community.

## PE 620 Advanced Beginning Ballet III

1. Course prefix and number: PE 620
2. Course title: Advanced Beginning Ballet III
3. Course description for the college catalog: Advanced Beginning Ballet III is a continuation of Advanced Beginning Ballet II. It places greater emphasis on building technique towards an intermediate level to prepare dance majors for Intermediate Ballet as well as to transfer into four-year Degree programs.
4. Prerequisites: PE 614 and PE 619
(and/or) co-requisites: permission of instructor
5. Hours and credits: 2 class hours, 1 credit
6. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:

Not only is the dance program growing in numbers, it is also growing in the technical level of the dancers. QCC's dance program is becoming a prominent dance program. In order to sustain this reputation and offer the students the level of technique that will be required of them to transfer into prominent four-year colleges, we must raise the level of technique offered to them. Without this, they cannot compete as transfer students or in the dance community.

## PE 728 Intermediate Ballet II

1. Course prefix and number: PE D 728
2. Course title: Intermediate Ballet II
3. Course description for the college catalog: Intermediate Ballet II is a continuation of Intermediate Ballet. It places greater emphasis on building technique on an intermediate/advanced level to prepare dance majors to transfer into four-year Degree programs.
4. Prerequisites: PE 727
(and/or) co-requisites: permission of instructor
5. Hours and credits:

4 class hours, 2 credits
14. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:

Not only is the dance program growing in numbers, it is also growing in the technical level of the dancers. QCC's dance program is becoming a prominent dance program. In order to sustain this reputation and offer the students the level of technique that will be required of them to transfer into prominent four year colleges, we must raise the level of technique offered to them. Without this, they cannot compete as transfer students or in the dance community.

## PE 729 Intermediate Ballet III

1. Course prefix and number: PE D 729
2. Course title: Intermediate Ballet III
3. Course description for the college catalog: Intermediate Ballet III is a continuation of Intermediate Ballet II. It places greater emphasis on building technique on a more advanced technical level to prepare dance
majors to transfer into four-year Degree programs.
4. Prerequisites: PE 727, 728
(and/or) co-requisites: permission of instructor
5. Hours and credits: 4 class hours, 2 credits
6. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:

Not only is the dance program growing in numbers, it is also growing in the technical level of the dancers. QCC's dance program is becoming a prominent dance program. In order to sustain this reputation and offer the students the level of technique that will be required of them to transfer into prominent four year colleges, we must raise the level of technique offered to them. Without this, they cannot compete as transfer students or in the dance community.

## PE 603 Beginning Modern Dance for Majors

1. Course prefix and number: PE 603
2. Course title: Beginning Modern Dance for Majors
3. Course description for the college catalog: Beginning Modern Dance for Majors is an introduction to Modern Dance. It places emphasis on preparing our dance majors with little experience or no background in dance to be able to develop technique.
4. Prerequisites: dance majors
(and/or) co-requisites: permission of instructor
5. Hours and credits:

2 class hours, 1 credit
14. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:

Beginning Modern Dance for Majors is designed to accommodate students who come in as freshmen and want to be dance majors although they have no previous dance experience. By offering a beginning level modern class specifically for these students, we will be able to better prepare them for the advanced beginning levels. If they are in beginning modern, they are in class with 30 other students who have no desire to pursue dance as a career. The Beginning level classes for majors will allow them to be in a class with other focused dance majors, which will allow them the attention that they need. Since their needs are quite different from the student taking a dance course to fulfill a physical education requirement, it would serve both populations better if these two populations were separated from one another.

## PE 606 Advanced Beginning Modern Dance II

1. Course prefix and number: PE 606
2. Course title: Advanced Beginning Modern Dance II
3. Course description for the college catalog: Advanced Beginning Modern Dance II is a continuation of Advanced Beginning Modern Dance I. It places greater emphasis on building technique at a low intermediate level to prepare dance majors for Advanced Beginning Modern III and intermediate Ballet as well as to transfer into four-year Degree programs.
4. Prerequisites: PE 605
(and/or) co-requisites: permission of the instructor
5. Hours and credits:

2 class hours, 1 credit
14. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:
Not only is the dance program growing in numbers, it is also growing in the technical level of the dancers. QCC's dance program is becoming a prominent dance program. In order to sustain this reputation and offer the students the level of technique that will be required of them to transfer into prominent four-year colleges, we must raise the level of technique offered to them. Without this, they cannot compete as transfer students or in the dance community. Projected enrollment is between 15-30 students. It will be offered in a cyclical pattern with PE 605 and 607.

## PE 607 Advanced Beginning Modern Dance III

1. Course prefix and number: PE 607
2. Course title: Advanced Beginning Modern Dance III
3. Course description for the college catalog: Advanced Beginning Modern Dance III is a continuation of Advanced Beginning Modern Dance II. It places greater emphasis on building technique towards an intermediate level to prepare dance majors for Intermediate Modern as well as to transfer into four-year Degree programs.
4. Prerequisites: PE 605 and 606
(and/or) co-requisites: or permission of the instructor
5. Hours and credits:

2 class hours, 1 credit
14. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:
Not only is the dance program growing in numbers, it is also growing in the technical level of the dancers. QCC's dance program is becoming a prominent dance program. In order to sustain this reputation and offer the students the level of technique that will be required of them to transfer into prominent four year colleges, we must raise the level of technique offered to them. Without this, they cannot compete as transfer students or in the dance community. Projected enrollment is between 15-30 students. It will be offered in a cyclical pattern with PE 605 and 606.

## PE 730 Intermediate Modern III

1. Course prefix and number: PE D 730
2. Course title: Intermediate Modern III
3. Course description for the college catalog: Intermediate Modern III is a continuation of Intermediate Modern II. It places greater emphasis on building technique on a more advanced level to prepare dance majors to transfer into four-year Degree programs.
4. Prerequisites: PE 725 and PE 726
(and/or) co-requisites: permission of instructor
5. Hours and credits:

4 class hours, 2 credits
14. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:

Not only is the dance program growing in numbers, it is also growing in the technical level of the dancers. QCC's dance program is becoming a prominent dance program. In order to sustain this reputation and offer the students the level of technique that will be required of them to transfer into prominent four year colleges, we must raise the level of technique offered to them. Without this, they cannot compete as transfer students or in the dance community.

## PE 719 Dance Workshop III

1. Course prefix and number: PE 719
2. Course title: Dance Workshop III
3. Course description for the college catalog: Dance Workshop III is a continuation of Dance Workshop II. Dance Workshop III provides performance and repertory experience. Students will learn about various aspects of dance productions, including performance, lighting, costumes, programs, etc.
4. Prerequisites: By audition
(and/or) co-requisites: permission of instructor
5. Hours and credits:

6 class hours, 3 credit
14. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:

Technique classes are to prepare dance majors for a life in performance. The experience of working in a dance company setting prepares dance majors for their solo auditions required at transfer auditions, performance opportunities and requirements offered at four-year programs, and for the life of a dancer.

## PE 722 Modern Dance Improvisation

1. Course prefix and number: PE 722
2. Course title: Modern Dance Improvisation
3. Course description for the college catalog: This course is an introduction to modern dance improvisation. Methods of accessing authentic movement as well as an understanding of how to develop and perform an improvisation score will be addressed.
4. Prerequisites: PE 607
(and/or) co-requisites: or permission of the instructor
5. Hours and credits: 2 class hours, 1 credit
6. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:

Improvisation is commonly offered in students' freshmen and sophomore years at four-year colleges. By offering this course, our students will be able to transfer as juniors without being behind in the four-year college curriculum.

## PE 732 Contact Improvisation

1. Course prefix and number: PE 732
2. Course title: Contact Improvisation
3. Course description for the college catalog: This course is an introduction to contact improvisation. Contact Improvisation was developed in the 70s by a group of dancers coming out of the Judson Church Era. Students will gain an understanding of structural support, following through with a point of contact, weight sharing, and energy flow.
4. Prerequisites: PE 722
(and/or) co-requisites: Permission of the Instructor
5. Hours and credits: 2 class hours, 1 credit
6. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc: Contact Improvisation is a standard requirement in most BFA programs. Usually, 1-2 credits in Contact Improvisation are required for graduation, which would make this course easily transferable to most BFA programs in dance. Additionally, the partnering techniques learned in this class will help the students get into guest artist pieces that they will have to audition for where they transfer. This course would be offered in the spring term every other year. Projected enrollment is between 15-20 students. The dance major program has doubled in the past 3 years, with most of those students preparing to transfer into BFA programs.

## PE 740 Special Topics in Modern Dance I

1. Course prefix and number: PE 740
2. Course title: Special Topics in Modern Dance I
3. Course description for the college catalog: Special Topics in Modern Dance I will provide an intensive study of various techniques in modern dance with an emphasis on the training necessary for a professional modern dancer. Elements of repertory and performance will also be incorporated.
4. Prerequisites: PE 725, Intermediate Modern Dance (and/or) co-requisites: or permission of the instructor
5. Hours and credits:

2 class hours, 1 credit
14. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:
Not only is the dance program growing in numbers, it is also growing in the technical level of the dancers. QCC's dance program is becoming a prominent dance program. In order to sustain this reputation and offer the students the level of technique that will be required of them to transfer into prominent four-year colleges, we must raise the level of technique offered to them. Without this, they cannot compete as transfer students or in the dance community. This course is specifically designed to offer them intensive study during the winter and summer sessions. If dance majors take this time off from dancing, it significantly decreases their chances of transferring into strong BFA programs.

## PE 741 Special Topics in Modern Dance II

1. Course prefix and number: PE 741
2. Course title: Special Topics in Modern Dance II
3. Course description for the college catalog: Special Topics in Modern Dance II will provide an intensive study of various techniques in modern dance with an emphasis on the training necessary for a professional modern dancer. Elements of repertory and performance will also be incorporated. It is a continuation of Special Topics in Modern Dance I
4. Prerequisites: PE 725, Intermediate Modern Dance (and/or) co-requisites: or permission of the instructor
5. Hours and credits: 2 class hours, 1 credit
6. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:
Not only is the dance program growing in numbers, it is also growing in the technical level of the dancers. QCC's dance program is becoming a prominent dance program. In order to sustain this reputation and offer the students the level of technique that will be required of them to transfer into prominent four-year colleges, we must raise the level of technique offered to them. Without this, they cannot compete as transfer students or in the dance community. This course is specifically designed to offer them intensive study during the winter and summer sessions. If dance majors take this time off from dancing, it significantly decreases their chances of transferring into strong BFA programs.

## PE 742 Special Topics in Modern Dance III

1. Course prefix and number: PE 742
2. Course title: Special Topics in Modern Dance III
3. Course description for the college catalog: Special Topics in Modern Dance III will provide an intensive study of various techniques in modern dance with an emphasis on the training necessary for a professional modern dancer. Elements of repertory and performance will also be incorporated. It is a continuation of Special Topics in Modern Dance II
4. Prerequisites: PE 725, Intermediate Modern Dance
(and/or) co-requisites: or permission of the instructor
5. Hours and credits: 2 class hours, 1 credit
6. Rationale - why the course is needed or desired; student demand; projected enrollment; how often it will be offered, etc:
Not only is the dance program growing in numbers, it is also growing in the technical level of the dancers. QCC's dance program is becoming a prominent dance program. In order to sustain this reputation and offer the students the level of technique that will be required of them to transfer into prominent four-year colleges, we must raise the level of technique offered to them. Without this, they cannot compete as transfer students or in the dance community. This course is specifically designed to offer them intensive study during the winter and summer sessions. If dance majors take this time off from dancing, it significantly decreases their chances of transferring into strong BFA programs.

# DEPARTMENT of ELECTRICAL and COMPUTER ENGINEERING TECHNOLOGY 

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

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

 Department
## Co-requisite: None <br> 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 HISTORY (1)

## HI-165 The European Renaissance 3 credits 3 class hours

Prerequisites: BE-122 (or 226) and BE-112 (or 205), or satisfactory score on the CUNY/ACT Assessment Test.

This course will analyze the political, economic, social, cultural, religious, and gender history of the European Renaissance, from approximately 1300-1650. The class will focus on the start of the Renaissance in Italy, examine the spread of the Renaissance into Northern Europe, explore the issues involved in new overseas encounters, as well as discuss the religious upheaval of the Reformation and Wars of Religion. A common theme will be grounding larger ideas associated with the Renaissance in the context of the social and cultural lives of men and women throughout European society. The readings for the class will focus on both primary and secondary sources.

## 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 SPEECH and THEATRE

TH-134 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

## 2. NEW COURSES EXPERIMENTAL for information purposes only

## DEPARTMENT of BASIC EDUCATIONAL SKILLS (1)

BE-207 Combined Academic Reading and Writing for Advanced ESL Students
Prerequisites: (and/or) co-requisites: successfully completed BE 203 AND BE 225 or who have received placement scores between a 48-55 on the CATW AND 58-69 on the ACT COMPASS reading exam.

## Course description:

BE-207 is an intensive, eight-hour, thoroughly integrated reading-writing course designed to prepare ESL students for the demands of credit-bearing academic coursework. The course will provide practice with the vocabulary, rhetorical structures, and critical thought processes of academic reading and writing. Because of the intensive nature of the class, students will be able to practice developing writing and reading skills concurrently with speaking and listening skills. The commonalities of these skills and their integrated presentation will enhance the effectiveness of this course in providing students with skills that will allow them to read and interpret collegelevel academic readings and to write expository essays that prepare them for college-level writing

## Rationale:

It will provide students an opportunity to fulfill remedial requirements in a pedagogically sound manner. Instead of completing two discrete courses, eligible students will take a single, contentbased course. The new university writing exam, the CATW, requires college-level proficiency in both reading and writing, which makes offering a combined course a necessity. In addition, the research in ESL education clearly supports combined instruction since reading and writing employ similar cognitive processes.

In Fall 2011, there are 13 BE 226 and 14 BE 205 sections. Very often those students taking one are taking the other, so more than one section would likely fill up. The course could be offered in Spring, Fall, and Summer semesters and then the results will be examined and decisions made.

## DEPARTMENT of BASIC EDUCATIONAL SKILLS--COLLEGE NOW PROGRAM

CN 71 West Side Story
4 Class Hours and 0 Credits
Prerequisites: (and/or) co-requisites: NONE

## Course description:

This course is intended for English language learners (ELLs) who are at a high intermediate/ advanced level of proficiency in English but need more practice to develop their academic language proficiency and college level reading and writing skills. The readings in this course include excerpts from newspapers and magazines, poetry, plays, and fiction. The emphasis in writing is on paragraph development and essay organization. The emphasis in reading is on developing reading strategies, gaining reading speed and fluency.

## Rationale:

This course is offered for English language learners. Many of the schools partnered with the QCC College Now program have large ELL populations. Students who are successful in this course could take either a reading or writing developmental course as a following course, or a college credit course dependant on eligibility requirements for subsequent courses.

## CN073 Reading and Writing Community Stories <br> 4 Class Hours and 0 Credits <br> Prerequisites: (and/or) co-requisites: NONE

## Course description:

This is a theme based developmental reading and writing course which will provide students with a foundation in the key academic reading and writing skills used in many humanities and social science college courses. The emphasis throughout the course will be placed on improving students' reading and writing skills by developing reading strategies for determining essential vs. non-essential elements of assigned texts, developing academic vocabulary, and writing essays in which they practice using theoretical approaches learned in the course. They will learn how to contextualize and move beyond one's own experience to look at and understand the experience of others from a global and historical perspective - one of important goals in many college levels courses in humanities and social sciences. Students will also further refine specific skills necessary to succeed on the CUNY placement exams in reading and writing.

## Rationale:

This is a second semester in a developmental sequence of courses offered to students in the College Now program. Students with whom the course has been piloted have responded enthusiastically to the course content and generally achieved well on the CUNY placement exam upon completion of the course. The College Now program believes that this course is needed for students to take after CN072 in order to be prepared to do college level work when they come to college. The demand for this course in high schools partnering with QCC College Now is very high. Projected enrollment is 200 students per semester and possibly more.

## DEPARTMENT of BIOLOGY and GEOLOGY (1)

GE-120, the Geology of Gems, 4 credits lab science 6 contact hours.

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## 3. CHANGES in COURSES

## DEPARTMENT of BUSINESS

From: BU-804 [Personal Information Management/Electronic Messaging Using Microsoft Outlook]
To: BU-804 Administrative Office Procedures (See Amendment 6)

## Rationale:

The original title, Personal Information Management/Electronic Messaging Using Microsoft Outlook, is cumbersome and somewhat misleading. Although some of features of Micrsoft Outlook software are used, the title gives the impression that the entire course is dedicated to using Microsoft Outlook.

This is just a title change. The catalog course description and the subject matter in this course remain unchanged.

From: [BU-803 Advanced Keyboarding and Software Transcription/Projects] 1 class hour 3 laboratory hours; 2 credits
Prerequisite: [BU-802] or the equivalent
To: BU-812 Transcription and Dictation of Business Documents
1 class hour 3 laboratory hours; 2 credits
Prerequisite: BU-801 or the equivalent

## Rationale:

The onslaught of technological changes in the office mandates that students planning careers in office administration and office management receive training that will enable them to qualify for entry-level positions and to climb career paths in extremely competitive technical environments.

At present, BU-803 (Advanced Keyboarding and Software Transcription/Projects) has a prerequisite of $\mathrm{BU}-802$ (Typewriting/Keyboarding II). By changing this prerequisite to $\mathrm{BU}-801$ (Typewriting/ Keyboarding I) students with basic keyboarding skill will be able to enroll in BU-812 (Transcription and Dictation of Business Documents) to:

- improve keyboarding skill by transcribing dictated business documents
- improve listening skills by using audio software (especially valuable for English as a Second Language students)
- become familiar with vocabulary used in business environments (advertising, education, government, public service, real estate, accounting, finance/banking, insurance, engineering, entertainment, restaurant services, marketing, travel, transportation, medicine, and law
- improve English mechanics
- become familiar with the software used to produce the documents required in corporate, professional, and government office environments

This course is a requirement in the Office Administration and Technology A.A.S. curriculum. In the OAT certificate curricula, in the Medical Office Procedures certificate, and in the Medical Office Procedures A.A.S.curriculum, students are given the option of selecting the keyboarding courses that they feel will enhance their future careers. Obviously, by changing the prerequisite from BU-802 (Typewriting/Keyboarding II) to BU-801 (Typewriting/Keyboarding I) our students will
gain the advantage of enrolling in a course which will help to prepare them for today's technical office environment while meeting their individual needs.

The title of BU-812 (Transcription and Dictation of Business Documents) has replaced the title used in BU-803 (Advanced Keyboarding and Software Transcription/Projects) because the title, Transcription and Dictation of Business Documents, clearly shows the kind and type of material that will be covered in BU-812.

## 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 HEALTH , PHYSCIAL 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: <br> 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 FOREIGN LANGUAGES and LITERATURE

From: LC-121 Mandarin for Students of Chinese Heritage I
To: LC-121 Elementary Mandarin I for Students of Chinese Heritage
From: LC-122 Mandarin for Students of Chinese Heritage II
To: LC-122 Elementary Mandarin II for Students of Chinese Heritage
DEPARTMENT of MATHEMATICS and COMPUTER SCIENCE

From: MA-119 College Algebra

$$
\text { [4 class hours] } 3 \text { credits }
$$

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

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

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

To: MA-119 College Algebra
3 class hours 1 recitation hour 3 credits
Prerequisite: MA-010 or exempt from remedial mathematics, or permission of the department.

Co-requisites: May be taken as a co-requisite to MA-121
Catalog Description: A basic presentation of the fundamental concepts of college algebra, systems of linear equations, inequalities, linear, quadratic, exponential and logarithmic functions. During the recitation hour, students review properties of signed numbers, graphing of linear equations, basic geometric concepts, solution of linear equations, factoring algebraic expressions and its applications to rational expressions. A graphing calculator will be required.

## Rationale:

MA-119 contains a compensatory hour and this needs to be reflected in the designation of the hours. Hence, 3 class hours and 1 recitation hour.

## MA-121 ELEMENTARY TRIGONOMETRY <br> Hours: 1 Class Hours 1 Credit <br> FROM: Co-requisite: May be taken as a co-requisite to MA-119. May be taken as a corequisite 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 <br> 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

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.

## DEPARTMENT of HEALTH, PHYSICAL EDUCATION and DANCE (15) <br> I. Degree Program and Course Prefix--Informational

As a result of the previous approval of the Academic Senate for new courses in Dance and corresponding changes in the A.S. Degree Program in Visual and Performing Arts (Dance Concentration) there will now appear this description involving a change in prefix designation for dance course from PE to DAN
Program: A.S. in Visual and Performing Arts (Dance Concentration)
Program Code: 81303 HEGIS Code: 5610 Effective: Spring 2012

| FROM: |  |  |  |
| :---: | :---: | :---: | :---: |
| A.S. Degree Program in Visual and Performing Arts (Dance Concentration) |  |  |  |
|  |  |  |  |
|  |  | DAN 120 | Beginning Modern Dance for Majors |
| PE 604 | Beginners' Modern Dance | DAN 100 | Beginning Modern Dance |
| PE 605 | Advanced Beginners' Modern Dance | DAN 121 | Advanced Beginning Modern Dance I |
|  |  | DAN 122 | Advanced Beginning Modern Dance II |
|  |  | DAN 123 | Advanced Beginning Modern Dance II |
| PE 609 | Social, Folk, and Square Dance | DAN 107 | Social and Folk Dance |
| PE 610 | Beginning Ballet | DAN 101 | Beginning Ballet |
|  |  | DAN 130 | Beginning Ballet for Majors |
| PE 612 | African and Afro-Caribbean Dance | DAN 103 | African \& African Caribbean Dance |
| PE613 | Jazz Dance | DAN 102 | Jazz Dance |
| PE 614 | Advanced Beginners' Ballet | DAN 131 | Advanced Beginning Ballet I |
| PE 615 | Advanced Beginners' Jazz Dance | DAN 140 | Advanced Beginning Jazz Dance |
| PE 616 | Music Video Dance | DAN 105 | Music Video Dance |
| PE 617 | Musical Theater Dance | DAN 104 | Musical Theater Dance |


| PE 618 | Latin Dance |  | DAN 106 | Latin Dance |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | DAN 132 | Advanced Beginning Ballet II |
|  |  |  | DAN 133 | Advanced Beginning Ballet III |
| PE 711 | Introduction to the Art of Dance |  | DAN 111 | Introduction to Art of Dance |
| PE 712 | Foundation of Dance Movement |  | DAN 110 | Foundations of Dance Movement |
| PE 713 | Dance Workshop I |  | DAN 260 | Dance Workshop I |
| PE 714 | Dance Workshop II |  | DAN 261 | Dance Workshop II |
| PE 715 | Dance in the Twentieth Century |  | DAN 112 | Dance in the Twentieth Century |
| PE 716 | History of African Dance Forms |  | DAN 113 | History of African Dance Forms |
| PE 717 | Dance on Stage and Film |  | DAN 114 | Dance on Stage and Film |
|  |  |  |  |  |
|  |  |  | DAN 262 | Dance Workshop III |
| PE 721 | Theory and Practice of Modern Dance | 2 | DAN 251 | Theory and Practice of Modern Dance |
|  |  |  | DAN 250 | Modern Dance Improvisation |
| PE 725 | Intermediate Modern Dance I | 2 | DAN 220 | Intermediate Modern Dance I |
| PE 726 | Intermediate Modern Dance II | 2 | DAN 221 | Intermediate Modern Dance II |
| PE 727 | Intermediate Ballet | 2 | DAN 231 | Intermediate Ballet I |
|  |  |  | DAN 232 | Intermediate Ballet II |
|  |  |  | DAN 233 | Intermediate Ballet III |
|  |  |  | DAN 222 | Intermediate Modern Dance III |
|  |  |  | DAN 252 | Contact Improvisation |
|  |  |  | DAN 270 | Special Topics in Modern Dance I |
|  |  |  | DAN 271 | Special Topics in Modern Dance II |
|  |  |  | DAN 272 | Special Topics in Modern Dance III |

## DEPARTMENT of SOCIAL SCIENCES

Title
From: CJ101 Introduction to Criminal Justice
To: CJ101 Introduction to the American Criminal Justice System

## Course Description

From: [A survey of the institutions and processes of the criminal justice system. Special emphasis on police, courts, and corrections.] This course will satisfy the Social
Sciences elective requirement for all QCC degree programs.
To: This course is an introductory survey of the American criminal justice system with a view to its social and institutional context, and its structure and functioning. The course provides an overview of the foundations and components of the criminal justice system,
including (substantive and procedural) criminal law, police, courts and corrections. The main emphasis will be placed on the criminal justice process, and how the various institutions of criminal justice interact. Key issues will be addressed as they arise at different stages of the process, such as the conflict between crime control and due process, and conflicts related to, for example, gender, class and ethnicity. This course will satisfy the Social Sciences elective requirement for all QCC degree programs.

SS-250 Labor and Management
From: Prerequisite: [SS-211 or SS-212]
To: Prerequisite: BE-122 (or BE-226) or satisfactory score on the English Placement Test

## Rationale:

Since the start of the Verizon Next Step program SS250 has been populated exclusively by students in that program. SS250 is the only required economics course in the program, and the Next Step students have been exempted from the SS211 or SS212 prerequisite. Instructors who have taught SS250 have never found the lack of a SS211 or SS212 prerequisite to be a hindrance to student success. In fact most students have done quite well without it. So, because de facto there has been no SS211 or SS212 prerequisite requirment for several years and because the lack of the prerequisite does not jeopardize student performance in the course, it seems reasonable to eliminate what appear to be unnecessary prerequisites.

Course Description Change SS375 Media and Society

## From:

[An examination of how the mass media both create and reflect public opinion and behavior.] Topics include [the functions and consequences of television and film violence; the effects of social class background on the formation of taste; the impact of the media on political decision-making; the effects of advertising and the rise of consumer culture; and the influence of television viewing on the educational process]

To:
This course will introduce students to a sociological analysis of the mass media. Topics include the mass media and socialization; functionalist theory and the mass media; conflict theory and the mass media; the economics of the media industry and its influence on the products we consume; advertising; the hidden world of public relations; social life in online environments; the history of celebrity and the sociological implications of celebrity gossip.

## Rationale:

In recent years significant changes have occurred in the contemporary media landscape, especially as regards the transition to internet delivery of information and the expansion
of online social media. The proposed course description expands the scope of the course to incorporate these recent trends.

## Course Prefix changes

The table below indicates proposed changes to the course prefixes and numbers for all Social Sciences, Criminal Justice, and Education courses.

| FROM | TO | FROM | TO |
| :---: | :---: | :---: | :---: |
| SS110 | ANTH101 | SS510 | PSYC101 |
| SS130 | ANTH130 | SS515 | PSYC215 |
| SS140 | ANTH140 | SS520 | PSYC220 |
| SS150 | ANTH150 | SS525 | PSYC225 |
| SS211 | ECON101 | SS530 | PSYC230 |
| SS212 | ECON102 | SS540 | PSYC240 |
| SS250 | ECON150 | SS550 | PSYC250 |
| SS260 | ECON160 | SS555 | PSYC255 |
| SS235 | ECON235 | SS560 | PSYC260 |
| SS310 | SOC101 | SS570 | PSYC270 |
| SS325 | SOC125 | SS590 | PSYC290 |
| SS330 | SOC230 | SS610 | PHIL101 |
| SS340 | SOC240 | SS620 | PHIL120 |
| SS350 | SOC250 | SS630 | PHIL130 |
| SS370 | SOC270 | SS635 | PHIL135 |
| SS375 | SOC275 | SS650 | PHIL150 |
| SS385 | SOC185 | SS640 | PHIL140 |
| SS410 | PLSC101 | SS645 | PHIL 145 |
| SS440 | PLSC140 | SS650 | PHIL150 |
| SS470 | PLSC170 | SS660 | PHIL160 |
| SS480 | PLSC180 | SS665 | PHIL165 |
| SS901 | UBST101 | SS680 | PHIL180 |
| SS902 | UBST202 | SS840 | RELI101 |
| SS911 | UBST102 | ISS221 | INTE221 |
| CJ101 | CRIM101 | CJ203 | CRIM203 |
| CJ102 | CRIM102 | CJ204 | CRIM204 |
| CJ201 | CRIM201 | ED110 | EDUC101 |
| CJ202 | CRIM202 | SS901 | UBST101 |
|  |  | SS902 | UBST201 |
|  |  | SS911 | UBST102 |

Rationale: The Pathways Common Core course nomination template allows 4-character course prefixes, using the Subject Area code table requires that courses be designated with 4 -character Subject Area codes (Note: the Pathways code for sociology is only 3
characters, SOC). The change in our course prefixes will create consistency between our prefixes and those Subject Area codes. In addition the new prefixes will obviate the confusion caused by having the same "SS" designation for six very different disciplines: anthropology, economics, sociology, political science, psychology and philosophy. It will also make it easier for students to identify discipline-specific courses and will reduce the problem of students taking a philosophy course with the impression that it will satisfy a Social Sciences course requirement. By changing the course numbers in the proposed manner we will bring our courses into conformity with the standard practice of designating introductory courses (i.e., courses with no pre-requisite in the discipline) as 100 -level courses and designating as 200 -level courses those electives with a prerequisite of an introductory course in the discipline.

## 4. Removal of Courses

## DEPARTMENT of BUSINESS

[BU-908 Word/Information Processing Using WordPerfect
2 class hours 2 laboratory hours; 3 credits]

## Rationale:

As a result of this change, BU-908 (Word/Information Processing using WordPerfect) will no longer be offered for the following reasons:

- Microsoft Word has become the standard word processing software package in both the business environment and for personal use. Since Microsoft Word is used in our other OAT (Office Administration and Technology) courses, our students become quite proficient using the features in this software. Those trained in Microsoft Word can easily adjust to WordPerfect in the workplace should the need arise.

1. In addition, we cannot run the WordPerfect software on personal computers that have the Windows 7 operating system installed. All of the personal computers in the Business Department are using the Windows 7 operating system.

## DEPARTMENT of ENGLISH

EN-213 Advanced Prose Writing 3 class hours, 1 recitation hour, 3 credits
Offers students the opportunity to develop their ability to write effective expository and argumentative prose. Students will analyze their own work in terms of aims, logic, and organization. They are encouraged to use literary techniques such as dialogue and figurative language to enrich their meaning and enliven their style. They are also required to evaluate and incorporate research into their own writing. Readings are assigned to teach students how to read as writers do - with eye for technique and form - as well as to develop their critical thinking.

## DEPARTMENT of MATHEMATICS and COMPUTER SCIENCE

Pre-requisite: MA-010 or MA-013 or satisfactory score on the Mathematics Placement Test Hours: 3 Class Hours 2 Recitation Hours 3 Credits

## 5. NEW DEGREE PROGRAMS

## 2. New Degree Program

## A DUAL/JOINT DEGREE PROGRAM IN ASSOCIATE IN APPLIED SCIENCE (A.A.S.) IN NURSING LEADING TO THE BACHELOR OF SCIENCE (B.S.) IN NURSING

NOTE: The entire document is titled QCC-York Dual Joint Nursing - Letter of Intent And located at http://www.qcc.cuny.edu/governance/academicSenate/curr/documents.html

The dual/joint degree program between Queensborough Community College's Nursing program and the upper division baccalaureate program at York College is a curricular collaboration that will result in a higher rate of seamless progression of Queensborough Community College (QCC) nursing graduates through the upper division baccalaureate program at York College. Like its predecessor, the dual/joint program with Hunter College, it is believed that this dual/joint degree program will serve as a model for other CUNY AAS and BS nursing programs and will be replicated across the university. The inception of the program is timely, even at a national level, as several states already have or are currently pursuing jointly registered programs, including Oregon, Hawaii, and California.

## PROGRAM REQUIREMENTS COURSES REQUIRED FOR A.A.S. IN NURSING AT QUEENSBOROUGH CC

## Program Content and Requirements

| Course Number and Course Title* |  | No. of Credits | York GER | York equiv course |
| :---: | :---: | :---: | :---: | :---: |
| List each course required for the college core (if applicable)** | ENGLISH COMPOSITION <br> EN 101 English Composition * <br> EN 102 English* <br> Mathematics <br> Math 119- / 336*** <br> LAB SCIENCE <br> BI-301 Anatomy and Physiology I* <br> BI 302 Anatomy and Physiology II* <br> BI 311 Microbiology* <br> SOCIAL SCIENCES <br> SS 510 Psychology* <br> SS 520 Human Growth and Development* <br> LIBERAL ARTS AND SCIENCES ELECTIVE* HIST 127 | 3 3 3 4 4 $4(1 \mathrm{Bio}$ $999)$ 3 3 3 3 |  | $\begin{gathered} \text { ENGL } \\ 125 \\ \text { ENGL } \\ 200 \\ \text { Math } 104 \\ \text { BIOL } 234 \\ \text { BOIL } 235 \\ \text { BIOL } 265 \\ \\ \text { PSYC } 102 \\ \text { PSYC } 214 \\ \text { Hist } 127 \end{gathered}$ |
| List each course required for the major (include any field experience, research, thesis, or capstone course)** | NURSING MAJOR <br> NU-101 Safe and effective nursing care of client, I NU-102 Safe and effective nursing care of client, II NU-201 Safe and effective nursing care of client, III NU-202 Safe and effective nursing care of client, IV <br> NU-204 Nursing and Societal Forces | $\begin{aligned} & 7 \\ & 9 \\ & 9 \\ & 9 \\ & 3 \end{aligned}$ | New course <br> NO <br> NO <br> NO <br> NO | $\begin{aligned} & \mathrm{NO} \\ & \mathrm{NO} \\ & \mathrm{NO} \\ & \mathrm{NO} \\ & \mathrm{NO} \end{aligned}$ |

[^1]**IF STUDENTS SELECT FROM CATEGORIES OF COURSES, SPECIFY THE CATEGORIES AND THE NUMBER OF CREDITS REQUIRED IN THE CATEGORY. IN SUCH A CASE, PROVIDE AN ANNOTATED COPY OF THE COLLEGE CATALOG.
ADDITIONAL COURSES REQUIRED FOR YORK COLLEGE B.S. IN NURSING

## Program Content and Requirements

| Course Number and Course Title* |  | No. of Credits | QCC equiv course |
| :---: | :---: | :---: | :---: |
| List each course required for the college core (if applicable)** | York courses |  |  |
|  | Statistics Math 111 | 4 | MA-336 or 3cr. elective |
|  | Philosophy 102, 103, 121 | 3 | SS 610 |
|  | Pathophysiology Bio 336 | 3 | BI 525 |
|  | Writing 303 | 3 | NO |
|  | Chemistry 105 | 5 | Chem 127 |
|  | Speech 101 | 3 | Sp 207/211 |
|  | Nutrition Bio 382 | 2 | HE 103 ( 1 elective credit) |
|  | Suggested selection for additional required credits (FA 104 or 150 or 155 or 264 or 382 or Music 101 or 110 or 225 or 250 or 253) | 3-8 | 7.5 |
|  | $\begin{aligned} & \text { ADDITIONAL GENERAL EDUCATION } \\ & \text { (9.5credits)* } \end{aligned}$ | 26-29 | 25.5// 34 |
|  | One 3 credit course taken at QCC as Liberal Arts elective (3 of 15 General Education) |  |  |
| List each course required for the major (include any field experience, research, thesis, or capstone course)** | NURSING MAJOR |  |  |
|  | NURS 200 * Pharmacology Challenge exam |  | In QCC curriculum |
|  | NURS 203 Health Assessment | 4 |  |
|  | NURS 301 Values in Transition | 4 | 3 NU-204// N |
|  |  | 4 | 301 |
|  | NURS 314 Leadership and management | 3 |  |
|  | NURS 315 Community Nursing I | 6 |  |
|  | NURS 405 Crisis Nursing | 3 |  |
|  | NURS 406 Emergent Evolution | 3 |  |
|  | NURS 407 Nursing Research | 3 |  |
|  | TOTAL YC Nursing | 28 |  |
|  |  |  | 27 |

120 credits
61 liberal arts cr.
6. 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 Equivalents Math [120]-119 Credits 3.0 equated credits [5.0] 4.0 MA-114*, 119, [120], 121

APPLIED AND SPECIALIZED COURSES: Mathematics (catalogue, page 70) Mathematics: MA-114*, [120,] 119 and 121, 128, 205, 240, 250, 260,* 261, 901 *MA-114, [120,] 119 and 121, 128, and 260 fulfill . . .
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. (catalogue, page 110)

## 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 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 $\mathbf{C}$ or better.

MA-303
Prerequisite: MA-[120] -119 with a grade of $\mathbf{C}$ 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
Prerequiste: 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
Prerequiste: 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).

## DEPARTMENT OF BUSINESS

From: Office Administration and Technology - A.A.S. Degree Program Optional Tracks: ADMINISTRATIVE SECRETARY

OFFICE TECHNOLOGY/WORD INFORMATION

## PROCESSING

General Education Core Requirements Credits

| EN-101, EN-102 | English Composition I, II | 6 |
| :--- | :--- | :---: |
| MA-321 | Mathematics in Contemporary Society | 3 |
|  | Laboratory Science | 4 |
| PE | Physical Education or Dance from the PE-400, 500, or 600 series | 1 |
| SP-111 | Speech Communication | 3 |
| SS-211 or SS-212+ | Economics | 3 |


| SS- or HI- | Elective in Social Science or History <br> (selected from HI-100 series) | 3 |
| :--- | :--- | :---: |

Requirements for the Major

| BU-201 | Business Organization and Management | 3 |
| :---: | :---: | :---: |
| BU-801** | Typewriting/Keyboarding I | 2 |
| BU-802 | Typewriting/Keyboarding II | 2 |
| [BU-803] | [Advanced Typewriting/Keyboarding] | 2 |
| [BU-804] | [Personal Information Management/Electronic Messaging Using Microsoft Outlook] | 3 |
| BU-850 | Fundamentals of Microsoft Windows | 1 |
| BU-907 | Word/Information Processing using Microsoft Word for Windows | 3 |
| Free Electives |  | 3 |
|  |  |  |
| [Administrative Secretary |  |  |
| BU-805** | Shorthand I (Gregg) | 3 |
| BU-806 | Shorthand II | 3 |
| BU-807 | Shorthand for the Professional Office | 3 |
| BU-906 or | Advanced Microsoft Office | 3 |
| BU-908 | Word/Information Processing Using WordPerfect |  |
| Choose two courses from:** |  |  |
| BU-500 <br> BU-859+ <br> BU-903 <br> BU-909 | Introduction to Microcomputer Applications <br> Desktop Publishing (software) <br> Medical Office Procedures <br> Cooperative Education in Business: Office Administration and Technology] | 6 |
| [Office Technology: |  |  |
| Word/Information Processing] |  |  |
| BU-500 | Introduction to Microcomputer Applications | 3 |
| BU-859+ | Desktop Publishing (software) | 3 |
| BU-906 | Advanced Microsoft Office | 3 |
| [BU-908] | [Word/Information Processing Using WordPerfect] | 3 |
| BU- | Business Electives | 6 |
|  | Total for Administrative Track OR Office Technology Track | 60 |

[^2]To: Office Administration and Technology - A.A.S. Degree Program

## General Education Core Requirements

Credits

| EN-101, EN-102 | English Composition I, II | 6 |
| :--- | :--- | :---: |
| MA-321 | Mathematics in Contemporary Society | 3 |
|  | Laboratory Science | 4 |
| PE | Physical Education or Dance from the PE-400, 500, or 600 series | 1 |
| SP-111 | Speech Communication | 3 |
| SS-211 or SS-212+ | Economics | 3 |
| SS- or HI- | Elective in Social Science or History <br> (selected from HI-100 series) | 3 |

## Requirements for the Major

| BU-201 | Business Organization and Management | 3 |
| :--- | :--- | :---: |
| BU-801* | Typewriting/Keyboarding I | 2 |
| BU-802 | Typewiting/Keyboarding II | 2 |
| BU-812 | Transcription and Dictation of Business Documents | 2 |
| BU-804 | Administrative Office Procedures | 3 |
| BU-850 | Fundamentals of Microsoft Windows | 1 |
| BU-907 | Word/Information Processing using Microsoft Word for Windows | 3 |
| BU-500 | Introduction to Microcomputer Applications | 3 |
| BU-859+ | Desktop Publishing (software) | 3 |
| BU-906 | Advanced Microsoft Office | 3 |
| BU- | Anv BU-800 or BU-900 course/s | 3 |
| BU- | Advised Business Electives from the list below |  |
| Free Electives |  | 6 |
|  |  | $\mathbf{3}$ |

*Students who have had previous training in typewriting. and who are exempt from BU-801 (Tvpewriitna/Kevboardina I) are not given credit for that course. Consequentlv. students who are excused from BU-801 must take a free elective in its place.
**Students wishing to prepare for the position of School Secretary may take BU-900 (School Records and Accounts) and BU-901, 902 (Educational Problems of the School Secretary I, II).
+Sections of BU-859 and one other course to be arranged by the Business Department may be taken to partially satisfy the Writing Intensive Requirement.
*Business Electives: (choose 6 credits):
BU-530 Spreadsheet Applications
BU-810 Legal Office Procedures
BU-900 School Records and Accounts
BU-901, 902 Educational Problems of the School Secretary I, II
BU903 Medical Office Procedures
BU-909 Cooperative Education in Business:
Office Administration and Technology

From: Health Care Office Administration: Managing, Coding, and Billing Certificate Program

## General Education Core Requirements

## Credits

| EN-101 or | English Composition I <br> EN-103 | Writing for the New Media |
| :--- | :--- | :---: |

## Requirements for the Major

| BI-520 | Public Health Science | 4 |
| :---: | :---: | :---: |
| BU-850 | Fundamentals of Microsoft Windows | 1 |
| BU-903 | Medical Office Procedures | 3 |
| BU-907 | Word/Information Processing Using Microsoft Word for Windows | 3 |
| BU-909 | Cooperative Education in Business | 3 |
| BU-914 | Critical Issues in Health Care Administration | 3 |
| BU-916 | Medical Coding and Billing I | 3 |
| Two courses selected from the following (dependent on typing ability) <br> BU-801* <br> BU802 <br> [BU-803] | Typewriting/Keyboarding I <br> Typewriting/Keyboarding II <br> [Advanced Typewriting/Keyboarding] | 4 |
| Choose three credits: <br> BI-150 <br> BI-403 <br> SS-640 <br> HE-101 or HE-102 or CPR <br> (HE-110) | Organization \& Delivery of Health Care <br> Medical Terminology <br> Medical Ethics <br> Health Education or CPR | 3 |
|  | Total | 30 |

*Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) or
[BU-803 (Advanced Typewriting/Keyboarding)]. Students should seek advisement from the Department of Business.

To: Health Care Office Administration: Managing, Coding, and Billing Certificate Program

## General Education Core Requirements

 Credits| EN-101 or | English Composition I |  |
| :--- | :--- | :---: |
| EN-103 | Writing for the New Media | 3 |

## Requirements for the Major

| BI_520 | Public Health Science | 4 |
| :--- | :--- | :---: |
| BU-850 | Fundamentals of Microsoft Windows | 1 |
| BU-903 | Medical Office Procedures | 3 |
| BU-907 | Word/lnformation Processing Using Microsoft Word for Windows | 3 |
| BU-909 | Cooperative Education in Business | 3 |
| BU-914 | Critical Issues in Health Care Administration | 3 |
| BU-916 | Medical Coding and Billing I | 3 |
| Two courses selected from the <br> following (dependent on typing <br> ability) <br> BU-801* <br> BU802 <br> BU-812 | Typewriting/Keyboarding I <br> Typewriting/Keyboarding II <br> BI-150 <br> BI-403 <br> SS-640 | Iranscription and Dictation of Business Documents |
| Chos: | 4 |  |


| HE-101 or HE-102 or CPR <br> (HE-110) | Health Education or CPR |  |
| :--- | :--- | :--- |
|  |  | Total |

*Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) or BU-812 (Transcription and Dictation of Business Documents). Students should seek advisement from the Department of Business.

From: Microsoft Office Applications Proficiency Preparation - Certificate Program

## General Education Core Requirements

 Credits| EN-101 or | English Composition I | 3 |
| :--- | :--- | :---: |
| EN-103 | Writing for the New Media |  |

## Requirements for the Major

| BU-500 | Introduction to Microcomputer Applications | 3 |
| :--- | :--- | :---: |
| BU-850 | Fundamentals of Microsoft Windows | 1 |
| BU-906 | Advanced Microsoft Office | 3 |
| BU-907 | Word/lnformation Processing using Microsoft Word for Windows | 3 |
| BU-920 | Graph Presentations Development Using Microsoft PowerPoint | 3 |
| BU-804 | [Personal Information Management/Electronic Messaging Using <br> Microsoft Outlook] | 3 |
| BU-921 | Advanced Project Development in Preparation for MOS Certification | 3 |
| BU-909 | Cooperative Education in Business | 3 |
| One course selected from the <br> following (dependent on typing <br> ability) <br> BU-801* <br> BU802 <br> [BU-803] | Typewriting/Keyboarding I <br> Typewriting/Keyboarding II <br> [Advanced Typewriting/Keyboarding] | 2 |
| Electives |  | Total |
| Advised Business Electives | $\mathbf{3 0}$ |  |

*Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) or [BU-803 (Advanced Typewriting/Keyboarding)]. Students should seek advisement from the Department of Business.

## To: Microsoft Office Applications Proficiency Preparation - Certificate Program General Education Core Requirements <br> Credits

| EN-101 or | English Composition I <br> EN-103 | Writing for the New Media |
| :--- | :--- | :---: |

## Requirements for the Major

| BU-500 | Introduction to Microcomputer Applications | 3 |
| :--- | :--- | :---: |
| BU-850 | Fundamentals of Microsoft Windows | 1 |
| BU-906 | Advanced Microsoft Office | 3 |
| BU-907 | Word/lnformation Processing using Microsoft Word for Windows | 3 |
| BU-920 | Graph Presentations Development Using Microsoft PowerPoint | 3 |
| BU-804 | Administrative Office Procedures | 3 |
| BU-921 | Advanced Project Development in Preparation for MOS Certification | 3 |
| BU-909 | Cooperative Education in Business | 3 |
| One course selected from the <br> following (dependent on typing <br> ability) <br> BU-801* <br> BU802 <br> BU-812 | Typewriting/Keyboarding I <br> Typewriting/Keyboarding II | 2 |


| Electives |  |  |
| :--- | :--- | :---: |
| Advised Business Electives |  | 3 |
|  |  | Total |

*Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) or BU-812 (Transcription and Dictation of Business Documents). Students should seek advisement from the Department of Business.

From: Accounting/Office Administration Technology - Certificate Program
General Education Core Requirements
Credits

| EN-101 | English Composition I | 3 |
| :--- | :--- | :---: |
| MA-321 | Mathematics in Contemporary Society | 3 |

## Requirements for the Major

| $\mathrm{BU}-101$ | Principles of Accounting I |  |
| :--- | :--- | :---: |
| $\mathrm{BU}-111^{*}$ | Computer Applications in Accounting | 4 |
| $\mathrm{BU}-500$ | Introduction to Microcomputer Applications | 3 |
| $\mathrm{BU}-801^{* *}$ | Typewriting/Keyboarding I | 3 |
| BU-804 | [Personal Information Management/Electronic Messaging Using <br> Microsoft Outlook] | 2 |
| $\mathrm{BU}-906$ | Advanced Microsoft Office | 3 |
| BU-912 | Cooperative Education in Business | 3 |
|  |  | 3 |
| Electives+ Advised Business Electives <br> Select one of the following: Principles of Accounting II <br> BU-102 Business Organization and Management <br> BU-201 Spreadsheet Applications | $3-4$ |  |
|  |  | Total |

*Students may take BU-111 upon completion of BU-101 with a grade of $C$ or better. A pre-requisite waiver will be granted to students enrolled in the Accounting/Office Administration Technology Certificate Program.
**Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) or [BU-803 (Advanced Typewriting/Keyboarding).] Students should seek advisement from the Department of Business.
+Students should seek advisement from the Business Department prior to the selection of a business elective.

## To: Accounting/Office Administration Technology - Certificate Program

## General Education Core Requirements Credits

| EN-101 | English Composition I | 3 |
| :--- | :--- | :---: |
| MA-321 | Mathematics in Contemporary Society | 3 |

## Requirements for the Major

| BU-101 | Principles of Accounting I | 4 |
| :--- | :--- | :---: |
| BU-111* | Computer Applications in Accounting | 3 |
| BU-500 | Introduction to Microcomputer Applications | 3 |
| BU-801** | Typewriting/Keyboarding I | 2 |
| BU-804 | Administrative Office Procedures | 3 |
| BU-906 | Advanced Microsoft Office | 3 |
| BU-912 | Cooperative Education in Business | 3 |
| Electives+ <br> BU-- <br> Select one of the following: | Advised Business Electives | $3-4$ |


| BU-102 | Principles of Accounting II |  |
| :--- | :--- | :---: |
| BU-201 | Business Organization and Management |  |
| BU-530 | Spreadsheet Applications |  |
|  |  | Total |

*Students may take BU-111 upon completion of BU-101 with a grade of C or better. A pre-requisite waiver will be granted to students enrolled in the Accounting/Office Administration Technology Certificate Program.
**Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) or BU-812 (Transcriotion and Dictation of Business Documents). Students should seek advisement from the Department of Business.
+Students should seek advisement from the Business Department prior to the selection of a business elective.

From: School Secretary - Certificate Program

## General Education Core Requirements

## Credits

EN-101
English Composition I
3

## Requirements for the Major

| BU-804 | [Personal Information Management/Electronic Messaging Using <br> Microsoff Outlook] | 3 |
| :--- | :--- | :---: |
| BU-900 | School Records and Accounts | 2 |
| BU-901 | Educational Problems of the School Secretary I | 2 |
| BU-902 | Educational Problems of the School Secretary II | 2 |
| Two courses selected from the <br> following (dependent on typing <br> ability) <br> BU-801* <br> BU802** <br> [BU-803] | Typewriting/Keyboarding I <br> Typewriting/Keybarding II <br> [Advanced Typewriting/Keyboarding] | 4 |
| [One course from the following:] <br> BU-907 <br> [BU-908] | Word/Information Processing using Microsoft Word for Windows <br> [Word/Information Processing using WordPerfect] |  |
| Two courses from the following: <br> BU-805 <br> BU-806 <br> BU-909 <br> HE-106 | Shorthand I** <br> Shorthand II** <br> Cooperative Education in Business <br> First Aid and Safety Education | 3 |
| Electives | Liberal Arts and Sciences electives | 6 |
|  | Business electives |  |
|  |  | Total |

*Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) and [BU-803 (Advanced Typewriting/Keyboarding).] Students should seek advisement from the Department of Business.
EN-102 is strongly recommended.
**Available by credit by exam

## To: School Secretary - Certificate Program

## General Education Core Requirements

## Credits

## Requirements for the Major

| BU-804 | Administrative Office Procedures | 3 |
| :--- | :--- | :---: |
| BU-900 | School Records and Accounts | 2 |
| BU-901 | Educational Problems of the School Secretary I | 2 |

Academic Senate Agenda—September 11, 2012—Attachment P1
$\left.\begin{array}{|l|l|c|}\hline \text { BU-902 } & \text { Educational Problems of the School Secretary II } & 2 \\ \hline \begin{array}{l}\text { Two courses selected from the } \\ \text { following (dependent on typing ability) } \\ \text { BU-801* }\end{array} & & \\ \begin{array}{ll}\text { BU802** } \\ \text { BU-812 }\end{array} & \begin{array}{l}\text { Typewriting/Keyboarding I }\end{array} & 4 \\ & \text { Typewriting/Keyboarding II } \\ \text { Transcription and Dictation of Business Documents }\end{array}\right]$
*Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) and BU-812 (Transcriotion and Dictation of Business Documents). Students should seek advisement from the Department of Business.

EN-102 is strongly recommended.
**Available by credit by exam
From: Medical Office Assistant - A.A.S. Degree Program

## General Education Core Requirements

## Credits

| EN-101,102 or 103 | English Composition I;II; Writing for the New Media | 6 |
| :--- | :--- | :---: |
| MA-301 | Foundations of Mathematics | 3 |
| SS-310 | Sociology | 3 |
| HI-110, 111, $112^{*}$ | History | 3 |
| SS-640 | Medical Ethics | 3 |
| BI-520 | Public Health Science | 4 |

## Requirements for the Major

| BI-110 | Fundamentals of Life Science | 3 |
| :---: | :---: | :---: |
| BI-150 | Organization and Delivery of Health Care | 2 |
| BI-340 | Assisting in Medical Office: Clinical Testing Procedures | 2 |
| BI-341 | Assisting in Medical Office: Medical Assisting Procedures | 2 |
| BI-403 | Medical Terminology | 2 |
| BI-451 | Phlebotomy Technology | 1 |
| BI-451 | EKG Technology | 2 |
| Business Courses |  |  |
| Any one course from the following (depending on keyboarding ability) BU-802 <br> [BU-803] | Typewriting/Keyboarding II [Advanced Typewriting/Keyboarding] | 2 |
| BU-903 | Medical Office Procedures | 3 |
| BU-907* | Word/Information Processing using Microsoft Word | 3 |
| BU-916, 918 | Medical Coding and Billing I, II | 6 |
| Internship |  |  |
| BU-909 or BI-961 and HE-110 | Cooperative Education in Business Phlebotomy Practice Cardiopulmonary resuscitation | 3 |
| Electives |  |  |
| Seven credits to be selected from the following courses: $\begin{aligned} & \text { BII-950, 951, } 952 \\ & \text { BU-801 } \\ & \text { HE-103 } \\ & \text { SP-211 } \end{aligned}$ | Field Experience in Medical Assisting Typewriting/Keyboarding I Nutrition and Health Speech Communication | 7 |


| $\mathrm{CH}-120$ | Fundamentals of Chemistry | Total |
| :--- | :--- | :--- |
|  | $\mathbf{6 0}$ |  |

*Writing Intensive sections of these courses are offered each semester.

## To: Medical Office Assistant - A.A.S. Degree Program

## General Education Core Requirements

## Credits

| EN-101,102 or 103 | English Composition I;II; Writing for the New Media | 6 |
| :--- | :--- | :---: |
| MA-301 | Foundations of Mathematics | 3 |
| SS-310 | Sociology | 3 |
| HI-110, $111,112^{*}$ | History | 3 |
| SS-640 | Medical Ethics | 3 |
| BI-520 | Public Health Science | 4 |

## Requirements for the Major

| BI-110 | Fundamentals of Life Science | 3 |
| :---: | :---: | :---: |
| BI-150 | Organization and Delivery of Health Care | 2 |
| BI-340 | Assisting in Medical Office: Clinical Testing Procedures | 2 |
| BI-341 | Assisting in Medical Office: Medical Assisting Procedures | 2 |
| BI-403 | Medical Terminology | 2 |
| BI-451 | Phlebotomy Technology | 1 |
| BI-451 | EKG Technology | 2 |
| Business Courses |  |  |
| Any one course from the following (depending on keyboarding ability) BU-802 <br> BU-812 | Typewriting/Keyboarding II <br> Transcription and Dictation of Business Documents | 2 |
| BU-903 | Medical Office Procedures | 3 |
| BU-907* | Word/Information Processing using Microsoft Word | 3 |
| BU-916, 918 | Medical Coding and Billing I, II | 6 |
| Internship |  |  |
| $\begin{gathered} \hline \text { BU-909 or } \\ \text { BI-961 and } \\ \text { HE-110 } \\ \hline \end{gathered}$ | Cooperative Education in Business <br> Phlebotomy Practice <br> Cardiopulmonary resuscitation | 3 |
| Electives |  |  |
| Seven credits to be selected from the following courses: $\begin{aligned} & \text { BII-950, 951, } 952 \\ & \text { BU-801 } \\ & \text { HE-103 } \\ & \text { SP-211 } \\ & \text { CH-120 } \end{aligned}$ | Field Experience in Medical Assisting Typewriting/Keyboarding I Nutrition and Health Speech Communication Fundamentals of Chemistry | 7 |
|  | Total | 60 |

[^3]
## From: Medical Office Assistant - Certificate Program

## General Education Core Requirements

## Credits

| EN-101 | English Composition I | 3 |
| :--- | :--- | :---: |
| $\mathrm{BI}-110$ | Fundamentals of Life Science | 3 |

## Requirements for the Major

| Bl-340 | Assisting in Medical Office: Clinical Testing Procedures | 2 |
| :---: | :---: | :---: |
| BI-341 | Assisting in Medical Office: Medical Assisting Procedures | 2 |
| BI-520 | Public Health Science | 4 |
| BU-903 | Medical Office Procedures | 3 |
| BU-907 | Word/Information Processing Using Microsoft Word for Windows | 3 |
| Two courses selected from the following (dependent on typing ability) <br> BU-801* <br> BU802 <br> [BU-803] | Typewriting/Keyboarding I <br> Typewriting/Keyboarding II <br> [Advanced Typewriting/Keyboarding] | 4 |
| Electives |  |  |
|  | Advised electives** | 3 |
|  | Free electives | 3 |
|  | Total | 30 |

*Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) and [BU-803 (Advanced Typewriting/Keyboarding).] Students should seek advisement from the Department of Business.
${ }^{* *}$ Advisement is a cooperative effort by the Department of Business and the Department of Biological Sciences and Geology, and is conducted in line with the student's background, interests, and goals.

## To: Medical Office Assistant - Certificate Program

## General Education Core Requirements

## Credits

| EN-101 | English Composition I | 3 |
| :--- | :--- | :---: |
| $\mathrm{BI}-110$ | Fundamentals of Life Science | 3 |

## Requirements for the Major

$\left.\begin{array}{|l|l|c|}\hline \text { BI-340 } & \text { Assisting in Medical Office: Clinical Testing Procedures } & 2 \\ \hline \text { BI-341 } & \text { Assisting in Medical Office: Medical Assisting Procedures } & 2 \\ \hline \text { BI-520 } & \text { Public Health Science } & 4 \\ \hline \text { BU-903 } & \text { Medical Office Procedures } & 3 \\ \hline \text { BU-907 } & \text { Word/Information Processing Using Microsoft Word for Windows } & 3 \\ \hline \begin{array}{l}\text { Two courses selected from the following } \\ \text { (dependent on typing ability) } \\ \text { BU-801* } \\ \text { BU802 } \\ \text { BU-812 }\end{array} & & 4 \\ \hline & \begin{array}{l}\text { Typewriting/Keyboarding I }\end{array} & \\ \hline & \text { Typewriting/Keyboarding II } \\ \text { Electives } & \text { Transcription and Dictation of Business Documents }\end{array}\right]$

[^4][^5]
## DEPARTMENT OF SOCIAL SCIENCES

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

FROM: [MA-120 College Algebra and Trigonometry 3]
TO:
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.

From: Free Electives ([1-3] cr.)
To: Free Electives (0-2 cr.)

## Rationale:

These changes are necessitated by changes in the Math and CS Dept. courses. MA120 has been deleted and replaced by MA119 and MA121. The additional 1 credit of required math will reduce the available credits to Free Elective to 0-2.

## DEPARTMENT of BUSINESS

Replace BU-914 with BU-917

From: [BU-914 Critical Issues in Health
Care Administration] 3 class hours 3 credits

To: BU-917 Healthcare Information Management 3 class hours, 1 laboratory hour* 3 credits

Substitution of BI-110 for BU-917

| From: $[$ BI-110 Fundamentals of Life |  |
| :---: | :---: |
| Science] 3 class hours 3 credits | To:BU-917 Healthcare Information <br> Management 3 class hours, $\underline{1}$ <br> laboratory hour* 3 credits |

Catalog Description:

This course covers the development, evolution and use of healthcare information technology in the healthcare industry. It is also designed to show how healthcare information management professionals serve the patient, physician, and the public by using the highest ethical standards to manage healthcare information through the use of both database software and paper formats.

## Rationale:

This course is needed to prepare students for entry-level positions in healthcare information management and also to update the skills needed by experienced workers in the healthcare information field. BU-917 (Healthcare Information Management Technology) has been designated as a "bridge course" that will serve both the Continuing Education population and our Queensborough Community College Certificate students interested in future careers in this industry.

## General Objective:

This course will introduce students to the functions of electronic healthcare records and healthcare information management--its evolution, its terminology, and its database technology. It will stress the importance of high standards in healthcare information management and its benefits to the medical professional, the patient, and society.

## Specific Objectives:

By completing the assignments, the following specific features will be accomplished:

- Becoming aware of the evolution of healthcare information management and envisioning the future of health information management
- Evaluating the importance of the health record
- Identifying the users of health records-individual users and institutional users
- Assessing the content of the health record and reducing the incidence of medical error by improving the accuracy and clarity of medical records
- Formatting the health record-paper-based vs. electronic
- Becoming familiar with electronic healthcare coding, healthcare data, and clinical vocabulary
- Examining the ethical and legal issues in healthcare information management
- Understanding reimbursement methods-Medicare, Medicaid, private insurance carriers
- Understanding database software that is used to keep the healthcare records
*The textbbok for this course is accompanied by a CD that contains the workbook assignments. Obviously, these assignments cannot be completed without using a PC classroom/laboratory. In addition, hands-on use of database software and Internet access are mandatory in order cover the course objectives and to train students for employment in the health care information field. Therefore, this course needs 3 class hours and 1 laboratory hour in order to cover the subject matter.

FROM: Medical Office Assistant - Certificate Program
General Education Core Requirements
Credits

| EN-101 | English Composition I | 3 |
| :--- | :--- | :---: |
| $\mathrm{BI}-110$ | Fundamentals of Life Science | 3 |

Requirements for the Major

| BI-340 | Assisting in Medical Office: Clinical Testing Procedures | 2 |
| :--- | :--- | :---: |
| BI-341 | Assisting in Medical Office: Medical Assisting Procedures | 2 |
| BI-520 | Public Health Science | 4 |
| BU-903 | Medical Office Procedures | 3 |
| BU-907 | Word/Information Processing Using Microsoft Word for Windows | 3 |
| Two courses selected from the following <br> (dependent on typing ability) <br> BU-801* <br> BU802 <br> BU-812 | Typewriting/Keyboarding I <br> Typewriting/Keyboarding II <br> Transcription and Dictation of Business Documents | 4 |
| Electives | [Advised electives**] |  |
|  | Free electives |  |
|  |  | 3 |
|  |  | 3 |

*Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) and BU-812 (Transcription and Dictation of Business Documents). Students should seek advisement from the Department of Business.
${ }^{* *}$ Advisement is a cooperative effort by the Department of Business and the Department of Biological Sciences and Geology, and is conducted in line with the student's background, interests, and goals.

## TO: Medical Office Assistant - Certificate Program

General Education Core Requirements
Credits

| EN-101 | English Composition I | 3 |
| :--- | :--- | :---: |
| BI-110 | Fundamentals of Life Science | 3 |

## Requirements for the Major

| BI-340 | Assisting in Medical Office: Clinical Testing Procedures | 2 |
| :--- | :--- | :---: |
| BI-341 | Assisting in Medical Office: Medical Assisting Procedures | 2 |
| BI-520 | Public Health Science | 4 |
| BU-903 | Medical Office Procedures | 3 |
| BU-907 | Word/Information Processing Using Microsoft Word for Windows | 3 |
| BU-917 | Healthcare Information Management | 3 |
| Two courses selected from the following <br> (dependent on typing ability) <br> BU-801* <br> BU802 <br> BU-812 | Typewriting/Keyboarding I <br> Typewriting/Keyboarding II <br> Transcription and Dictation of Business Documents | 4 |
| Electives |  |  |
|  | Free electives |  |
|  |  | $\mathbf{3}$ |

*Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) and BU-812 (Transcription and Dictation of Business Documents). Students should seek advisement from the Department of Business.
**Advisement is a cooperative effort by the Department of Business and the Department of Biological Sciences and Geology, and is conducted in line with the student's background, interests, and goals.

## From:

Health Care Office Administration: Managing, Coding, and Billing - Certificate Program

## General Education Core Requirements <br> Credits

| EN-101 or | English Composition I | 3 |
| :--- | :--- | :---: |
| EN-103 | Writing for the New Media |  |

Requirements for the Major

| BI-520 | Public Health Science | 4 |
| :---: | :---: | :---: |
| BU-850 | Fundamentals of Microsoft Windows | 1 |
| BU-903 | Medical Office Procedures | 3 |
| BU-907 | Word/Information Processing Using Microsoft Word for Windows | 3 |
| BU-909 | Cooperative Education in Business | 3 |
| [BU-914 | Critical Issues in Health Care Administration] | 3 |
| BU-916 | Medical Coding and Billing I | 3 |
| Two courses selected from the following (dependent on typing ability) <br> - BU-801 <br> - BU802 <br> - BU-812 | - Typewriting/Keyboarding I <br> - Typewriting/Keyboarding II <br> - Transcription and Dictation of Business Documents | 4 |
| Choose three credits: <br> - BI-150 <br> - BI-403 <br> - SS-640 <br> - HE-101 or HE-102 or <br> - CPR | - Organization \& Delivery of health Care <br> - Medical Terminology <br> - Medical Ethics <br> - Health Education <br> - CPR | 3 |
|  | Total | 30 |

## To:

## Health Care Office Administration: Managing, Coding, and Billing - Certificate Program Credits

General Education Core Requirements

| EN-101 or | English Composition I | 3 |
| :--- | :--- | :---: |
| EN-103 | Writing for the New Media |  |

Requirements for the Major

| BI_520 | Public Health Science | 4 |
| :---: | :---: | :---: |
| BU-850 | Fundamentals of Microsoft Windows | 1 |
| BU-903 | Medical Office Procedures | 3 |
| BU-907 | Word/Information Processing Using Microsoft Word for Windows | 3 |
| BU-909 | Cooperative Education in Business | 3 |
| BU-917 | Healthcare Information Management | 3 |
| BU-916 | Medical Coding and Billing I | 3 |
| Two courses selected from the following (dependent on typing ability) <br> - BU-801 <br> - BU802 <br> - BU-812 | - Typewriting/Keyboarding I <br> - Typewriting/Keyboarding II <br> - Transcription and Dictation of Business Documents | 4 |


| Choose three credits: |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| $\bullet \bullet$ | BI-150 |  |  |
| $\bullet \bullet$ | BI-403 | Organization \& Delivery of health Care |  |
| $\bullet \bullet$ | SS-640 | $\bullet$ | Medical Terminology |
| $\bullet$ | HE-101 or HE-102 or | $\bullet$ | Medical Ethics |
| $\bullet$ | CPR | $\bullet$ | Health Education |
|  |  | CPR |  |

## 7. ITEMS APPROVED by the COMMITTEE and NOT YET APPROVED by the ACADEMIC SENATE

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

1. New Courses
2. Changes in Courses
3. Removal of Courses

## 1. NEW COURSES

## DEPARTMENT OF BIOLOGY

BI-425 Pathophysiology 3 class hours; 3 credits
Prerequisites: BI 302 or 421
An introduction to the basic concepts of pathophysiology. Examination of the phenomena that produce alterations in human physiologic function and the resulting human responses. Emphasis will be placed on disease processes in the human body, including their primary and secondary effects, and their application to clinical practice across the life span.

Rationale: This course is desired by students with interest in continuing from the A.S. to B.S. in nursing. Many nursing programs are now requiring this course and an interest in Pathophysiology was also expressed from the QCC Nursing department, in which the course may facilitate an easier transfer to the B.S. nursing program at York College. Projected enrollment is $24-30 /$ semester, where courses will be accessible for both day and evening students.

## DEPARTMENT OF CHEMISTRY (2)

## CH-106 Chemistry and the Arts -provisional <br> 3 class hours 2 laboratory hours 4 credits

Prerequisites: none
This course covers the chemistry of art preservation and the authentication of art objects according to chemical properties. Topics can include the origin of light absorption,emission,scattering, reflection,refraction,transmittance, and visible absorption spectroscopy as well as color, additive and subtractive color mixing, and chromatography. Chemical structure and properties of dyes, paints, pigments, dyeing with indigo, manufacturing of gouache paint. Light-fastness testing. The physical properties of melt, waxes, and patinas for metals used in sculpting, The chemistry of art preservation and
authentication of art objects, hazards of chemicals, principle of black and white and color photography, methods of chemical investigation employed in order to examine the physical and chemical properties of organic materials.

Rationale: This course will be required by all Digital Arts and Design majors and will fulfill the Life and Science Core requirement. This course is recommended for students in programs offered by the Digital Arts and Design. This course is not open to students who have completed $\mathrm{CH}-151,152,251,252$. Successful completion of $\mathrm{CH}-106$ satisfies the Life and Physical Sciences General Educations Core Requirement.

## CH- 122. Foundations in Chemistry -provisional

3 class hours 2 laboratory hours 3 credits
Prerequisites: none
An introduction of fundamental laws, theories, and principles of general chemistry. Experiments are designed to illustrate simple chemical principles and basic laboratory techniques. The aim is to provide insight into how chemical laws are derived, verified, and applied.

Note: Successful completion of CH -122 satisfies the Life and Physical Sciences General Education Core Requirement and the laboratory requirement for the A.A. degree. This course is not open to students who have completed CH -151, 152, 251, 252.

Rationale: The course will satisfy a three credit requirement for students in AA degree program as required by the Pathways Initiative. By integrating the lecture and lab into the same course, students will benefit from a more complete exposure to the fundamental concepts of chemistry. Since there will be a limited number of sections, the chances of developing student cohorts will also be improved, which is expected to improve their success in the course.

## DEPARTMENT OF ENGLISH (1)

EN-230 Introduction to Literary Studies 3 class hours, 1 recitation hour, 3 credits Prerequisites: EN-101, EN-102

An inquiry into what it means to study literature, involving close reading and critical analysis of a variety of prose fiction, drama, and poetry, and informed by an introduction to some of the theoretical issues currently debated in literary studies and a consideration of how such issues have evolved historically. In addition to works of literature, students will read critical and theoretical works, some of which they will identify through their own research. This course combines a study of literature with continued training in clear and effective writing.

Rationale: This course is required to be offered by the CUNY BOT Policy related to Pathways initiatives. It is part of the program for English Majors. It replaces EN 213.

## DEPARTMENT OF ELECTRICAL and MECHANICAL TECHNOLOGY

ET 570 Creating Smartphone Apps 3 Class Hours/3 Credits<br>Prerequisites: none

This course introduces the use and features of smartphones in modern life and how to create working applications. Students will create apps using existing modules and building blocks. No prior programming knowledge is necessary. After this initial experience, basics of the Java programming language will be introduced along with a minimum of XML programming to
introduce the student to the needs of more advanced apps. Software development kits (SDK), along with the development environment will also be covered. In addition, students will have the opportunity to distribute apps into the Marketplace

Rationale: Creating smartphone apps are not just for techies. Today, the best apps are as likely to be originated by a techie as by someone with little technical background so this course will be viable in many curricula. Smartphones, universally owned by our students, have become indispensable accessories in their lives. Each phone is individualized by the number and type of apps selected. Every user has an opinion on how their favorite app might be improved.

This course will teach our students the entire process of how an idea can be transformed into an app and how the app enters the marketplace to be freely distributed or sold. The process can be fun and intellectually rewarding and possibly a financial success. Soon not only phones, but computers will be driven by apps. Windows 8 , which will be released soon, will be "app driven" with a built in market place to download all varieties of apps.

Apps are now the new canvas for creative ideas and arts of all types and dimensions.

## ET 575 Introduction to C++ Programming Design and Implementation 3 Lecture

 Hours, 3 creditsPrerequisites (and/or) co-requisites: none
This foundation course provides a general understanding of the use and development of computer software applications in fields such as science, mathematics, and business using a high level computer language. The course will concentrate on assessing the practical requirements of a software package and developing applications in $\mathrm{C}++$, which is a high level computer language that teaches the basic skills necessary for implementing it in a variety of real world applications. Topics include the analysis and use of concepts such as: primitive data types and their operators, basic I/O, control statements, decision making, looping, subprograms, arrays, strings and computer ethics. Each student will have a computer platform at his/her disposal from which he/she will design, develop, implement and test programs, while evaluating the interactions between a user and the computer.

Rationale : This foundation course is more than just a computer programming experience with the dominant computer language of the twenty first century " $\mathrm{C}++$ ". The proposed $\mathrm{C}++$ course was developed and designed to fulfill the computer literacy requirements for the senior colleges and for those students wishing to make a smooth transition to studying Computer Science and Object Oriented Programming. Students will use analytical reasoning and develop critical thinking skills by solving computer programming problems in realistic situations. Students will submit their applications and be provided with feedback based on their solutions and given the opportunity to modify and resubmit their applications. Students will apply written, oral and graphical arguments in both technical and nontechnical environments to support their conclusions. Each student will be exposed to computing profession ethics including the guarding against the privacy of confidential data and the protection of computer resources against harmful programs i.e. malware. Students will identify ethical misbehavior or situations and suggest appropriate courses of action ,

ET 821 Computers in the Modern Society —provisional 3 Class Hours/3 Credits
Prerequisites (and/or) co-requisites: none

This course examines the impact of computers on modern life by looking at how they work, what they do, where they can be used, what they are capable of, what happens when they fail, and how they are used - and misused. Among the many topics included are gaming, entertainment, communications and social networking, encryption and cryptography, data security, piracy and copyright, governmental regulation and related issues. Class demonstrations are used to illustrate the major points.

Rationale: At a time when almost every student carries a small yet powerful computer in his pocket (in the form of a smartphone), it behooves us to try to put the computer's utility into focus. This course shows students how this modern invention affects not just their lives, but the world around us, and tries to point out not just the good that they do, but also the bad that they can do.

The course examines how computers are used today, and the impact they have on society in general, as well as on us as individuals. It looks at computers from both the inside and the outside - the inside or technical viewpoint (how computers work, what they can and cannot do, how they can be used and abused, and how this affects various industries), and the outside or societal viewpoint (how individuals, corporations, industry, and government deal with these abilities.) The point is to reconcile what the computer _can_ do with what it _should_do.

ET 830 Technology and Society 3 Class Hours/3 Credits
Prerequisites (and/or) co-requisites: none
This course explores the effects of technology and engineering design in areas such as robotics, computers, internet, and energy sources on the past, present, and future of society. Topics include the 21 st century emerging technologies as they relate to education, the environment, economy, industry, and social issues. Students are also introduced to the concepts of the development and use of robotics, computers, internet, and energy sources, along with the societal impact of such technologies

Rationale: Technology provides an understanding, and an appreciation for the world around us. Society also controls technology through the choices it makes. The course is designed to enable students to pursue three objectives:

1. To understand the central role of science and technology in contemporary society.
2. To examine how science and technology reflect their social, political, philosophical, economic and cultural contexts.
3. To explore the human, ethical and policy implications of current and emerging technologies.

This course studies the cultural, economic, and political impacts of scientific innovation.

## ET 841 The Science of Energy and Power in the Modern World 3 Class Hours/3 Credits

Prerequisites (and/or) co-requisites: none
This course examines the science and technology of energy and how humans use it on a daily basis. Topics include: importance of energy in modern society; how energy is used
in food production, materials, manufacturing, transportation, communications, lighting, heating and cooling ; the relationship between various forms of energy and greenhouse gases; individual and societal conservation methods and their economical and environmental impact; the laws of thermodynamics and equations relating energy, work and power; the electrical grid and elementary home and auto wiring; the pn junction and active and passive solar technology; wind, hydro, wave, geo and ocean thermal renewable energy schemes; the fuel cell and the new generation of electromechanical propulsion; Law of Conservation of Energy.

Rationale: Energy, like food and water, is a necessity of life. Most people aren't even aware that the availability of water and food are also heavily energy dependent. That makes understanding energy of top importance. Understanding what energy is, and how we use and consume it daily are important steps to teaching students conservation.

The way we acquire energy is getting more complex every year in terms of the technology, environmental impact and geopolitical wrangling. As fossil fuels become depleted, we will need to rely on renewable energy technologies. Renewable technologies have many scientific, technological, economic and environmental tradeoffs, so a good understanding of all the renewable energy technologies can make the educated student save lots of money over a lifetime

## ET 843 The Role of Energy in Society —provisional

3 Class Hours/3 Credits
Prerequisites (and/or) co-requisites: none
This course deals with the history of energy use and the societal changes that have resulted from these developments. Contemporary usage, resources, distribution, as well as the current and future impact on the quality of life for individuals and society are considered. Energy extracted from fossil fuels to other current and future forms of renewable energy are discussed along with their economic and environmental impact. The geopolitics of energy use around the world will be studied along with the role played by major industries in energy sourcing. Finally, students will consider the optimal choices regarding our energy future to affect the best long-term social, economic and environmental results.

Rationale: Not a day goes by today when the New York Times does not have an important article related to energy and how it may affect us in some way. Energy sources, delivery, and how and who are using it constitute the most important subjects today since it affects all nation's power, wealth and well being.

This course will prepare the student to better understand how energy and power impact their daily life. The politics of fossil fuel and all forms of renewable and nuclear energy will be addressed by this course. Upon completion of this course a student will be able to understand and more importantly play an active role in shaping this nations very important energy future. Following the correct long-term rather than expedient course can make a great difference for our future wellbeing.

Basic scientific principles that underlie and enable the conveniences and necessities we take for granted in our modern society will be introduced and studied. The science and technology underlying the electrical grid, power generation, automobile, aircraft, television, cell phones, solid state electronics, cat scans, MRI, molecular medicine, DNA, fission and fusion, LED lighting, photovoltaics, nano-materials, stem cells, heat pumps, fuel cells, artificial intelligence, robotics, GPS, WiFi, internet, sonar, radar, microprocessor and the PC.

Rationale: The concept of a liberal arts education dates to the Hellenistic period where a term was coined to represent the breadth of knowledge an educated citizen should exemplify. For 2 millennia, it has more or less included language, history, mathematics, arts and sciences. Late last century and now in this century, educators have been trying to broaden the scope of knowledge represented by the traditional liberal arts definition. Knowledge has exploded in the last century. Recent technology has profoundly changed the way we live and behave. To be intellectually comfortable and to have the sense of being in control of our lives in the midst of ubiquitous technology requires a rethinking of what a person needs to know today to be considered both well-educated and prepared to deal with the world.

Currently students are not required to take a course that will teach them about the technology they take for granted every day, like cell phones and television. ET880 represents the type of course all college students worldwide need to take today to better understand the world around them and to help them navigate better and healthier lives.

## DEPARTMENT of HEALTH , PHYSICAL EDUCTION and DANCE (3)

HE-114 Foundations of Health Promotion and Disease Prevention 3 class hours, 3 credits
Prerequisites (and/or) co-requisites: none
This foundation course will provide perspectives on health promotion and disease prevention. This course will introduce students to different, social, political, cultural and economic dimensions of health and illness. Students will examine the meaning of health and illness and how they vary culturally and historically. Students will also learn of the health promotion professions (health education, dietetics, cardiac rehab, exercise physiologist...) and an overview of the skills and models commonly utilized by such professionals.

Rationale: This course will provide students of health education with a historical overview of the influences that have stimulated the increased societal interest in health promotion and disease prevention. This class is different and unique because key historical developments in the evolution of health promotion and disease prevention will be examined. In order to become a certified health educator specialist (C.H.E.S) - an understanding of such key historical events in the health field and an understanding of the broader model of health promotion and disease prevention is necessary.

PE 815 Foundations of Physical Education 3 class hours, 3 credits
Prerequisites (and/or) co-requisites: none
This course introduces the discipline of physical education teacher education (PETE) to the future practitioner, providing theory, issues, and methods of current physical education practices as well as opportunities to observe these practices in K-12 schools.

Rationale: An introductory course in Physical Education is the centerpiece of most beginning level Physical Education Teacher Education programs. Not only does it introduce the subject in detail, it allows students to explore the current issues and philosophies of the profession, observe

PE teaching and organization in the field, demonstrate understanding of the basic components of lesson planning, content standards and assessment, and practice teaching.

This course is intended to be included in the concentration of the AA program in Physical Education and available to students majoring in Physical Education and Childhood Education.

PE 825 Introduction to Exercise Science 3 class hours, 3 credits
Prerequisites (and/or) co-requisites: none
A comprehensive review of the field of exercise science including: scope of practice, career opportunities, critical issues, foundations of exercise physiology and biomechanics, and behavioural and social dimensions of exercise. In-class lectures will be augmented with performance lab work, multi-media presentations, guest professionals, and opportunities to observe practices in the field.

Rationale: An introduction to exercise science course would be a foundations course for any student pursuing a degree in the health sciences such as exercise physiology, athletic training, health promotion, physical therapy, physical education, sports medicine, cardiac rehabilitation, etc.

This course is intended to be included in the concentration of the AA program in Exercise Science and offered to students majoring in Exercise Science, Physical Education and Health Promotion.

## DEPARTMENT OF PHYSICS (3)

PH-111 Space, Astronomy, and our Universe 2 hours lecture, 1 hour recitation, 2 hours lab, 3 credits
Prerequisites (and/or) co-requisites: none
Space, Astronomy, and our Universe" discusses topics related to space and astronomy, beginning with our planet and our Moon, and extending to stars, galaxies, and the Universe as a whole. This course will explore physical processes and laws that govern the motion and evolution of all objects in the Universe, including meteors, asteroids, planets, and stars.

Rationale: The course will satisfy a lab science common core course.
PH-411 Science Calculus Physics I 2 class hours, 2 recitation hours and 2 laboratory hours, 3.5 credits
Prerequisites (and/or) co-requisites: MA-440 or the equivalent. Co-requisite: MA-441
Fundamental principles of mechanics; includes kinematics, classical laws of motion, statics, conservation laws, work, mechanical energy, and simple harmonic motion.

Rationale: This course will satisfy major requirements for Engineering Science and Physics. Recitations give students opportunities to practice. Laboratory work is essential in the study of physics. It engages students in significant experiences with experimental processes and helps students develop a broad array of basic skills and tools of experimental physics and data analysis. It also helps them to master basic physics concepts, to understand the role of direct observation in physics and to distinguish between inferences based on theory and the outcomes of experiments. Finally, labs help students develop collaborative learning skills that are vital to success in many lifelong endeavors. This will also make this course universally transferrable outside CUNY.

## 2. Changes in Courses

## DEPARTMENT of FOREIGN LANGUAGES and LITERATURE (9)

## LF-213 Intermediate French I

From: LF-213 Intermediate French I 3 class hours 3 credits
General review of grammar, readings and discussion in French
TO: FREN 213 Intermediate French I_3 class hours, 3 credits
This third-semester course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills - listening, speaking, reading and writing. Level-appropriate cultural information will be presented to promote the students' understanding of the French-speaking world.

Rationale: It fulfills a graduation requirement for the Associate degree in Liberal Arts and Sciences as well as the QCC/John Jay Dual/Joint Criminal Justice A.S./B.A. Program. It fulfills the Flexible Core requirement in World Cultures and Global Issues. It will be offered every semester.
Rationale. The revision of the course description reflects more accurately the learning objectives that align with the CUNY Pathways learning outcomes under II.A. World Cultures and Global Issues. The prerequisite has been rewritten for more accuracy and clarity.

## LF 214 Intermediate French I

From: LF-214 Intermediate French I 3 class hours 3 credits
General review of grammar, readings and discussion in French]
TO: FREN 214 Intermediate French I
3 class hours, 3 credits
The focus of this fourth-semester course is to continue improving students' oral communication skills, along with reading, writing and grammar. Students will expand their vocabulary and study more complex grammatical structures. Aspects of French-speaking cultures will be integrated through readings, films, discussions and Internet-related activities.

Rationale: It fulfills a graduation requirement for the Associate degree in Liberal Arts and Sciences as well as the QCC/John Jay Dual/Joint Criminal Justice A.S./B.A. Program. It fulfills the Flexible Core requirement in World Cultures and Global Issues. It will be offered every semester.
The revision of the course description reflects more accurately the learning objectives that align with the CUNY Pathways learning outcomes under II.A. World Cultures and Global Issues. The prerequisite has been rewritten for more accuracy and clarity.

## LG 213 Intermediate German I

From: [LG-213 Intermediate German I 3 class hours 3 credits
Intensive review of German grammar throug h Practice of the phonological and grammatical structure of German orally an in writing. Selected readings in contemporary German prose.]
To: GERM 213 Intermediate German I_ 3 class hours, 3 credits
This third-semester course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills - listening, speaking, reading and writing. Level-appropriate cultural information will be presented to promote students' understanding of German speaking countries.

Rationale: It fulfills a graduation requirement for the Associate degree in Liberal Arts and Sciences as well as the QCC/John Jay Dual/Joint Criminal Justice A.S./B.A. Program. The revision of the course description reflects more accurately the learning objectives that align with the CUNY Pathways learning outcomes under II.A. World Cultures and Global Issues. The prerequisite has been rewritten for more accuracy and clarity. . It will be offered every semester.

## LG 401 Cultures of German Speaking Countries Today

From: [Students will be exposed to and discuss cultural developments in German-Speaking including their role the European Union. They will read English translations of contemporary writings and apply an interdisciplinary approach to texts, films, and music, focusing on various facets of life and culture.] Students will also attend cultural events in New York City.
To: In this course, students will examine literary and other texts and media from cultures in the German-speaking countries, including film, art, music, and performance. Through discussion of selected cultural artifacts and issues related to art, history, politics and traditions, students will analyze the distinguishing features of these cultures. As an integral part of the course, students will be expected to conduct research on selected topics. Students will also attend cultural events in New York City. The course will be taught in English as WI.

Rationale: The revision of the course description reflects more accurately the learning objectives that align with the CUNY Pathways learning outcomes under II.A. World Cultures and Global Issues. The prerequisite has been rewritten for more accuracy and clarity.

## LG 401 Cultures of German Speaking Countries Today

From: LG-401 [Students will be exposed to and discuss cultural developments in GermanSpeaking including their role the European Union. They will read English translations of contemporary writings and apply an interdisciplinary approach to texts, films, and music, focusing on various facets of life and culture.] Students will also attend cultural events in New York City. To:GERM 401 In this course, students will examine literary and other texts and media from cultures in the German-speaking countries, including film, art, music, and performance. Through discussion of selected cultural artifacts and issues related to art, history, politics and traditions, students will analyze the distinguishing features of these cultures. As an integral part of the course, students will be expected to conduct research on selected topics. Students will also attend cultural events in New York City. The course will be taught in English as WI.

Rationale: It is a Writing Intensive course and fulfills a graduation requirement. The revision of the course description reflects more accurately the learning objectives which align with the CUNY Pathways learning outcomes under II.D. Individual and Society.

## LH 213 Intermediate Hebrew

From: LH-213 Intermediate Hebrew I 3 class hours 3 credits
General review of grammar covered in Hebrew I (LH-111) and Hebrew II (LH-112); readings, short stories, reports, and discussions in the language.
To; HEBR 213 Intermediate Hebrew I 3 class hours, 3 credits
This third-semester course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills - listening, speaking, reading and writing. Level-appropriate cultural information will be presented to promote students' understanding of Jewish culture

Rationale. The revision of the course description reflects more accurately the learning objectives that align with the CUNY Pathways learning outcomes under II.A. World Cultures and Global Issues. The prerequisite has been rewritten for more accuracy and clarity.

## LI 213 Intermediate Italian I

From: LI-213 Intermediate Italian I 3 class hours 3 credits General review of grammar, readings and discussion in Italian]
To: ITAL 213 Intermediate Italian I 3 class hours, 3 credits This third-semester course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills - listening, speaking, reading and writing. Level-appropriate cultural information will be presented to promote students' understanding of Italian civilization.

Rationale. The revision of the course description reflects more accurately the learning objectives that align with the CUNY Pathways learning outcomes under II.A. World Cultures and Global Issues. The prerequisite has been rewritten for more accuracy and clarity.

## LS 213 Intermediate Spanish I

From: LS-213 Intermediate Spanish I 3 class hours 3 credits
Review of Spanish grammar with intensive aural-oral practice, through the use of videotapes and selected readings.
To: SPAN 213 Intermediate Spanish I 3 class hours, 3 credits
This third-semester course will continue to develop students' communicative competence through the study of grammar, acquisition of new vocabulary, and practice of the four language skills - listening, speaking, reading and writing. Level-appropriate cultural information will be presented to promote students' understanding of the Spanishspeaking world.

Rationale. The revision of the course description reflects more accurately the learning objectives that align with the CUNY Pathways learning outcomes under II.A. World Cultures and Global Issues. The prerequisite has been rewritten for more accuracy and clarity.

## LS 214 Intermediate Spanish II

From: LS-214 Intermediate Spanish II 3 class hours 3 credits
Emphasis on written composition. Selections from Spanish and Spanish-American literature read and analyzed.
To: SPAN 214 Intermediate Spanish II_ 3 class hours, 3 credits
The focus of this fourth-semester course is to continue improving students' oral communication skills, along with reading,
writing and grammar. Students will expand their vocabulary and study more complex grammatical structures. Aspects of
Spanish-speaking cultures will be integrated through readings, films, discussions and Internetrelated activities.

Rationale. The revision of the course description reflects more accurately the learning objectives that align with the CUNY Pathways learning outcomes under II.A. World Cultures and Global Issues. The prerequisite has been rewritten for more accuracy and clarity.

## LS 402 Latin American and Caribbean Cultures

FROM :LS 402 Latin American and Caribbean Cultures A journey into contemporary Latin American and Caribbean Cultures through the reading and discussion of politics, customs, art, music and cinema. The course will be taught in English

To: SPAN 402 Latin American and Caribbean Cultures In this course, students will examine literary and other texts and media from Latin American and Caribbean cultures, including film, art, music, and performance. Through discussion of selected cultural artifacts and issues related to art, history, politics and traditions, students will analyze the distinguishing features of these cultures. As an integral part of the course, students will be expected to conduct research on
selected topics. Students will also attend cultural events in New York City. The course will be taught in English as WI.

Rationale: The revision of the course description reflects more accurately the learning objectives which align with the CUNY Pathways learning outcomes under II.D. Individual and Society.

## DEPARTMENT of MATHEMATICS and COMPUTER SCIENCE (3)

MA 301 Foundations of Mathematics
Change in title:
From: [ Foundations of Mathematics ] 3 Class Hours 3 Credits
To: Mathematics for the Liberal Arts 3 Class Hours 3 Credits
Rationale: The new title is more appropriate for the purpose and content of the course.
Change in Course description for the College Catalog:
From: [ Designed to provide students with the mathematical literacy that is necessary to understand contemporary issues in today's technological society. Students will obtain hands-onexperience in solving realistic problems in discrete mathematics, exponential modeling, statistics and probability. Graphing calculators will be used throughout the course.]
To : Designed to provide students with an understanding of how mathematics relates to the humanities, social and natural sciences. Students will obtain experience in solving realistic questions and applications using discrete mathematics, modeling, statistics and probability.

Rationale: The description differentiates this course from MA-321 which is more computational in substance. This course places stress on the connections between mathematics and the other arts and sciences.

Change in Prerequisites and/or co-requisites:
From: MA-010 OR MA-013 OR SATISFACTORY SCORE ON [CMAT OR COMPASS EXAMS]
To: MA-010 OR MA-013 OR SATISFACTORY SCORE ON THE MATHEMATICS PLACEMENT TEST

Rationale: CMAT is obsolete. This wording more easily allows changes to testing procedures.

MA 303 NUMBER SYSTEMS Hours: 3 Class Hours 1 Recitation Hour 3 Credits
Change in Prerequisites and/or co-requisites:
FROM: Pre-requisite: MA-120 or permission of the Department.
TO: Pre-requisite: MA-119 (with a grade of C or better) or permission of the Department.
Change in Course description for the College Catalog:
FROM: This course is designed to instruct students in areas of mathematics that are related to the elementary school curriculum, to clear up common misunderstandings of mathematical concepts, and to use current computer technologies with the concepts developed in the course as tools for
solving problems. Topics covered will be chosen from numeration systems, number theory, mathematical systems, statistics and geometry. Recommended for future teachers.
TO: This course is designed to instruct students in areas of mathematics that are related to the elementary school curriculum, to enhance understanding of fundamental concepts, and to use current computer technologies with the concepts developed in the course as tools for solving problems. Topics covered will be chosen from numeration systems, number theory, mathematical systems, statistics and geometry. Recommended for future teachers.

Rationale: The new description will allow the course to be given to a wider range of students.

## MA 315 Topics in Mathematics

Change in Course description for the College Catalog:
From: [Topics, emphasizing the nature of proof and problem-solving, include Euclidean and non-Euclidean geometries, abstract algebraic systems, number theory, graph theory, and mathematical logic. ]

To: Topics emphasizing a fundamental understanding of mathematical concepts and problem solving may include ratio, proportion, number theory, concepts in mathematics from a historical point of view, logic, advanced topics in mathematics.

Rationale: The new description will allow the course to be given to a wider range of students.
Change in Prerequisites and/or co-requisites:
From: [MA-301 or MA 303]
To: MA-301 or MA-303 or permission of the department
Rationale: The new description will allow the course to be given to a wider range of students.

## DEPARTMENT of PHYSICS (4)

PH-120 Introduction to Meteorology 3 class hours, 3 credits
Prerequisites \& Co-req: None
Change in Course Description:
FROM: Introduces students to Meteorology and Atmospheric Sciences. The course presents basic scientific principles and how they apply to atmosphere and ocean. [Fulfills the science requirement without lab (or with lab when taken in conjunction with PH 121)]

TO: Introduces students to Meteorology and Atmospheric Sciences. The course presents basic scientific principles and how they apply to atmosphere and ocean.

Rationale: The catalog description needs to be changed so as to be consistent with the Pathways 2E requirement.

## PH-201 General Physics I

Change in Hours or credits:
From: 3 lecture hours, 2 lab hours, 4 credits
Prerequisites: MA-114 or MA-120 or the equivalent, or satisfactory score on the Mathematics Placement Test (Level II MA-120)
To: 3 lecture hours, 1 recitation hour, 2 lab hours, 4 credits
Prerequisites: MA-114 or MA-120 or the equivalent, or satisfactory score on the Mathematics Placement Test (Level II MA-120)

Rationale: The addition of 1 recitation hour will match its equivalent course at City Tech such that QCC students will receive the same number of contact hours. City Tech PH1433 has a 6 -hr 4 -credit structure. Additional use of computational software such as Matlab in PH-201 will strengthen our students' preparation. NY City Tech is the CUNY college that offers the bachelor of technology degree. Technology students who transfer to 4 year technology programs overwhelmingly transfer to City Tech.

## PH 202 General Physics I

Change in Hours or credits
From: 3 lecture hours, 2 lab hours, 4 credits Prerequisites: PH-201 (with a grade of C or better)
To: 3 lecture hours, 1 recitation hour, 2 lab hours, 4 credits Prerequisites: PH-201 (with a grade of C or better)

Rationale - The addition of 1 recitation hour will match its equivalent course at City Tech such that QCC students will receive the same number of contact hours. City Tech PH1434 has a 6 -hr 4 -credit structure. Additional use of computational software such as Matlab in PH-202 will strengthen our students' preparation. NY City Tech is the CUNY college that offers the bachelor of technology degree. Technology students who transfer to 4 year technology programs overwhelmingly transfer to City Tech.

## PH-240 Computerized Physical Measurement Using Graphical Programming

Change in Prerequisites and/or co-requisites:
From: PH-240 Computerized Physical Measurement Using Graphical Programming
2 lecture hours, 3 lab hours, 3 credits
Prerequisites: [Permission of the department based on one laboratory science or technology; MA-114, MA-120 or the equivalent; ET-501, PH-303, BU-500 or the equivalent]
To: PH-240 Computerized Physical Measurement Using Graphical Programming 2 lecture hours, 3 lab hours, 3 credits Prerequisites: MA-440 or the equivalent

Rationale: There is no longer a need to require a formal computer course to ensure students have some computer experience as all come to the college with computer experience. While it is helpful if students have experience with making measurements in a laboratory setting, it is not necessary for success in the course, so the laboratory course requirement is being dropped. The mathematics level of the course is extremely challenging for students without better math preparation, so increasing the prerequisite level of mathematics will make it easier for students to be successful in the course.

## DEPARTMENT of SOCIAL SCIENCES (3)

The changes in the following Social Science course prefixes were approved.
From: -- To:
SS901 $\square$ UBST101
SS902 $\square$ UBST201 (because of the UBST101 pre-req)
SS911■ UBST102

Rationale: All courses in the department are having their prefix code changed using 4 letter prefixes common throughout CUNY. Other courses have been previously changed. These were omitted in previous listing.

## 3. REMOVAL OF COURSES

## DEPARTMENT of ENGLISH (1)

EN-213 Advanced Prose Writing 3 class hours 1 recitation hour 3 credits Prerequisite : EN 102

Rationale: replaced by EN-230 in conformity to the PATHWAYS common English course for majors in CUNY. This course formerly fulfilled a need for Education students who did poorly in EN 101 but planned on transferring to Queens College; this need no longer exists.


[^0]:    This course proposal was initiated by Dr. Roland Scal and results from the awarding of an NSF TUES Grant (Transforming Undergraduate Education in Science, Technology, Engineering, and Mathematics) to Drs. Roland Scal, Cheryl Bluestone, and Hugh Rance. The grant entitled, TUES: Development of an Active Learning Gemology Studio Course: Introducing Nonscience Majors to the STEM Curriculum supports the creation of the new course by providing three-years funding for evaluation of the learning outcomes and student attitudes toward science and for materials to teach the course. The two key words in the title "active learning" and "studio course" means that the students will actively direct the course topics and that a studio environment will blur the lines between laboratory and lecture so that topics move freely in both directions between lecture and laboratory.
    The NSF TUES program funded by the Division of Undergraduate Education expects three years (six semesters) of the experimental course analysis and presentation of results of the course evaluation at national science meetings, including a workshop on the results of attracting nonscience majors to the STEM curriculum.

[^1]:    | Total credits in the A.A.S. in Nursing program | 67 |
    | :--- | :--- |

    NOTE: 30 CREDITS ARE LIBERAL ARTS AND SCIENCES
    *** Students who place out of Math 119 may proceed to Math 336
    *MOST UNDERGRADUATE DEGREE TITLES REQUIRE A SPECIFIED PERCENTAGE OF LIBERAL ARTS CONTENT (FOR EXAMPLE, AA, BA REQUIRE 75\%; AS, BS, BSED REQUIRE $50 \%$; AAS REQUIRES 33\%). WITHIN THE TABLE, IDENTIFY WITH AN ASTERISK ALL COURSES THAT ARE CONSIDERED LIBERAL ARTS AND SCIENCES.

[^2]:    *[Students who have had previous training in shorthand and/or typewriting, and who are exempt from introductory keyboarding and introductory shorthand are not given credt for those courses. Consequently, students who are so excused must take other courses in their place as outlined below:
    (a) Students who have had previous training in keyboarding and who are excused from BU-801 must take a free elective in its place.
    (b) Students in the Administrative "Secretary track who have had appropriate previous training in shorthand and who are excused from BU-805 are required to take another BU-800 or BU-900 course in its place.]
    **Students wishing to prepare for the position of School Secretary may take BU-900 (School Records and Accounts) and BU-901, 902 (Educational Problems of the School Secretary I, II).
    +Sections of BU-859 and one other course to be arranged by the department may be taken to partially satisfy the Writing Intensive requirement.

    Business Electives [for the Office Technology Track]: (choose 6 credits)
    BU-530 Spreadsheet Applications
    [BU-805 Shorthand I (Gregg)
    BU-806 Shorthand II]
    BU-810 Legal Office Procedures
    BU-900 School Records and Accounts
    BU-901, 902 Educational Problems of the School Secretary I, II
    BU903 Medical Office Procedures
    BU-909 Cooperative Education in Business:
    Office Administration and Technology

[^3]:    *Writing Intensive sections of these courses are offered each semester.

[^4]:    *Students who have had previous training in typewriting/keyboarding may take BU-802 (Typewriting/Keyboarding II) and BU-812 (Transcriotion and Dictation of Business Documents). Students should seek advisement from the Department of Business.

[^5]:    **Advisement is a cooperative effort by the Department of Business and the Department of Biological Sciences and Geology, and is conducted in line with the student's background, interests, and goals.

