## OFFICE OF VICE PRESIDENT FOR ACADEMIC AFFAIRS AND PROVOST

| TO: | Yelena Bondar, Associate Dean for Student Success Programs; Carey Manifold, ASAP; Zuleika Clarke, Business Academy; <br> Karimah Ellis, Liberal Arts and Humanities Academy; Samantha Sierra, Health Sciences and STEM Academy; Melissa Merced, <br> Education and Justice Academy |
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| CC: | Sharon Warren Cook, Associate Provost; Michael Klein, Registrar; Avery Mullen, Academic Scheduling; Seanna Carter, Academic <br> Scheduling |
| FROM: | Amanda Kalin, Director of Curriculum Development \& Program Planning, Academic Affairs |
| DATE: | April 13, 2020 |
| RE: | FALL 2020 Degree/Certificate Changes and Curriculum Information |

CLOSINGS: Degree Programs and/or Concentrations:

| Program | Concentration | Removed | Added/Changed/Closed Information |
| :---: | :---: | :---: | :---: |
| A.A.S. Tourism and Hospitality <br> (Business <br> Academy) | Sports <br> Management Concentration | Closed Concentration <br> (See changes listed below) | - Students cannot be readmitted to or enroll in this concentration <br> - Students in this concentration must graduate by August 2022. <br> - Sunset date of September 2022 <br> - Students interested in pursuing a concentration in Sports Management should be advised to enroll in the A.S. in Physical Education, Recreation, and Recreation Therapy and select the Sports Management concentration contained in that degree program |
| A.S. Mental Health and Human Services <br> (Health Sciences and STEM Academy) | ALL Concentrations CLOSED | ALL Concentrations Closed <br> (See changes listed below) | - Students cannot be readmitted to or enroll in any concentration <br> - Students in this concentration must graduate by August 2025. <br> - Sunset date of September 2025 <br> - There is ONE degree program NO concentrations for FALL 2020 <br> - Students interested in pursuing substance abuse counseling should be advised to enroll in the A.S. in Chemical Dependency Counseling, which by degree completion will grant them Certification in Alcoholism and Substance Abuse Counseling - Trainee Certification (CASAC-T) |

## CHANGES: Degree/Certificate Programs

| Program | Concentration | Removed | Added/Changed |
| :---: | :---: | :---: | :---: |
| A.S. Accounting <br> (Business <br> Academy) | N/A | N/A | - Inclusion of new course, ECO 2200, Principles of Financial Management, under program electives. This course corresponds to both industry demand and requirements for an understanding of the fundamentals of finance by four-year programs within the fields of Business, Finance, Accounting, Management, or Economics. <br> - Clarification for ECO 1200 and ECO 1300 and optional business elective courses if one or both courses are taken to fulfill Pathways requirements. |
| A.S. Business Administration <br> (Business Academy) | N/A | N/A | - Inclusion of new course, ECO 2200, Principles of Financial Management, under program electives. This course corresponds to both industry demand and requirements for an understanding of the fundamentals of finance by four-year programs within the fields of Business, Finance, Accounting, Management, or Economics. <br> - Clarification for ECO 1200 and ECO 1300 and optional business elective courses if one or both courses are taken to fulfill Pathways requirements. <br> TAH 500 Deleted as an option since the Customer Service option is no longer available for students. <br> - Inclusion of recommendation of course (PHI 6800) under Pathways if transferring to Brooklyn College B.B.A. program. |


| A.A.S. Tourism and Hospitality <br> (Business <br> Academy) | Sports Management | Sports Management Concentration Closed | - Inclusion of TAH 1200 under degree requirements <br> - Deleted TAH 1800 from degree requirements <br> - Deleted TAH 6600 - Under Tourism and Hospitality Concentration. <br> Course offered CLIA Industry certification, which is now offered through CLIA directly, online, at a substantial cost to the student, in turn, TAH 6600 is no longer offered as an option for students. Students no longer have an option of select three under the concentration - Take TAH 1700, 200, 1500, and 6500. <br> - Deletion of Sports Management Concentration - Students who are interested in the Sports Management Concentration complete the concentration under the A.S. in Physical Education, Recreation, and Recreation Therapy as opposed to the A.A.S. in Tourism and Hospitality. |
| :---: | :---: | :---: | :---: |
| A.S. Media Arts <br> (Liberal Arts and Humanities Academy) | N/A | N/A | - Inclusion of new course, MCB 5200, Video Editing and Media Composer, under program electives. This course is designed to prepare students to take the Avid Certified User (ACU) examination. Avid aligned certification courses help students attain and demonstrate the skills and credentials they need to increase their value through competency and efficiency in the highly competitive media industry. |
| A.S. Mental Health and Human Services (Health Sciences and STEM Academy) | Substance Abuse Counseling, General Mental Health, and Domestic Violence Concentrations | ALL Concentrations Closed | - Inclusion of PSY 1100 (originally a hidden credit) under degree requirements. <br> - There in now ONE Degree Program - Concentrations have been either completed deleted or absorbed into the degree as follows: <br> 1. Deletion - Substance Abuse Counseling concentration. As PSY 1100 is now included as a major requirement, students in this concentration would have been required to take three courses over and above their degree requirements in order to earn both the degree and the New York State CASAC-T. This was unfair and untenable. Student interested in CASAC-T are recommended enroll under the A.S. in Chemical Dependency. <br> 2. Inclusion- MH 3500, and MH 3100 OR MH 3700, and MH 3400 OR MH 3800 <br> Students interested in General Mental Health complete MH 3100 and MH 3400, students interested in Domestic Violence complete MH 3700 and MH 3800, then enroll in internships that address their desired focus, the merging of the General Mental Health and Domestic Violence Concentrations into one degree allows more flexibility for students particularly in the case of students who discover they no longer want to work with a domestic violence population or who have limitations on their availability to take a particular course |
| A.S. Biology <br> (Health Sciences and STEM Academy) | BOTH: Allied Health Transfer and Biology Transfer | N/A | - The changes are necessary based on approved changes in credits for MAT 1400, Analytic Geometry and Pre-Calculus Math, from 4 credits to 3 credits. <br> - Adjusted elective credits to accommodate the noted credit change in credits for MAT 1400. |
| A.A.S. Computer Information Systems <br> (Health Sciences and STEM Academy) | N/A/ | N/A | - The changes are necessary based on approved changes in credits for MAT 1400, Analytic Geometry and Pre-Calculus from 4 credits to 3 credits. <br> - Deleted CP 7100 <br> - Adjusted elective credits to accommodate the noted credit changes. |


| A.S. Computer Science <br> (Health Sciences and STEM Academy) | N/A/ | N/A | - The changes are necessary based on approved changes in credits for MAT 1400, MAT 1500, MAT 1600, CS 1200, CS 3500, and CS 3700 from 4 credits to 3 credits. <br> - Restructured degree presentation for transparency in Math course sequencing. <br> - Adjusted elective credits to accommodate the noted credit changes in required courses. |
| :---: | :---: | :---: | :---: |
| A.S. Mathematics <br> (Health Sciences and STEM Academy) | N/A | N/A | - The changes are necessary based on approved changes in credits for MAT 1400, MAT 1500, MAT 1600, MAT 2100, CS 1200, and CS 3500 from 4 credits to 3 credits. <br> - Restructured degree presentation for transparency in Math sequencing and Computer course options. <br> - Deleted - HE 1400 from degree requirements <br> - Inclusion of MAT 3000, Introduction to Mathematical Concepts in Proof, as a requirement for the degree, which based on program assessment, was a missing critical skill for students being well prepared in Mathematics. <br> - Adjusted elective credits to accommodate the noted credit changes in required courses. |
| A.S. Chemistry <br> (Health Sciences and STEM Academy) | N/A | N/A | - The changes are necessary based on approved changes in credits for MAT 1400, MAT 1500, MAT 1600, and MAT 2100 from 4 credits to 3 credits. <br> - Restructured degree presentation for transparency in Math course sequencing and Physical Science course requirements. <br> - Adjusted elective credits to accommodate the noted credit changes in required courses. |
| A.S. Earth and Planetary Sciences <br> (Health Sciences and STEM Academy) | N/A | N/A | - The changes are necessary based on approved changes in credits for MAT 1400, MAT 1500, MAT 1600, and MAT 2100 from 4 credits to 3 credits. <br> - Restructured degree presentation for transparency in Math course sequencing and Physical Science course requirements. <br> - Adjusted elective credits to accommodate the noted credit changes in required courses. |
| A.S. Engineering Science <br> (Health Sciences and STEM Academy) | N/A | N/A | - The changes are necessary based on approved changes in credits for MAT 1400, MAT 1500, MAT 1600, MAT 2100, and CS 1200 from 4 credits to 3 credits. <br> - Restructured degree presentation for transparency in Math course sequencing and Physical Science course requirements. <br> - In review of degree and restructure of course options minimum credits for degree completion changed from a range of 66-70 to 61 - 70. |
| A.S. Physics <br> (Health Sciences and STEM Academy) | N/A | N/A | - The changes are necessary based on approved changes in credits for MAT 1400, MAT 1500, MAT 1600, and MAT 2100 from 4 credits to 3 credits. <br> - Restructured degree presentation for transparency in Math course sequencing and Physical Science course requirements. <br> - Adjusted elective credits to accommodate the noted credit changes in required courses. |
| A.S. Science for Forensics <br> (Health Sciences and STEM Academy) | N/A | N/A | - The changes are necessary based on approved changes in credits for MAT 1400, MAT 1500, and MAT 1600 from 4 credits to 3 credits. <br> - Restructured degree presentation for transparency in Math course sequencing and Physical Science course requirements. <br> - Adjusted elective credits to accommodate the noted credit changes in required courses. |

## A.S. Accounting

## HEGIS CODE: 5002.00

PROGRAM CODE: 01045
Change: Degree Requirements
Effective: FALL 2020

CUNY CORE

CREDITS

REQUIRED CORE: (4 Courses, 12 Credits) 12
When Required Core courses are specified for a category, they are strongly suggested and/or required for the major.
ENG 1200
ENG 2400
Mathematical and Quantitative Reasoning
Life and Physical Sciences*
FLEXIBLE CORE (6 Courses, 18 Credits)
When Flexible Core courses are specified for a category, they are strongly suggested and/or required for the major. One (1) course from each Group A to E and one (1) additional course from any group. No more than two courses can be selected from the same discipline.
A. World Cultures and Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society

ECO 1200-Macroeconomics *
ECO 1300-Microeconomics *
E. Scientific World

DEPARTMENT REQUIREMENTS (9 to 11 Courses, 29 to 36 Credits)
ACC 1100 - Fundamentals of Accounting I
ACC 1200 - Fundamentals of Accounting II 4
ACC 2100 - Intermediate Accounting I 3
ACC 2200 - Intermediate Accounting II 3
BA 1100 - Fundamentals of Business 3
BA 1200 - Business Law I
3
BA 6000 - Introduction to Computer Concepts 3
ECO 1200 - Macroeconomics
ECO 1300 - Microeconomics

## AND

IF ECO 1200 or ECO 1300 is taken to satisfy Pathways Flexible Core, THEN choose one (1) of the following courses. IF BOTH ECO 1200 and ECO 1300 are taken to satisfy Pathways Flexible Core, then choose two (2) of the following courses:

BA 1300 - Business Law II or 3
BA 6100 - Spreadsheet Applications in Business or 3
ECO 1400 - Money and Banking or 3
ECO 2200 - Principles of Financial Management or 3
ACC 3100 - Cost Accounting** or 4
ACC 6000 - Microcomputer Accounting Applications 3
ELECTIVES:
1 credit sufficient to meet required total of 60

NOTE: **This is a 4-credit course. For Financial Aid, TAP will count 3 credits towards your degree requirements. Additional credit(s) will go towards electives, if available. Consultation with a program advisor to address financial aid and academic planning is highly recommended.
*It is HIGHLY RECOMMENDED that students take both ECO 1200 and ECO 1300 to satisfy the Pathways Flexible Core courses. However, if neither course is used within the Pathways Flexible Core, both must be taken within the major and no optional courses will be required.

## A.S. Business Administration

HEGIS CODE: 5002.00
PROGRAM CODE: 01050
Change: Degree Requirements
Effective: FALL 2020

## CUNY CORE

CREDITS

When Required Core courses are specified for a category, they are strongly suggested and/or required for the major.
ENG 1200
ENG 2400
Mathematical and Quantitative Reasoning
MAT 2200 - Business Statistics**
Life and Physical Sciences*
FLEXIBLE CORE (6 Courses, 18 Credits)
When Flexible Core courses are specified for a category, they are strongly suggested and/or required for the major. One (1) course from each Group A to $E$ and one (1) additional course from any group. No more than two courses can be selected from the same discipline.
A. World Cultures and Global Issues

It is recommended that students planning to transfer to Brooklyn College's BBA program take PHI 6800
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society

ECO 1200-Macroeconomics *
ECO 1300-Microeconomics *
E. Scientific World

DEPARTMENT REQUIREMENTS (9 to 11 Courses, 29 to 35 Credits) 29-35
ACC 1100 - Fundamentals of Accounting I 4
ACC 1200 - Fundamentals of Accounting II 4
BA 1100 - Fundamentals of Business 3
BA 1200 - Business Law I 3
BA 1400 - Principles of Marketing 3
BA 3100 - Organizational Behavior and Management 3
BA 6000 - Introduction to Computer Concepts 3
ECO 1200 - Macroeconomics 3
ECO 1300 - Microeconomics 3

## AND

IF ECO 1200 or ECO 1300 is taken to satisfy Pathways Flexible Core, THEN choose one (1) of the following courses. IF BOTH ECO 1200 and ECO 1300 are taken to satisfy Pathways Flexible Core, then choose two (2) of the following courses:

BA 1300 - Business Law II or
3
BA 6100 - Spreadsheet Applications in Business or 3
ECO 1400 - Money and Banking or
3
ECO 2200 - Principles of Financial Management
3
ELECTIVES:
1 credit sufficient to meet required total of 60

## NOTE:

**This is a 4 -credit course. For Financial Aid, TAP will count 3 credits towards your degree requirements. Additional credit(s) will go towards electives, if available. Consultation with a program advisor to address financial aid and academic planning is highly recommended.
*It is HIGHLY RECOMMENDED that students take both ECO 1200 and ECO 1300 to satisfy the Pathways Flexible Core courses. However, if neither course is used within the Pathways Flexible Core, both must be taken within the major and no optional courses will be required.

## A.A.S. Tourism and Hospitality

HEGIS: 5011.10
PROGRAM CODE: 81183
Sunset: FALL 2022
Change: Requirements for the degree and Deletion of Sports Management Concentration
Effective: FALL 2020

## CUNY CORE <br> CREDITS

When Required Core Courses are specified for a category, they are required for the major
ENG 1200 - Composition I
3
ENG 2400 - Composition II 3
$\pm$ Mathematical \& Quantitative Reasoning 3
$\pm$ Life and Physical Sciences 3
FLEXIBLE CORE: (3 Courses, 9 Credits) 9
When Flexible Core Courses are specified for a category, they are strongly suggested and/or required for the major
Select one (1) course from three (3) Groups A to E for a total of nine (9) credits. Each course must be in a different discipline.
A. World Cultures \& Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society
$\pm$ E. Scientific World
DEGREE REQUIREMENTS (9 Courses, 27 Credits) 27
TAH 100 - Introduction to Tourism and Hospitality
TAH 500 - Labor Relations and Customer Service3

TAH 1200 - Tourism and Hospitality Entrepreneurship 3
TAH 1900 - The Business of Tourism and Hospitality 3
TAH 3000 - Financial Decision Making 3
TAH 9000 - The Virtual Enterprise 3
TAH 9250 - Field Experience in Tourism and Hospitality 3
TAH 2500 - Tourism \& Hospitality Marketing 3
BA 6000 - Introduction to Computer Concepts 3
CONCENTRATIONS: (4 Courses, 12 Credits)
Select one (1) of the following concentrations:
Tourism: (4 Courses, 12 Credits) 12
TAH 1700 - Tourism Technology 3
TAH 200 - Destination Geography 3
TAH 1500 - Cruises and Specialty Travel Markets 3
TAH 6500 - Airport and Aviation Security and Management 3
Hotel Management: (4 Courses, 12 Credits) 12
TAH 2200 - Front Office Operations 3
TAH 4100 - Meeting and Convention Management 3
TAH 5200 - Hotel Property Management Systems 3
TAH 5500 - Housekeeping Management 3

Food \& Beverage Management: (4 Courses, 12 Credits) 12
CA 990 - Culinary Concepts 3
TAH 7100 - Introduction to Professional Food Service 3
CA 5000 - Food and Beverage Cost Control 3
CA 6000 - Beverage Management 3
ELECTIVES: 0 credits sufficient to meet required total of 60 . 0
TOTAL CREDITS: 60 60

## A.S. Media Arts

HEGIS: 5008.00
PROGRAM CODE: 81224
Change: Degree Requirements
Effective: FALL 2020
CUNY CORE

REQUIRED CORE: (4 Courses, 12 Credits)
When Required Core courses are specified for a category, they are strongly suggested and/or required for the major ENG 1200 Composition I ..... 3
ENG 2400 Composition II ..... 3
$\pm$ Mathematical \& Quantitative Reasoning ..... 3
$\pm$ Life and Physical Sciences ..... 3
FLEXIBLE CORE: (6 Courses, 18 Credits) ..... 18

When Flexible Core courses are specified for a category, they are strongly suggested and/or required for the major. One (1) course from each Group A to E and one (1) additional course from any group. No more than two courses can be selected from the same discipline.
A. World Cultures \& Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society

MCM 3000 - Mass Media
$\pm$ E. Scientific World
$\pm$ Plus another course selected from any Group A - E
DEGREE REQUIREMENTS (8 to 10 Courses, 24 to 30 Credits) 24 - $\mathbf{3 0}$
MCB 3900 - Radio Studio Operations 3
MCM 3000 - Mass Media 3
MCB 4100 - Introduction to Television Production 3
MCB 4600 - Media Technology 3
MCB 4900 - Digital Audio/Visual Production and Editing 3
MCB 5000 - Writing for the Electronic Media 3
Select from the following program electives: (6 to 12 credits)
MCB 3600 - Announcing - Radio and Television
MCB 4000 - Introduction to Pro Tools 3
MCB 4800 - Advanced Video Production
MCB 5100 - Digital Video/Audio Production and Editing II 3
MCB 5200 - Video Editing with Media Composer 2
MCB 81XX - Independent Study 1-3
MCB 82XX - Topical/Pilot Course 1-3
MCB 92XX - Internship 3
MCF 4000 - Film: The Creative Medium 3
MCF 4300 - Film Genre 3
MCF 4400 - Film and Society 3
THA 4700 - Stage Management 3
THA 5500 - Introduction to Technical Theatre 3
THA 5600 - Fundamentals of Theatrical Lighting 3
THA 6000 - Introduction to Costume and Make-Up 3
THA 6300 - Basic Sound Technology 3
JRL 3100 - Basic Journalism 3

## A.S. Mental Health and Human Services

HEGIS: 5216.00
PROGRAM CODE: 78382
Change: Requirements for degree and Deletion of Concentrations
Sunset: FALL 2025
Effective: FALL 2020
CREDITS
REQUIRED CORE: (4 Courses, 12 Credits) ..... 12
When Required Core courses are specified for a category, they are strongly suggested and/or required for the major ENG 1200 Composition I ..... 3ENG 2400 Composition II$\pm$ Mathematical \& Quantitative Reasoning3
$\pm$ Life and Physical Sciences ..... 33
FLEXIBLE CORE: (6 Courses, 18 Credits) ..... 18
When Flexible Core courses are specified for a category, they are strongly suggested and/or required for the major One coursefrom each Group A to E. and one (1) additional course from any group
A. World Cultures and Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society
PSY3200 - Human Growth and Development or
PSY3600 - Abnormal Psychology
$\pm$ E. Scientific World
PSY 1100 - General Psychology
$\pm$ Plus another course selected from any Group A - E
DEGREE REQUIREMENTS: (10 Courses, 30 Credits) ..... 30
MH 1100 - Introduction to Human Services ..... 3
MH 3000 - Human Services Organizations ..... 3
MH 3500 - Introduction to Gerontology ..... 3
MH3100 - Principals of Interviewing and Group Leadership OR ..... 3
MH 3700 - Introduction to Domestic Violence*
MH 3400 - Mental Health Practices with Vulnerable Populations OR ..... 3
MH 3800 - Assessment and Intervention with Domestic Violence Survivors*
MH 9801 - Supervised Instructional Experience in Mental Health I ..... 3
MH 9802 - Supervised Instructional Experience in Mental Health II ..... 3
PSY 1100 - General Psychology ..... 3
PSY 3200 - Human Growth and Development ..... 3
PSY 3600 - Abnormal Psychology ..... 3

ELECTIVES: $0-6$ credits sufficient to total 60 credits for the degree. If additional elective credits are available, consultation with an advisor is highly recommended. SOC 3100 - Introduction to Sociology is recommended if not taken to fulfill Pathways Flexible Core: Individual and Society (Group D)

## TOTAL CREDITS: 60

*NOTE: Students who complete MH 3700 and MH 3800 will be enrolled at internships (MH9801 AND MH 9802) that focus on Domestic Violence

## A.S. Biology

HEGIS: 5604.00
PROGRAM CODE: 01039
Change: Degree Requirements
Effective: FALL 2020

## CUNY CORE

REQUIRED CORE: (4 Courses, 13 Credits)
When Required Core Courses are specified for a category, they are required for the major
ENG 1200 - English Composition I
ENG 2400 - English Composition II
Mathematical \& Quantitative Reasoning*^:
MAT 900 - College Algebra
Life and Physical Sciences*:
BIO 1300 - General Biology I

FLEXIBLE CORE: (6 Courses, 19 Credits)
When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D (Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.
A. World Cultures and Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society
E. Scientific World*:

BIO 1400 - General Biology II
MAT 1400 - Analytic Geometry and Pre-Calculus Math 3
DEPARTMENT REQUIREMENTS (3 Courses, 11 to 12 Credits)
CHM 1100 - General Chemistry I
CHM 1200-General Chemistry II
CP 1100 - Introduction to Computers and Computer Applications (4 crs) or BIO/CIS 6000 - Computer Applications in Bioinformatics (3 crs.)

CONCENTRATIONS: (2 Courses, 8 Credits)
Select one (1) of the following concentrations:
Biology Transfer: (2 Courses, 8 Credits)
Select two (2) of the following Biology Laboratory courses:
BIO 2100 - Comparative Anatomy ( 4 crs.) or
BIO 2200 - Developmental Biology ( 4 crs.) or
BIO 5000 - General Microbiology (4 crs.) or
BIO 5200 - Marine Biology (4 crs.) or
BIO 5300 - Ecology (4 crs.) or
BIO 5800 - Recombination DNA Technology ( 4 crs.) or
BIO 5900 - Genetics (4 crs.) or
BIO 6500 - Molecular and Cellular Biology (4 crs.)
OR
Allied Health Transfer (2 Courses, 8 Credits):

BIO 1100 - Human Anatomy and Physiology I (4 crs.)
BIO 1200 - Human Anatomy and Physiology II (4 crs.)

ELECTIVES: 8-9 credits sufficient to meet the required total 60 credits for the degree.

Allied Health Transfer Option, Suggested Elective:
BIO/MAT 9100 - Biostatistics (4 crs.)

Transfer to a Physician Assistant Program, Suggested Elective:
BIO 5100 - Microbiology in Health and Disease ( 4 crs .)

TOTAL CREDITS: 60
A.A.S. Computer Information Systems
HEGIS CODE: 5101.00
PROGRAM CODE: 01055
Change: Degree Requirements
Effective: FALL 2020
CUNY CORE
CREDITS
REQUIRED CORE: (4 Courses, 12-13 Credits) ..... 12-13
When Required Core courses are specified for a category, they are strongly suggested and/or required for the major.
ENG 1200 - English Composition I ..... 3
ENG 2400 - English Composition II ..... 3
Mathematical and Quantitative Reasoning:
MAT 1400 - Analytic Geometry and Pre-Calculus* or ..... 3
MAT/BA 2200 - Business Statistics* ..... 4
Life and Physical Sciences ..... 3
FLEXIBLE CORE: (3 Courses, 9 Credits) ..... 9
When Flexible Core Courses are specified for a category, they are strongly suggested and/or required for the major
Select one (1) course from three (3) Groups A to E for a total of nine (9) credits. Each Course Must be in a Different Discipline
A. World Cultures \& Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society
E. Scientific World*:
MAT 900 - College Algebra ..... 3
DEGREE REQUIREMENTS: (11 Courses, 37 to 38 Credits) ..... 37-38
CP 500 - Introduction to Computer Programming ..... 4
CP 2100 - C++ Programming I ..... 4
CP 2200 - C++ Programming II ..... 4
CS 1200 - Introduction to Operating Systems ..... 3
CIS 1500 - Applied Computer Architecture ..... 3
CIS 3100 - Introduction to Database ..... 3
ACC 1100 - Fundamentals of Accounting I or ..... 3-4BA 1100 - Fundamentals of Business or
BA 1200 - Business Law I
HE 1400 - Critical Issues in Personal Health1
AND
Select three (3) courses from the following
CP 6200 - JAVA Programming 2 ..... 4
CIS 2100 - Introduction to Webpage Development ..... 4
CIS 2200 - HTML Authoring and JavaScript ..... 4
CIS 3200 - Advanced Database Programming ..... 4
CIS 4500 - Network Server Administration ..... 4
ELECTIVES: 0 -2 credits sufficient to total 60 credits for the degree. ..... 0-2

## A.S. Computer Science

## HEGIS CODE: 5103.00

PROGRAM CODE: 01041
Change: Degree Requirements
Effective: FALL 2020
CUNY CORE ..... CREDITS
REQUIRED CORE: (4 Courses, 12 Credits) ..... 12
When Required Core Courses are specified for a category, they are required for the major
ENG 1200 - English Composition I ..... 3
ENG 2400 - English Composition II ..... 3
Mathematical and Quantitative Reasoning*^:
MAT 900-College Algebra^ or ..... 3
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or ..... 3
MAT 1500 - Calculus I ..... 3
Life and Physical Sciences ..... 3
FLEXIBLE CORE: (6 Courses, 18 Credits) ..... 18When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D(Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.
A. World Cultures and Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society
E. Scientific World*^:
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or ..... 3
MAT 1500 - Calculus I or ..... 3
MAT 1600 - Calculus II ..... 3
AND
CS 1200 - Introduction to Computing ..... 3
Major Requirements (7-9 Courses, 24-30 Credits) ..... 24-30
CS 13A0 - Advanced Programming Techniques ..... 4
CS 1400 - Computer Organization and Assembly Language Programming ..... 4
CS 3500 - Discrete Structures ..... 3
CS 3700 - Data Structures ..... 3
MAT 5600 - Linear Algebra ..... 3
MAT 9100/BIO 9100 - Biostatistics or ..... 4
MAT 2200/BA 2200 - Business Statistics
If not taken for Required Core or Flexible Core:
MAT 1500 - Calculus I3
MAT 1600 - Calculus II ..... 3
Select ONLY ONE (1) of the two options below based on initial Mathematics Placement:** ..... 3
OPTION 1:
If student's initial Mathematics Placement is below MAT 1500:
MAT 1000 - College Trigonometry^3

OPTION 2:
If student's initial Mathematics Placement is MAT 1500:
MAT 2100 - Calculus III
ELECTIVES: $0-6$ credits sufficient to total 60 credits for the degree. 0-6
TOTAL CREDITS: $60 \quad 60$
*This program has a waiver to require particular courses in the Common Core, otherwise more than the minimum credits for the degree may be necessary.
^ Depending on Math placement, students may be required to complete MAT 900 and/or MAT 1400 and MAT 1000.
**Consultation with the Mathematics Department is HIGHLY recommended to ensure that the student selects the correct option.

## A.S. Mathematics

HEGIS CODE: 5617.00
PROGRAM CODE: 01041
Change: Degree Requirements
Effective: FALL 2020
CUNY CORE CREDITS
REQUIRED CORE: (4 Courses, 12 Credits) ..... 12
When Required Core Courses are specified for a category, they are required for the major ENG 1200 - English Composition I ..... 3
ENG 2400 - English Composition II ..... 3
Mathematical and Quantitative Reasoning^^:
MAT 900 - College Algebra^ or ..... 3
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or ..... 3
MAT 1500 - Calculus I ..... 3
Life and Physical Sciences ..... 3
FLEXIBLE CORE: (6 Courses, 18 Credits)18When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D(Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.
A. World Cultures and Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society
E. Scientific World ${ }^{\star \wedge}$ :
E. Scientific World ${ }^{\star \wedge}$ :

MAT 1400-Analytic Geometry and Pre-Calculus Mathematics^ or3
MAT 1500 - Calculus I or ..... 3
MAT 1600 - Calculus II ..... 3
AND
CS 1200 - Introduction to Computing ..... 3
Major Requirements: (8-10 Courses, 24-30 Credits) ..... 24-30
MAT 2100 - Calculus III ..... 3
MAT 5500 - Differential Equations ..... 3
MAT 5600 - Linear Algebra ..... 3
MAT 9100/BIO 9100 - Biostatistics or ..... 4
MAT 2200/BA 2200 - Business Statistics
CS 3500 - Discrete Structures ..... 3
MAT 3000 Introduction to Mathematical Concepts in Proof ..... 1
If not taken for Required Core or Flexible Core:
MAT 1500-Calculus I3
MAT 1600 - Calculus II ..... 3
Select ONLY ONE (1) of the two options below based on initial Mathematics Placement: ** ..... 7-8
OPTION 1:
If student's initial Mathematics Placement is below MAT 1500:
MAT 1000 - College Trigonometry^ ..... 3
AND
MAT 1100 - Finite Mathematics ..... 4
MAT 3200 - Introduction to Set Theory ..... 4
MAT 7100 - Applications of Linear Algebra
OPTION 2:
If student's initial Mathematics Placement is MAT 1500:
Select two (2) courses from the following:
CS 13A0 - Advanced Programming Techniques ..... 4
MAT 1100 - Finite Mathematics ..... 4
MAT 3200 - Introduction to Set Theory ..... 4
MAT 7100 - Applications of Linear Algebra ..... 4
ELECTIVES: $0-6$ credits sufficient to total 60 credits for the degree. ..... 0-6${ }^{\wedge}$ Depending on Math placement, students may be required to complete MAT 900 and/or MAT 1400 and MAT 1000.${ }^{* *}$ Consultation with the Mathematics Department is HIGHLY recommended to ensure that the student selects the correctoption.
A.S. Chemistry
HEGIS CODE: 5619.00
PROGRAM CODE: 01043
Change: Degree Requirements
Effective: FALL 2020
CUNY CORE CREDITS
REQUIRED CORE: (4 Courses, 13 Credits) ..... 13
When Required Core Courses are specified for a category, they are required for the major
ENG 1200 - English Composition I ..... 3
ENG 2400 - English Composition II ..... 3
Mathematical and Quantitative Reasoning*:
MAT 900 - College Algebra or ..... 3
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or ..... 3
MAT 1500 - Calculus I ..... 3
Life and Physical Sciences*: ..... 4
CHM 1100 - General Chemistry I
FLEXIBLE CORE: (6 Courses, 20 Credits)20When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D(Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.A. World Cultures and Global IssuesB. U.S. Experience In Its DiversityC. Creative ExpressionD. Individual \& Society
E. Scientific World*:
PHY 1300 - Advanced General Physics I
CHM 1200 - General Chemistry II
DEPARTMENT REQUIREMENTS (7 Courses, 26-27 Credits) ..... 26-27
Additional Physical Sciences Requirements (3 Courses, 14 Credits) ..... 14
CHM 3100 - Organic Chemistry I ..... 5
CHM 3200 - Organic Chemistry II ..... 5
PHY 1400 - Advanced General Physics II ..... 4
Additional Mathematics Requirements (2 Courses, 6 Credits) ..... 6
Select Two (2) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following: MAT 1000 - College Trigonometry^ ..... 3
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended) ..... 3
MAT 1500 - Calculus I (Recommended) ..... 3
MAT 1600 - Calculus II (Recommended) ..... 3
MAT 2100 - Calculus III ..... 3
MAT 5500 - Differential Equations ..... 3
MAT 5600 - Linear Algebra ..... 3
Additional Science and Mathematics Electives (2 Courses, 6-7 Credits) ..... 6-7
Elective Credits in CHM, CS, EGR, EPS, MAT, PHY, or SCI
ELECTIVES: 0-1 credits sufficient to meet the required total 60 credits for the degree.0-1
TOTAL CREDITS: 60 ..... 60

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## A.S. Earth and Planetary Sciences

HEGIS: 5499.00
PROGRAM CODE: 34242
Change: Degree Requirements
Effective: FALL 2020
CUNY CORE ..... CREDITS
REQUIRED CORE: (4 Courses, 13 Credits) ..... 13
When Required Core Courses are specified for a category, they are required for the major
ENG 1200 - English Composition I ..... 3
ENG 2400 - English Composition II ..... 3
Mathematical \& Quantitative Reasoning*:
MAT 900 - College Algebra or ..... 3
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or ..... 3
MAT 1500 - Calculus I ..... 3
Life and Physical Sciences*: ..... 4
CHM 1100-General Chemistry I
FLEXIBLE CORE: (6 Courses, 20 Credits) ..... 20
When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D(Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.
A. World Cultures and Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society
E. Scientific World*:
EPS 3100 - Meteorology
EPS 3800 - Introduction to Earth Science
DEPARTMENT REQUIREMENTS (7 Courses, 26 Credits) ..... 26
Additional Physical Sciences Requirements (5 Courses, 20 Credits) ..... 20
EPS 3200 - Oceanography ..... 4
EPS 3300 - Physical Geography ..... 4
EPS 3500 - Astronomy ..... 4
EPS 3600 - Planetology ..... 4
PHY 1100 - General Physics I ..... 4
Additional Mathematics Requirements (2 Courses, 6 Credits) ..... 6
Select Two (2) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following: MAT 1000 - College Trigonometry^ ..... 3
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended) ..... 3
MAT 1500 - Calculus I (Recommended) ..... 3
MAT 1600 - Calculus II (Recommended) ..... 3
MAT 2100 - Calculus III ..... 3
MAT 5500 - Differential Equations ..... 3
MAT 5600 - Linear Algebra ..... 3
ELECTIVES: 1 credit sufficient to meet the required total 60 credits for the degree. ..... 1
TOTAL CREDITS: 60 ..... 60
${ }^{\wedge}$ Depending on Math placement, students may be required to select MAT 1000

## A.S. Engineering Science

HEGIS: 5609.00
PROGRAM CODE: 87212
Change: Degree Requirements
Effective: FALL 2020

REQUIRED CORE: (4 Courses, 13 Credits) 13
When Required Core Courses are specified for a category, they are required for the major
ENG 1200 - English Composition I
ENG 2400 - English Composition II
Mathematical \& Quantitative Reasoning*:
MAT 900 - College Algebra or
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or 3
MAT 1500 - Calculus I 3
Life and Physical Sciences*:
CHM 1100-General Chemistry I
FLEXIBLE CORE: (6 Courses, 20 Credits)
When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D (Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.
A. World Cultures and Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society
E. Scientific World*:

CHM 1200 - General Chemistry II
PHY 1300 - Advanced General Physics I

| DEPARTMENT REQUIREMENTS $(9-12$ Courses, $28-37$ Credits) | $28-37$ |
| :--- | :---: |
| Additional Physical Sciences Requirements ( 4 Courses, 13 Credits) | - |

PHY 1400 - Advanced General Physics II 4
EGR 2100 - Engineering Design 3
EGR 2200 - Introduction to Electrical Engineering 3
EGR 2300 - Introduction to Engineering Thermodynamics 3
Additional Mathematics Requirements (5-8 Courses, 15-24 Credits)
Select five (5) to eight (8) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:
CS 1200 - Introduction to Computing 3
MAT 1000 - College Trigonometry^
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended) 3
MAT 1500 - Calculus I (Recommended) 3
MAT 1600 - Calculus II (Recommended) 3
MAT 2100 - Calculus III
MAT 5500 - Differential Equations 3
MAT 5600 - Linear Algebra
ELECTIVES: 0 credits sufficient to meet the required total 60 credits for the degree.
TOTAL CREDITS: 61-70
${ }^{\wedge}$ Depending on Math placement, students may be required to select MAT 1000

## A.S. Physics

HEGIS: 5619.00
PROGRAM CODE: 01042
Change: Degree Requirements
Effective: FALL 2020

## CUNY CORE <br> CREDITS

REQUIRED CORE: (4 Courses, 13 Credits)
When Required Core Courses are specified for a category, they are required for the major
ENG 1200 - English Composition I
ENG 2400 - English Composition II
Mathematical and Quantitative Reasoning*:
MAT 900 - College Algebra or
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or 3
MAT 1500 - Calculus I
Life and Physical Sciences*:
CHM 1100-General Chemistry I
FLEXIBLE CORE: (6 Courses, 20 Credits)
When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D (Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.
A. World Cultures and Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society
E. Scientific World*:

CHM 1200 - General Chemistry II PHY 1300 - Advanced General Physics I

DEPARTMENT REQUIREMENTS (8 Courses, 26 to 27 Credits) 26-27
Additional Physical Sciences Requirements (4 Courses, 14 Credits) 14
PHY 1400 - Advanced General Physics II 4
EGR 2200 - Introduction to Electrical Engineering or 3
EGR 2300 - Introduction to Engineering Thermodynamics 3
Select one (1) from the following:
EPS 3100 - Meteorology
EPS 3200 - Oceanography
EPS 3300 - Physical Geology
EPS 3500 - Introduction to Astronomy
EPS 3600 - Planetology: A Trip Through the Solar System
EPS 3800 - Introduction to Earth Science
Additional Mathematics Requirements (2 Courses, 6 Credits)
Select Two (2) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:
MAT 1000 - College Trigonometry^
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended) 3
MAT 1500 - Calculus I (Recommended) 3
MAT 1600 - Calculus II (Recommended) 3
MAT 2100 - Calculus III 3
MAT 5500 - Differential Equations 3
MAT 5600 - Linear Algebra 3

Elective Credits in CHM, CS, EGR, EPS, MAT, PHY, or SCI
ELECTIVES: 0-1 credits sufficient to meet the required total 60 credits for the degree. $0-1$
TOTAL CREDITS: $60 \quad 60$
${ }^{\wedge}$ Depending on Math placement, students may be required to select MAT 1000

## A.S. Science for Forensics

HEGIS: 5619.00
PROGRAM CODE: 34472
Change: Degree Requirements
Effective: FALL 2020

REQUIRED CORE: (4 Courses, 13 Credits)

## CREDITS

When Required Core Courses are specified for a category, they are required for the major
ENG 1200 - English Composition I
ENG 2400 - English Composition II
Mathematical \& Quantitative Reasoning*:
MAT 900 - College Algebra or
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or ..... 3
MAT 1500 - Calculus I ..... 3
Life and Physical Sciences*: ..... 4
BIO 1300-General Biology I

## FLEXIBLE CORE: (6 Courses, 20 Credits)

When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D (Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.
A. World Cultures and Global Issues
B. U.S. Experience In Its Diversity
C. Creative Expression
D. Individual \& Society
E. Scientific World*:

BIO 1400 - General Biology II
CHM 1100 - General Chemistry I
DEPARTMENT REQUIREMENTS ( 6 Courses, 25 Credits)
A cumulative grade point average of 2.50 or above, which includes BIO 1300,BIO 1400, and CHM 1100 as well as the following Physical Science Courses, is required:
Additional Physical Sciences Requirements (5 Courses, 22 Credits)
CHM 1200 - General Chemistry II
CHM 3100 - Organic Chemistry I 5
CHM 3200 - Organic Chemistry II
PHY 1300 - Advanced General Physics I
PHY 1400 - Advanced General Physics II
Additional Mathematics Requirement ( 1 Course, 3 Credits)
Select one (1) additional course beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:
MAT 1000 - College Trigonometry^
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)
MAT 1500 - Calculus I (Recommended)
MAT 1600 - Calculus II (Recommended)
ELECTIVES: 2 credits sufficient to meet the required total 60 credits for the degree.
Completion of MAT 1600 - Calculus II is highly recommended

## TOTAL CREDITS: 60

${ }^{\wedge}$ Depending on Math placement, students may be required to select MAT 1000

## Changes to Existing Courses:

## Changes is Pre-, Co-, and Pre-/Co- requisites:

| Department | Courses |
| :--- | :---: |
| Business | BF 3500 |
| Health, Physical Education, and Recreation | RPE 3200, RPE 9153 |
|  |  |
|  | $\begin{array}{c}\text { CIS 1200, CIS 2100, CIS 3100, CP 300, CP 500, CP 1000, CP 1100, CP 2100, CP 6200, }\end{array}$ |
| Math and Computer Science | CS 3500, R3000, MAT 500, MAT 900, MAT 1300, MAT 1400, MAT 1500, MAT 19A0, MAT |
| 2000, MAT/BA 2200 |  |$]$

## Changes in Credits:

| Department | Courses |
| :---: | :---: |
| Math and Computer Science | CS 1200, CS 3500, CS 3700, MAT 1400, MAT 1500, MAT 1600, MAT 2100 |

Changes in Course Title and/or Descriptions:

| Department | Courses |
| :--- | :---: |
| Art | ART 5500, ART 5600, ART 7400, |
|  | HPE 1500, RPE 1100, RPE 1200, RPE 1300, RPE 1400, RPE 3100, RPE 3200, RPE |
|  | 3500, RPE 3600, RPE 4000, RPE 4600, RPE 7000, RPE 9152, PEC 200, PEC 400, PEC |
| Health, Physical Education, and Recreation | 1200, PEC 1500, PEC 1900 |
| Math and Computer Science | MAT 4A0, MAT 500 |

## New Courses:

| Department | Courses |
| :--- | :---: |
| Art | ART 2600 |
| Behavioral Sciences | PSY 4100 |
| Business | ECO 2200 |
| Communications and Performing Arts | MCB 5200 |
| English | ENG 12A0, ENG 6000 |
| Health, Physical Education, and Recreation | COH 1700 |
| Math and Computer Science | MAT 3000 |
|  | PSQ 1001, PSQ 1002, PSQ 1003, PSQ 1004 |
|  | These courses will be helpful for students not yet at the MAT pre/Co-requisites for PHY <br> 1100, PHY 1300, PHY 1400, and EGR 22 for the Physical Sciences Degrees |

## Important Change for English Placement

The following course REPLACES the previous ALP structure of ENG 1200 + ENG 1220 (ALP)

## ENG 12AO - Composition I ALP

Prerequisite: This course is open to the ALP Student Group. Eligibility is determined as follows: (1) Score of 50-55 on the CATW AND a Passing score on the CUNY Assessment Test in Reading, or (2) Passing grade in ENG 93A0, or (3) Starting Spring 2020: Placement determined by CUNY Proficiency Index guidelines


| Effective: FALL 2020 |
| :--- |

## New Pathways Courses

## Group C: Creative Expression

THA 5200, Acting I: Fundamentals of Acting


[^0]:    ^ Depending on Math placement, students may be required to select MAT 1000

