KINGSBOROUGH COMMUNITY COLLEGE			
Special Meeting of Curriculum Committee @ Chairs Meeting			
Wednesday, February 23, 2022			
10:00 AM			
Zoom Meeting			
MINUTES			
Members Attending:			
Carlos Arguelles (LIB)		Donald Hume (HPER)	
Anthony Borgese (TAH)		Jeffrey Lax (BUS)	
Scott Cally (COM)		John Mikalopas (PHY)	
Mary Dawson (BIO & Chair)		Stuart Parker (BEH)	
Thomas Eaton (ART)		Joanne Russell (Provost)	
Eileen Ferretti (ENG)		Jacob Segal (HIS)	
Richard Fruscione (AHMHHS)		Bridget Weeks (NUR)	
Alfonso Garcia-Osuna (WLC)		Rina Yarmish (MAT)	
Members Absent:		**Guests:**	
NONE		Amanda Kalin (Secretary of the Committee)	
		Sharon Warren Cook (Associate Provost & Chief Student Affairs Officer)	
Meeting was called to order by Chairperson Dawson at 10:33am. She welcomed all to the meeting and addressed that this Special Meeting of the Curriculum Committee was required to meet the CUNY mandate for removal of all standalone developmental courses effective Fall 2022. Chairperson Yarmish thanked Secretary Kalin for her quick work to construct the materials for the meeting. Chairperson Yarmish presented the two new courses, MAT 9010 and MAT 2010, that were created to meet the CUNY mandate.			
The following curriculum items were **APPROVED** unanimously. Note: Some items were voted out of order or grouped for voting purposes, due to their relation to new courses, degree requirements, and common changes.			
SPECIAL ACTIONS			
Department of Health, Physical Education and Recreation			
Change Pending Approval by Accrediting Body			
1. A.A.S. Polysomnographic Technology			
HEGIS: 5299.00			
Program Code: 36624			
Change in Admission Criteria for A.A.S. Polysomnographic Technology			
FROM:		**TO:**	
1. English and Math proficient as determined by the CUNY Proficiency Index, unless otherwise exempt, or have successfully completed any required developmental course(s).		1. English and Math proficient as determined by the CUNY Proficiency Index, unless otherwise exempt, or have successfully completed any required developmental course(s).	

2. Students must complete BIO 1100*, MAT 9B0 or MAT 900*, ENG 1200, and PSG 100 with a minimum grade of "C".		2. Students must complete BIO 1100*, **MAT 9010* or** MAT 9B0* or MAT 900*, ENG 1200, and PSG 100 with a minimum grade of "C".	
3. Formal interview with the Program Director		3. Formal interview with the Program Director	
*It is HIGHLY recommended that students complete BIO 1100 and MAT 900 or MAT 9B0 during the 12-week semester.		*It is HIGHLY recommended that students complete BIO 1100 and MAT 900 or **MAT 9010 or** MAT 9B0 during the 12-week semester.	
Change Pending Approval by Accrediting Body			
2. A.A.S. Physical Therapist Assistant			
HEGIS: 5219.00			
Program Code: 88328			
Change in Admission Criteria for A.A.S. Physical Therapist Assistant			
FROM:		TO:	
Minimum overall grade point average of 2.80. Successful completion of the following prerequisite courses: ENG 1200, PSY 1100, MAT 2000, and BIO 1100 for consideration for the program. Courses from other colleges to be applied toward program requirements must have grades submitted for them.		Minimum overall grade point average of 2.80. Successful completion of the following prerequisite courses: ENG 1200, PSY 1100, MAT 2000 **or MAT 2010**, and BIO 1100 for consideration for the program. Courses from other colleges to be applied toward program requirements must have grades submitted for them.	
In addition to completing the prerequisite courses, students must complete a minimum of 25 hours of exposure to physical therapy services, provide a letter of recommendation from a physical therapist working in the exposure facility, and submit a writing sample on an assigned topic.		In addition to completing the prerequisite courses, students must complete a minimum of 25 hours of exposure to physical therapy services, provide a letter of recommendation from a physical therapist working in the exposure facility, and submit a writing sample on an assigned topic.	
Top candidates are interviewed by a panel of faculty and complete the Health Occupations Aptitude Examination (HOAE).		Top candidates are interviewed by a panel of faculty and complete the Health Occupations Aptitude Examination (HOAE).	
		Students who have been administratively dismissed from a Physical Therapist Assistant program at a previous school are not eligible for admission to the Physical Therapist Assistant program.	
The admissions process is a competitive process and not all applicants are granted admission to the program. Students interested in the program should contact the Director of the PTA Program, S-128.		The admissions process is a competitive process and not all applicants are granted admission to the program. Students interested in the program should contact the Director of the PTA Program, S-128.	
CHANGE IN DEGREE REQUIREMENT			
Department of Allied Health, Mental Health and Human Services			
Change Pending Approval by Accrediting Body			
1. A.A.S. Polysomnographic Technology			
HEGIS: 5299.00			
Program Code: 36624			
Change: Degree Requirements			

FROM:		TO:	
CUNY CORE	**CREDITS**	**CUNY CORE**	**CREDITS**
REQUIRED CORE: (4 Courses, 13 Credits)	**13**	**REQUIRED CORE:** (4 Courses, 13 Credits)	**13**
When Required Core courses are specified for a category, they are required for the major.		When Required Core courses are specified for a category, they are required for the major.	
ENG 1200 - Composition I	3	ENG 1200 - Composition I	3
ENG 2400 - Composition II	3	ENG 2400 - Composition II	3
Mathematical and Quantitative Reasoning:	3	Mathematical and Quantitative Reasoning:	3
MAT 2000 - Elements of Statistics		MAT 2000 - Elements of Statistics **or**	
		MAT 2010 - Integrated Statistics	
Life and Physical Sciences:	4	Life and Physical Sciences:	4
BIO 1100 - Human Anatomy and Physiology I		BIO 1100 - Human Anatomy and Physiology I	
FLEXIBLE CORE: (4 Courses, 13 Credits)	**13**	**FLEXIBLE CORE:** (4 Courses, 13 Credits)	**13**
When Flexible Core Courses are specified for a category, they are required for the major. Group D and E are satisfied by the courses shown:		When Flexible Core Courses are specified for a category, they are required for the major. Group D and E are satisfied by the courses shown:	
A. World Cultures and Global Issues		A. World Cultures and Global Issues	
B. U.S. Experience In Its Diversity		B. U.S. Experience In Its Diversity	
C. Creative Expression		C. Creative Expression	
D. Individual & Society		D. Individual & Society	
PHI 7600 - Ethics and Morality in the Health Professions	3	PHI 7600 - Ethics and Morality in the Health Professions	3
E. Scientific World		E. Scientific World	
BIO 1200 - Human Anatomy and Physiology II	4	BIO 1200 - Human Anatomy and Physiology II	4
PSY 1100 - General Psychology	3	PSY 1100 - General Psychology	3
		MAT 9010 - Introduction to Mathematics with College Algebra or	3
MAT 9B0 - College Algebra for STEM Majors or		MAT 9B0 - College Algebra for STEM Majors or	
MAT 900 - College Algebra		MAT 900 - College Algebra	
DEPARTMENT REQUIREMENTS: (9 Courses, 34 Credits):	**34**	**DEPARTMENT REQUIREMENTS:** (9 Courses, 34 Credits):	**34**
PSG 100 - The Science of Sleep and Circadian Rhythms	3	PSG 100 - The Science of Sleep and Circadian Rhythms	3
PSG 101 - Neuroscience and Pharmacology in Sleep	4	PSG 101 - Neuroscience and Pharmacology in Sleep	4

Course	Credits	Course	Credits
PSG 102 - Foundations Of Polysomnography I	3	PSG 102 - Foundations Of Polysomnography I	3
PSG 103 - Clinical Practicum in Sleep Medicine I	6	PSG 103 - Clinical Practicum in Sleep Medicine I	6
PSG 104 - Foundations of Polysomnography II	3	PSG 104 - Foundations of Polysomnography II	3
PSG 105 - Clinical Polysomnographic Scoring	3	PSG 105 - Clinical Polysomnographic Scoring	3
PSG 106 - Classification of Sleep Disorders	3	PSG 106 - Classification of Sleep Disorders	3
PSG 107 - Cardiopulmonary Physiology in Sleep	3	PSG 107 - Cardiopulmonary Physiology in Sleep	3
PSG 108 - Clinical Practicum in Sleep Medicine II	6	PSG 108 - Clinical Practicum in Sleep Medicine II	6
ELECTIVES:	**0**	**ELECTIVES:**	**0**
0 credits sufficient to total 60 credits for the degree.		0 credits sufficient to total 60 credits for the degree.	
TOTAL:	**60**	**TOTAL:**	**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.		*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.	
Change Pending Approval by Accrediting Body			
2. A.A.S. Physical Therapist Assistant			
HEGIS: 5219.00			
Program Code: 5219.00			
Change: Degree Requirements			
FROM:		**TO:**	
CUNY CORE	CREDITS	**CUNY CORE**	CREDITS
REQUIRED CORE: (4 Courses, 13 Credits)	**13**	**REQUIRED CORE:** (4 Courses, 13 Credits)	**13**
When Required Core courses are specified for a category, they are required for the major.		When Required Core courses are specified for a category, they are required for the major.	
ENG 1200 - Composition I	3	ENG 1200 - Composition I	3
ENG 2400 - Composition II	3	ENG 2400 - Composition II	3
Mathematical and Quantitative Reasoning*	3	Mathematical and Quantitative Reasoning*	3
		MAT 2010 - Integrated Statistics or	
MAT 2000 - Elements of Statistics		MAT 2000 - Elements of Statistics	
Life and Physical Sciences*	4	Life and Physical Sciences*	4
BIO 1100 – Human Anatomy and		BIO 1100 – Human Anatomy and	
FLEXIBLE CORE: (3 Courses, 10 Credits)	**10**	**FLEXIBLE CORE:** (3 Courses, 10 Credits)	**10**

When Flexible Core Courses are specified for a category, they are required for the major. Group C and E are satisfied by the courses shown:		When Flexible Core Courses are specified for a category, they are required for the major. Group C and E are satisfied by the courses shown:	
C. Creative Expression*		C. Creative Expression*	
SPE 2100 - Effective Public Speaking		SPE 2100 - Effective Public Speaking	
E. Scientific World*		E. Scientific World*	
PSY 1100 - General Psychology	3	PSY 1100 - General Psychology	3
BIO 1200 - Human Anatomy and Physiology II	4	BIO 1200 - Human Anatomy and Physiology II	4
DEPARTMENT REQUIREMENTS: (12 Courses, 44 Credits):	**44**	**DEPARTMENT REQUIREMENTS:** (12 Courses, 44 Credits):	**44**
PTA 100 - Foundations of Physical Therapy I	3	PTA 100 - Foundations of Physical Therapy I	3
PTA 200 - Kinesiology and Applied Anatomy	4	PTA 200 - Kinesiology and Applied Anatomy	4
PTA 300 - Foundations of Physical Therapy II	3	PTA 300 - Foundations of Physical Therapy II	3
PTA 400 - Modalities and Procedures I	5	PTA 400 - Modalities and Procedures I	5
PTA 500 - Therapeutic Exercise	5	PTA 500 - Therapeutic Exercise	5
PTA 600 - Clinical Practicum I	3	PTA 600 - Clinical Practicum I	3
PTA 700 - Modalities and Procedures II	4	PTA 700 - Modalities and Procedures II	4
PTA 800 - Selected Topics in Physical Therapy	5	PTA 800 - Selected Topics in Physical Therapy	5
PTA 900 - Clinical Practicum II	3	PTA 900 - Clinical Practicum II	3
PTA 1000 - Introduction to Physical Therapy	3	PTA 1000 - Introduction to Physical Therapy	3
PTA 2000 - Pathology	3	PTA 2000 - Pathology	3
PTA 2500 - Interactions in the Clinic	3	PTA 2500 - Interactions in the Clinic	3
ELECTIVES:	**1**	**ELECTIVES:**	**1**
1 credit sufficient to total 68 credits for the degree.		1 credit sufficient to total 68 credits for the degree.	
TOTAL:	68	**TOTAL:**	68
*This program has a waiver to require particular courses in the Common Core, otherwise more than the minimum credits for the degree may be		*This program has a waiver to require particular courses in the Common Core, otherwise more than the minimum credits for the degree may be	
Department of Biological Sciences			
1. A.S. Biology			
HEGIS: 5604.00			
Program Code: 01039			
Change: Degree Requirements			
FROM:		**TO:**	
CUNY CORE	CREDITS	**CUNY CORE**	CREDITS
REQUIRED CORE: (4 Courses, 13 Credits)	**13**	**REQUIRED CORE:** (4 Courses, 13 Credits)	**13**
When Required Core Courses are specified for a category, they are required for the major		When Required Core Courses are specified for a category, they are required for the major	
ENG 1200 - English Composition I	3	ENG 1200 - English Composition I	3

ENG 2400 - English Composition II	3	ENG 2400 - English Composition II	3
Mathematical & Quantitative Reasoning*:	3	Mathematical & Quantitative Reasoning*:	3
		MAT 9010 - Introduction to Mathematics with College Algebra or	
MAT 9B0 - College Algebra for STEM Majors or		MAT 9B0 - College Algebra for STEM Majors or	
MAT 900 - College Algebra		MAT 900 - College Algebra	
Life and Physical Sciences*:	4	Life and Physical Sciences*:	4
BIO 1300 – General Biology I		BIO 1300 – General Biology I	
FLEXIBLE CORE: (6 Courses, 19 Credits)	**19**	**FLEXIBLE CORE:** (6 Courses, 19 Credits)	**19**
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.		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		A. World Cultures and Global Issues	
B. U.S. Experience In Its Diversity		B. U.S. Experience In Its Diversity	
C. Creative Expression		C. Creative Expression	
D. Individual & Society		D. Individual & Society	
E. Scientific World*:		E. Scientific World*:	
BIO 1400 – General Biology II		BIO 1400 – General Biology II	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics	
DEPARTMENT REQUIREMENTS: (3 Courses, 11 to 12 Credits)	**11 to 12**	**DEPARTMENT REQUIREMENTS:** (3 Courses, 11 to 12 Credits)	**11 to 12**
CHM 1100 – General Chemistry I	4	CHM 1100 – General Chemistry I	4
CHM 1200 - General Chemistry II	4	CHM 1200 - General Chemistry II	4
CP 1100 - Introduction to Computers and Computer Applications (4 crs) or	4 - 3	CP 1100 - Introduction to Computers and Computer Applications (4 crs) or	4 - 3
BIO/CIS 6000 – Computer Applications in Bioinformatics (3 crs.)		BIO/CIS 6000 – Computer Applications in Bioinformatics (3 crs.)	
CONCENTRATIONS: (2 Courses, 8 Credits)	8	**CONCENTRATIONS:** (2 Courses, 8 Credits)	8
Select **one (1)** of the following concentrations:		Select **one (1)** of the following concentrations:	
Biology Transfer: (2 Courses, 8 Credits)	**8**	**Biology Transfer:** (2 Courses, 8 Credits)	**8**
Select **two (2)** of the following Biology Laboratory courses:		Select **two (2)** of the following Biology Laboratory courses:	
BIO 2100 - Comparative Anatomy or	4	BIO 2100 - Comparative Anatomy or	4
BIO 2200 - Developmental Biology or	4	BIO 2200 - Developmental Biology or	4
BIO 5000 - General Microbiology or	4	BIO 5000 - General Microbiology or	4
BIO 5200 - Marine Biology or	4	BIO 5200 - Marine Biology or	4
BIO 5300 - Ecology or	4	BIO 5300 - Ecology or	4

BIO 5800 - Recombination DNA Technology or	4	BIO 5800 - Recombination DNA Technology or	4
BIO 5900 – Genetics or	4	BIO 5900 – Genetics or	4
BIO 6500 - Molecular and Cellular Biology	4	BIO 6500 - Molecular and Cellular Biology	4
OR		**OR**	
Allied Health Transfer: (2 Courses, 8 Credits):	**8**	**Allied Health Transfer:** (2 Courses, 8 Credits):	**8**
BIO 1100 - Human Anatomy and Physiology I	4	BIO 1100 - Human Anatomy and Physiology I	4
BIO 1200 - Human Anatomy and Physiology II	4	BIO 1200 - Human Anatomy and Physiology II	4
ELECTIVES: 8 - 9 credits sufficient to meet the required total 60 credits for the degree.	**8 - 9**	**ELECTIVES:** 8 - 9 credits sufficient to meet the required total 60 credits for the degree.	**8 - 9**
Allied Health Transfer Option, Suggested Elective:		Allied Health Transfer Option, Suggested Elective:	
BIO/MAT 9100 – Biostatistics (4 crs.)		BIO/MAT 9100 – Biostatistics (4 crs.)	
Transfer to a Physician Assistant Program, Suggested Elective:		Transfer to a Physician Assistant Program, Suggested Elective:	
BIO 5100 – Microbiology in Health and Disease (4 crs.)		BIO 5100 – Microbiology in Health and Disease (4 crs.)	
TOTAL CREDITS: 60	**60**	**TOTAL CREDITS: 60**	**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.		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.	
2. A.S. Biotechnology			
HEGIS: 5407.00			
Program Code: 5407.00			
Change: Degree Requirements			
FROM:		**TO:**	
CUNY CORE	**CREDITS**	**CUNY CORE**	**CREDITS**
REQUIRED CORE: (4 Courses, 13 Credits)	**13**	**REQUIRED CORE:** (4 Courses, 13 Credits)	**13**
When Required Core Courses are specified for a category, they are required for the major		When Required Core Courses are specified for a category, they are required for the major	
ENG 1200 - English Composition I	3	ENG 1200 - English Composition I	3
ENG 2400 - English Composition II	3	ENG 2400 - English Composition II	3
Mathematical & Quantitative Reasoning*:	3	Mathematical & Quantitative Reasoning*:	3
		MAT 9010 - Introduction to Mathematics with College Algebra or	

MAT 9B0 - College Algebra for STEM Majors or		MAT 9B0 - College Algebra for STEM Majors or	
MAT 900 - College Algebra		MAT 900 - College Algebra	
Life and Physical Sciences*:	4	Life and Physical Sciences*:	4
BIO 1300 – General Biology I		BIO 1300 – General Biology I	
FLEXIBLE CORE: (6 Courses, 20 Credits)	20	**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.		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		A. World Cultures and Global Issues	
B. U.S. Experience In Its Diversity		B. U.S. Experience In Its Diversity	
C. Creative Expression		C. Creative Expression	
D. Individual & Society		D. Individual & Society	
E. Scientific World*:		E. Scientific World*:	
BIO/MAT 9100 - Biostatistics		BIO/MAT 9100 - Biostatistics	
BIO 1400 - General Biology II		BIO 1400 - General Biology II	
DEPARTMENT REQUIREMENTS: (6 Courses, 23 Credits)	23	**DEPARTMENT REQUIREMENTS:** (6 Courses, 23 Credits)	23
BIO 5000 - General Microbiology **or**	4	BIO 5000 - General Microbiology **or**	4
BIO 5900 - Genetics		BIO 5900 - Genetics	
BIO 5800 - Recombinant DNA Technology **or**	4	BIO 5800 - Recombinant DNA Technology **or**	4
BIO 5700 - Biotechnology: Cell Culture and Cloning		BIO 5700 - Biotechnology: Cell Culture and Cloning	
BIO 6500 - Molecular and Cellular Biology	4	BIO 6500 - Molecular and Cellular Biology	4
CHM 1100 - General Chemistry I	4	CHM 1100 - General Chemistry I	4
CHM 1200 - General Chemistry II	4	CHM 1200 - General Chemistry II	4
BIO/CIS 6000 - Computer Applications in Bioinformatics	3	BIO/CIS 6000 - Computer Applications in Bioinformatics	3
ELECTIVES:		**ELECTIVES:**	
4 credits sufficient to meet the required total 60 credits for the degree.	4	4 credits sufficient to meet the required total 60 credits for the degree.	4
TOTAL CREDITS: 60	60	**TOTAL CREDITS: 60**	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		*This program has a waiver to require particular courses in the Common Core, otherwise more than the minimum credits for the degree may be	
Department of Mathematics and Computer Science			
1. A.A.S. Computer Information Systems			
HEGIS: 5101.00			

Program Code: 01055			
Change: Degree Requirements			
FROM:		**TO:**	
<u>**CUNY CORE**</u>	CREDITS	<u>**CUNY CORE**</u>	CREDITS
<u>**REQUIRED CORE**</u>: (4 Courses, 12 Credits)	**12**	<u>**REQUIRED CORE**</u>: (4 Courses, 12 Credits)	**12**
When Required Core courses are specified for a category, they are required for the major.		When Required Core courses are specified for a category, they are required for the major.	
ENG 1200 - Composition I	3	ENG 1200 - Composition I	3
ENG 2400 - Composition II	3	ENG 2400 - Composition II	3
Mathematical and Quantitative Reasoning:	3	Mathematical and Quantitative Reasoning:	
		MAT 9010 - Introduction to Mathematics with College Algebra^ or	
MAT 9B0 - College Algebra for STEM Majors^		MAT 9B0 - College Algebra for STEM Majors^ or	
MAT 900 - College Algebra ^		MAT 900 - College Algebra^	
Life and Physical Sciences	3	Life and Physical Sciences	3
<u>**FLEXIBLE CORE**</u>: (3 Courses, 9 - 10 Credits)	**9 - 10**	<u>**FLEXIBLE CORE**</u>: (3 Courses, 9 - 10 Credits)	**9 - 10**
When Flexible Core Courses are specified for a category, they are required for the major.		When Flexible Core Courses are specified for a category, they are 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 <u>Different</u> Discipline		Select one (1) course from three (3) Groups A to E for a total of nine (9) credits. Each Course Must be in a <u>Different</u> Discipline	
A. World Cultures & Global Issues		A. World Cultures & Global Issues	
B. U.S. Experience In Its Diversity		B. U.S. Experience In Its Diversity	
C. Creative Expression		C. Creative Expression	
D. Individual & Society		D. Individual & Society	
E. Scientific World*:	3 - 4	E. Scientific World*:	3 - 4
MAT 1400 – Analytic Geometry and Pre-Calculus Mathematics * or	3	MAT 1400 – Analytic Geometry and Pre-Calculus Mathematics * or	3
MAT/BA 2200 – Business Statistics*	4	MAT/BA 2200 – Business Statistics*	4
<u>**DEGREE REQUIREMENTS**</u>: (11 Courses, 37 to 38 Credits)	**37 - 38**	<u>**DEGREE REQUIREMENTS**</u>: (11 Courses, 37 to 38 Credits)	**37 - 38**
CP 500 - Introduction to Computer Programming	4	CP 500 - Introduction to Computer Programming	4
CP 2100 - C++ Programming I	4	CP 2100 - C++ Programming I	4
CP 2200 - C++ Programming II	4	CP 2200 - C++ Programming II	4
CIS 1200 - Introduction to Operating Systems	3	CIS 1200 - Introduction to Operating Systems	3
CIS 1500 - Applied Computer Architecture	3	CIS 1500 - Applied Computer Architecture	3
CIS 3100 - Introduction to Database	3	CIS 3100 - Introduction to Database	3
ACC 1100 – Fundamentals of Accounting I **or**	3 - 4	ACC 1100 – Fundamentals of Accounting I **or**	3 - 4

BA 1100 - Fundamentals of Business **or**		BA 1100 - Fundamentals of Business **or**	
BA 1200 - Business Law I		BA 1200 - Business Law I	
HE 1400 - Critical Issues in Personal Health	1	HE 1400 - Critical Issues in Personal Health	1
AND		**AND**	
Select three (3) courses from the following	12	**Select three (3) courses from the following**	12
CP 6200 - JAVA Programming 2	4	CP 6200 - JAVA Programming 2	4
CIS 2100 - Introduction to Webpage Development	4	CIS 2100 - Introduction to Webpage Development	4
CIS 2200 - HTML Authoring and JavaScript	4	CIS 2200 - HTML Authoring and JavaScript	4
CIS 3200 - Advanced Database Programming	4	CIS 3200 - Advanced Database Programming	4
CIS 4500 - Network Server Administration	4	CIS 4500 - Network Server Administration	4
ELECTIVES: 0 -2 credits sufficient to total 60 credits for the degree.	**0 - 2**	**ELECTIVES**: 0 -2 credits sufficient to total 60 credits for the degree.	**0 - 2**
TOTAL:	60	**TOTAL:**	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.		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, or MAT 9B0, and MAT 1400.		^ Depending on Math placement, students may be required to complete MAT 900, **or MAT 9010** or MAT 9B0, and MAT 1400.	
2. A.S. Computer Science			
HEGIS: 5103.00			
Program Code: 01040			
Change: Degree Requirements			
FROM:		**TO:**	
CUNY CORE	**CREDITS**	**CUNY CORE**	**CREDITS**
REQUIRED CORE: (4 Courses, 12 Credits)	**12**	**REQUIRED CORE:** (4 Courses, 12 Credits)	**12**
When Required Core Courses are specified for a category, they are required for the major		When Required Core Courses are specified for a category, they are required for the major	
ENG 1200 - Composition I	3	ENG 1200 - Composition I	3
ENG 2400 - Composition II	3	ENG 2400 - Composition II	3
Mathematical and Quantitative Reasoning:	3	Mathematical and Quantitative Reasoning:	3

		MAT 9010 - Introduction to Mathematics with College Algebra^ or	
MAT 9B0 - College Algebra for STEM Majors^		MAT 9B0 - College Algebra for STEM Majors^	
MAT 900 - College Algebra^ or		MAT 900 - College Algebra^ or	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or	
MAT 1500 – Calculus I		MAT 1500 – Calculus I	
Life and Physical Sciences:	3	Life and Physical Sciences:	3
FLEXIBLE CORE: (6 Courses, 18 Credits)	**18**	**FLEXIBLE CORE:** (6 Courses, 18 Credits)	**18**
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.		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 & Global Issues		A. World Cultures & Global Issues	
B. U.S. Experience In Its Diversity		B. U.S. Experience In Its Diversity	
C. Creative Expression		C. Creative Expression	
D. Individual & Society		D. Individual & Society	
E. Scientific World*^:		E. Scientific World*^:	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or	
MAT 1500 - Calculus I or		MAT 1500 - Calculus I or	
MAT 1600 - Calculus II		MAT 1600 - Calculus II	
AND		AND	
CS 1200 - Introduction to Computing		CS 1200 - Introduction to Computing	
DEGREE REQUIREMENTS: (7 to 9 Courses, 24 to 30 Credits)	**24 - 30**	**DEGREE REQUIREMENTS:** (7 to 9 Courses, 24 to 30 Credits)	**24 - 30**
CS 13A0 - Advanced Programming Techniques	4	CS 13A0 - Advanced Programming Techniques	4
CS 1400 - Computer Organization and Assembly Language Programming	4	CS 1400 - Computer Organization and Assembly Language Programming	4
CS 3500 - Discrete Structures	3	CS 3500 - Discrete Structures	3
CS 3700 - Data Structures	3	CS 3700 - Data Structures	3
MAT 5600 - Linear Algebra	3	MAT 5600 - Linear Algebra	3
MAT 9100/BIO 9100 - Biostatistics **or**	4	MAT 9100/BIO 9100 - Biostatistics **or**	4
MAT 2200/BA 2200 - Business Statistics		MAT 2200/BA 2200 - Business Statistics	
If not taken for Required Core or Flexible Core:		If not taken for Required Core or Flexible Core:	
MAT 1500 - Calculus I	3	MAT 1500 - Calculus I	3
MAT 1600 - Calculus II	3	MAT 1600 - Calculus II	3

Select ONLY ONE (1) of the these two options below based on initial Mathematics Placement:**	3	Select ONLY ONE (1) of the these two options below based on initial Mathematics Placement:**	3
OPTION 1:		OPTION 1:	
If student's initial Mathematics Placement is below MAT 1500:		If student's initial Mathematics Placement is below MAT 1500:	
MAT 1000 - College Trigonometry^		MAT 1000 - College Trigonometry^	
OPTION 2:		OPTION 2:	
If student's initial Mathematics Placement is MAT 1500:		If student's initial Mathematics Placement is MAT 1500:	
MAT 2100 - Calculus III		MAT 2100 - Calculus III	
ELECTIVES: 0 - 6 credits sufficient to total 60 credits for the degree.	0 - 6	ELECTIVES: 0 - 6 credits sufficient to total 60 credits for the degree.	0 - 6
TOTAL:	60	TOTAL:	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.		*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, or MAT 9B0, and/or MAT 1400, and/or MAT 1000.		^ Depending on Math placement, students may be required to complete MAT 900, **or MAT 9010** or MAT 9B0, and/or MAT 1400, and/or MAT 1000.	
**Consultation with the Mathematics Department is HIGHLY recommended to ensure that the student selects the correct option.		**Consultation with the Mathematics Department is HIGHLY recommended to ensure that the student selects the correct option.	
3. A.S. Mathematics			
HEGIS: 5617.00			
Program Code: 01041			
Change: Degree Requirements			
FROM:		**TO:**	
CUNY CORE	CREDITS	**CUNY CORE**	CREDITS
REQUIRED CORE: (4 Courses, 12 Credits)	12	**REQUIRED CORE:** (4 Courses, 12 Credits)	12
When Required Core Courses are specified for a category, they are required for the major		When Required Core Courses are specified for a category, they are required for the major	
ENG 1200 - Composition I	3	ENG 1200 - Composition I	3
ENG 2400 - Composition II	3	ENG 2400 - Composition II	3
Mathematical and Quantitative Reasoning:	3	Mathematical and Quantitative Reasoning:	3

		MAT 9010 - Introduction to Mathematics with College Algebra^ or	
MAT 9B0 - College Algebra for STEM Majors^ or		MAT 9B0 - College Algebra for STEM Majors^ or	
MAT 900 - College Algebra^ or		MAT 900 - College Algebra^ or	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or	
MAT 1500 – Calculus I		MAT 1500 – Calculus I	
Life and Physical Sciences:	3		
FLEXIBLE CORE: (6 Courses, 18 Credits)	18	**FLEXIBLE CORE:** (6 Courses, 18 Credits)	18
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.		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 & Global Issues		A. World Cultures & Global Issues	
B. U.S. Experience In Its Diversity		B. U.S. Experience In Its Diversity	
C. Creative Expression		C. Creative Expression	
D. Individual & Society		D. Individual & Society	
E. Scientific World*^:		E. Scientific World*^:	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or	
MAT 1500 - Calculus I or		MAT 1500 - Calculus I or	
MAT 1600 - Calculus II		MAT 1600 - Calculus II	
AND		AND	
CS 1200 - Introduction to Computing		CS 1200 - Introduction to Computing	
DEGREE REQUIREMENTS: (8 to 10 Courses, 24 to 30 Credits)	24 - 30	**DEGREE REQUIREMENTS:** (8 to 10 Courses, 24 to 30 Credits)	24 - 30
MAT 2100 - Calculus III	3	MAT 2100 - Calculus III	3
MAT 5500 - Differential Equations	3	MAT 5500 - Differential Equations	3
MAT 5600 - Linear Algebra	3	MAT 5600 - Linear Algebra	3
MAT 9100/BIO 9100 - Biostatistics or	4	MAT 9100/BIO 9100 - Biostatistics or	4
MAT 2200/BA 2200 - Business Statistics		MAT 2200/BA 2200 - Business Statistics	
CS 3500 - Discrete Structures	3	CS 3500 - Discrete Structures	3
MAT 3000 Introduction to Mathematical Concepts in Proof	1	MAT 3000 Introduction to Mathematical Concepts in Proof	1
If not taken for Required Core or Flexible Core:		If not taken for Required Core or Flexible Core:	
MAT 1500 - Calculus I	3	MAT 1500 - Calculus I	3
MAT 1600 - Calculus II	3	MAT 1600 - Calculus II	3

Select ONLY ONE (1) of the these two options below based on initial Mathematics Placement: **	7-8	Select ONLY ONE (1) of the these two options below based on initial Mathematics Placement: **	7-8
OPTION 1:		OPTION 1:	
If student's initial Mathematics Placement is below MAT 1500:		If student's initial Mathematics Placement is below MAT 1500:	
MAT 1000 - College Trigonometry^	3	MAT 1000 - College Trigonometry^	3
AND		AND	
Select one (1) course from the following:		Select one (1) course from the following:	
CS 13A0 - Advanced Programming Techniques	4	CS 13A0 - Advanced Programming Techniques	4
MAT 1100 - Finite Mathematics	4	MAT 1100 - Finite Mathematics	4
MAT 3200 - Introduction to Set Theory	4	MAT 3200 - Introduction to Set Theory	4
MAT 7100 - Applications of Linear Algebra and Vector Analysis	4	MAT 7100 - Applications of Linear Algebra and Vector Analysis	4
OPTION 2:		OPTION 2:	
If student's initial Mathematics Placement is MAT 1500:		If student's initial Mathematics Placement is MAT 1500:	
Select two (2) courses from the following:	4	Select two (2) courses from the following:	4
CS 13A0 - Advanced Programming Techniques	4	CS 13A0 - Advanced Programming Techniques	4
MAT 1100 - Finite Mathematics	4	MAT 1100 - Finite Mathematics	4
MAT 3200 - Introduction to Set Theory	4	MAT 3200 - Introduction to Set Theory	4
MAT 7100 - Applications of Linear Algebra and Vector Analysis	4	MAT 7100 - Applications of Linear Algebra and Vector Analysis	4
ELECTIVES: 0 - 6 credits sufficient to total 60 credits for the degree.	0 - 6	**ELECTIVES:** 0 - 6 credits sufficient to total 60 credits for the degree.	0 - 6
TOTAL:	60	**TOTAL:**	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.		*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, or MAT 9B0, and/or MAT 1400 and MAT 1000.		^ Depending on Math placement, students may be required to complete MAT 900, **or MAT 9010 or** MAT 9B0, and/or MAT 1400 and MAT 1000.	
**Consultation with the Mathematics Department is HIGHLY recommended to ensure that the student selects the correct option.		**Consultation with the Mathematics Department is HIGHLY recommended to ensure that the student selects the correct option.	

Department of Physical Sciences			
1. A.S. Chemistry			
HEGIS: 5619.00			
Program Code: 01043			
Change: Degree Requirements			
FROM:		**TO:**	
CUNY CORE	**CREDITS**	**CUNY CORE**	**CREDITS**
REQUIRED CORE: (4 Courses, 13Credits)	**13**	**REQUIRED CORE:** (4 Courses, 13Credits)	**13**
When Required Core Courses are specified for a category, they are required for the major		When Required Core Courses are specified for a category, they are required for the major	
ENG 1200 - Composition I	3	ENG 1200 - Composition I	3
ENG 2400 - Composition II	3	ENG 2400 - Composition II	3
Mathematical and Quantitative Reasoning*:	3	Mathematical and Quantitative Reasoning*:	3
		MAT 9010 - Introduction to Mathematics with College Algebra or	
MAT 9B0 - College Algebra for STEM Majors or		MAT 9B0 - College Algebra for STEM Majors or	
MAT 900 - College Algebra or		MAT 900 - College Algebra or	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or	
MAT 1500 – Calculus I		MAT 1500 – Calculus I	
Life and Physical Sciences*:	4	Life and Physical Sciences*:	4
CHM 1100 - General Chemistry I		CHM 1100 - General Chemistry I	
FLEXIBLE CORE: (6 Courses, 20 Credits)	**20**	**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.		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		A. World Cultures and Global Issues	
B. U.S. Experience In Its Diversity		B. U.S. Experience In Its Diversity	
C. Creative Expression		C. Creative Expression	
D. Individual & Society		D. Individual & Society	
E. Scientific World*:		E. Scientific World*:	
CHM 1200 - General Chemistry II		CHM 1200 - General Chemistry II	
PHY 1300 – Advanced General Physics I		PHY 1300 – Advanced General Physics I	
DEPARTMENT REQUIREMENTS: (7 Courses, 26 - 27 Credits)		**DEPARTMENT REQUIREMENTS:** (7 Courses, 26 - 27 Credits)	
Additional Physical Sciences Requirements (3 Courses, 14 Credits)	**14**	Additional Physical Sciences Requirements (3 Courses, 14 Credits)	**14**

CHM 3100 – Organic Chemistry I	5	CHM 3100 – Organic Chemistry I	5
CHM 3200 – Organic Chemistry II	5	CHM 3200 – Organic Chemistry II	5
PHY 1400 – Advanced General Physics II	4	PHY 1400 – Advanced General Physics II	4
Additional Mathematics Requirements (2 Courses, 6 Credits)	6	Additional Mathematics Requirements (2 Courses, 6 Credits)	6
Select Two (2) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:		Select Two (2) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:	
MAT 1000 - College Trigonometry^		MAT 1000 - College Trigonometry^	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)	
MAT 1500 - Calculus I (Recommended)		MAT 1500 - Calculus I (Recommended)	
MAT 1600 - Calculus II (Recommended)		MAT 1600 - Calculus II (Recommended)	
MAT 2100 - Calculus III		MAT 2100 - Calculus III	
MAT 5500 - Differential Equations		MAT 5500 - Differential Equations	
MAT 5600 - Linear Algebra		MAT 5600 - Linear Algebra	
Additional Science and Mathematics Electives (2 Courses, 6 - 7 Credits)	6 to 7	Additional Science and Mathematics Electives (2 Courses, 6 - 7 Credits)	6 to 7
Elective Credits in CHM, CS, EGR, EPS, MAT, PHY, or SCI		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 to 1	**ELECTIVES:** 0 - 1 credits sufficient to meet the required total 60 credits for the degree.	0 to 1
TOTAL CREDITS: 60	60	**TOTAL CREDITS: 60**	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.		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 select MAT 1000		^ Depending on Math placement, students may be required to select MAT 1000	
2. A.S. Earth and Planetary Sciences			
HEGIS: 5499.00			
Program Code: 34242			
Change: Degree Requirements			
FROM:		**TO:**	
CUNY CORE	CREDITS	**CUNY CORE**	CREDITS
REQUIRED CORE: (4 Courses, 13Credits)	13	**REQUIRED CORE:** (4 Courses, 13Credits)	13

When Required Core Courses are specified for a category, they are required for the major		When Required Core Courses are specified for a category, they are required for the major	
ENG 1200 - Composition I	3	ENG 1200 - Composition I	3
ENG 2400 - Composition II	3	ENG 2400 - Composition II	3
Mathematical and Quantitative Reasoning*:	3	Mathematical and Quantitative Reasoning*:	3
		MAT 9010 - Introduction to Mathematics with College Algebra or	
MAT 9B0 - College Algebra for STEM Majors or		MAT 9B0 - College Algebra for STEM Majors or	
MAT 900 - College Algebra or		MAT 900 - College Algebra or	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or	
MAT 1500 – Calculus I		MAT 1500 – Calculus I	
Life and Physical Sciences*:	4	Life and Physical Sciences*:	4
CHM 1100 - General Chemistry I		CHM 1100 - General Chemistry I	
FLEXIBLE CORE: (6 Courses, 20 Credits)	**20**	**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.		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		A. World Cultures and Global Issues	
B. U.S. Experience In Its Diversity		B. U.S. Experience In Its Diversity	
C. Creative Expression		C. Creative Expression	
D. Individual & Society		D. Individual & Society	
E. Scientific World*:		E. Scientific World*:	
EPS 3100 - Meteorology		EPS 3100 - Meteorology	
EPS 3800 – Introduction to Earth Science		EPS 3800 – Introduction to Earth Science	
DEPARTMENT REQUIREMENTS: (7 Courses, 26 Credits)	**26**	**DEPARTMENT REQUIREMENTS:** (7 Courses, 26 Credits)	**26**
Additional Physical Sciences Requirements (5 Courses, 20 Credits)		Additional Physical Sciences Requirements (5 Courses, 20 Credits)	
EPS 3200 – Oceanography	4	EPS 3200 – Oceanography	4
EPS 3300 – Physical Geography	4	EPS 3300 – Physical Geography	4
EPS 3500 – Astronomy	4	EPS 3500 – Astronomy	4
EPS 3600 – Planetology	4	EPS 3600 – Planetology	4
PHY 1100 – General Physics I	4	PHY 1100 – General Physics I	4
Additional Mathematics Requirements (2 Courses, 6 Credits)	**6**	Additional Mathematics Requirements (2 Courses, 6 Credits)	**6**
Select Two (2) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:		Select Two (2) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:	

MAT 1000 - College Trigonometry^		MAT 1000 - College Trigonometry^	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)	
MAT 1500 - Calculus I (Recommended)		MAT 1500 - Calculus I (Recommended)	
MAT 1600 - Calculus II (Recommended)		MAT 1600 - Calculus II (Recommended)	
MAT 2100 - Calculus III		MAT 2100 - Calculus III	
MAT 5500 - Differential Equations		MAT 5500 - Differential Equations	
MAT 5600 - Linear Algebra		MAT 5600 - Linear Algebra	
ELECTIVES: 1 credit sufficient to meet the required total 60 credits for the degree.	**1**	**ELECTIVES**: 1 credit sufficient to meet the required total 60 credits for the degree.	**1**
TOTAL CREDITS: 60	**60**	**TOTAL CREDITS: 60**	**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.		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 select MAT 1000		^ Depending on Math placement, students may be required to select MAT 1000	
3. A.S. Engineering Science			
HEGIS: 5609.00			
Program Code: 87212			
Change: Degree Requirements			
FROM:		**TO:**	
CUNY CORE	**CREDITS**	**CUNY CORE**	**CREDITS**
REQUIRED CORE: (4 Courses, 13Credits)	**13**	**REQUIRED CORE:** (4 Courses, 13Credits)	**13**
When Required Core Courses are specified for a category, they are required for the major		When Required Core Courses are specified for a category, they are required for the major	
ENG 1200 - Composition I	3	ENG 1200 - Composition I	3
ENG 2400 - Composition II	3	ENG 2400 - Composition II	3
Mathematical and Quantitative Reasoning*:	3	Mathematical and Quantitative Reasoning*:	3
		MAT 9010 - Introduction to Mathematics with College Algebra or	
MAT 9B0 - College Algebra for STEM Majors or		MAT 9B0 - College Algebra for STEM Majors or	
MAT 900 - College Algebra or		MAT 900 - College Algebra or	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or	
MAT 1500 – Calculus I		MAT 1500 – Calculus I	
Life and Physical Sciences*:	4	Life and Physical Sciences*:	4

CHM 1100 - General Chemistry I		CHM 1100 - General Chemistry I	
FLEXIBLE CORE: (6 Courses, 20 Credits)	**20**	**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.		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		A. World Cultures and Global Issues	
B. U.S. Experience In Its Diversity		B. U.S. Experience In Its Diversity	
C. Creative Expression		C. Creative Expression	
D. Individual & Society		D. Individual & Society	
E. Scientific World*:		E. Scientific World*:	
CHM 1200 - General Chemistry II		CHM 1200 - General Chemistry II	
PHY 1300 – Advanced General Physics I		PHY 1300 – Advanced General Physics I	
DEPARTMENT REQUIREMENTS: (9 to 12 Courses, 28 to 37 Credits)	**28 - 37**	**DEPARTMENT REQUIREMENTS:** (9 to 12 Courses, 28 to 37 Credits)	**28 - 37**
Additional Physical Sciences Requirements (4 Courses, 13 Credits)	**13**	Additional Physical Sciences Requirements (4 Courses, 13 Credits)	**13**
PHY 1400 – Advanced General Physics II	4	PHY 1400 – Advanced General Physics II	4
EGR 2100 – Engineering Design	3	EGR 2100 – Engineering Design	3
EGR 2200 – Introduction to Electrical Engineering	3	EGR 2200 – Introduction to Electrical Engineering	3
EGR 2300 – Introduction to Engineering Thermodynamics	3	EGR 2300 – Introduction to Engineering Thermodynamics	3
Additional Mathematics Requirements (5 - 8 Courses, 15 - 24 Credits)	**15 - 24**	Additional Mathematics Requirements (5 - 8 Courses, 15 - 24 Credits)	**15 - 24**
Select five (5) to eight (8) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:		Select five (5) to eight (8) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:	
CS 1200 – Introduction to Computing		CS 1200 – Introduction to Computing	
MAT 1000 - College Trigonometry^		MAT 1000 - College Trigonometry^	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)	
MAT 1500 - Calculus I (Recommended)		MAT 1500 - Calculus I (Recommended)	
MAT 1600 - Calculus II (Recommended)		MAT 1600 - Calculus II (Recommended)	
MAT 2100 - Calculus III		MAT 2100 - Calculus III	
MAT 5500 - Differential Equations		MAT 5500 - Differential Equations	
MAT 5600 - Linear Algebra		MAT 5600 - Linear Algebra	
ELECTIVES: 0 credits sufficient to meet the required total 60 credits for the degree.	**0**	**ELECTIVES:** 0 credits sufficient to meet the required total 60 credits for the degree.	**0**
TOTAL CREDITS: 61 - 70	**61 - 70**	**TOTAL CREDITS:** 61 - 70	**61 - 70**

*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.		*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 select MAT 1000		^ Depending on Math placement, students may be required to select MAT 1000	
4. A.S. Physics			
HEGIS: 5619.00			
Program Code: 01042			
Change: Degree Requirements			
FROM:		**TO:**	
CUNY CORE	CREDITS	**CUNY CORE**	CREDIT S
REQUIRED CORE: (4 Courses, 13 Credits)	13	**REQUIRED CORE:** (4 Courses, 13 Credits)	13
When Required Core Courses are specified for a category, they are required for the major		When Required Core Courses are specified for a category, they are required for the major	
ENG 1200 - Composition I	3	ENG 1200 - Composition I	3
ENG 2400 - Composition II	3	ENG 2400 - Composition II	3
Mathematical and Quantitative Reasoning*:	3	Mathematical and Quantitative Reasoning*:	3
		MAT 9010 - Introduction to Mathematics with College Algebra or	
MAT 9B0 - College Algebra for STEM Majors or		MAT 9B0 - College Algebra for STEM Majors or	
MAT 900 - College Algebra or		MAT 900 - College Algebra or	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or	
MAT 1500 – Calculus I		MAT 1500 – Calculus I	
Life and Physical Sciences*:	4	Life and Physical Sciences*:	4
CHM 1100 - General Chemistry I		CHM 1100 - General Chemistry I	
FLEXIBLE CORE: (6 Courses, 20 Credits)	20	**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.		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		A. World Cultures and Global Issues	
B. U.S. Experience In Its Diversity		B. U.S. Experience In Its Diversity	
C. Creative Expression		C. Creative Expression	
D. Individual & Society		D. Individual & Society	

E. Scientific World*:		E. Scientific World*:	
CHM 1200 - General Chemistry II		CHM 1200 - General Chemistry II	
PHY 1300 – Advanced General Physics I		PHY 1300 – Advanced General Physics I	
DEPARTMENT REQUIREMENTS: (8 Courses, 26 to 27 Credits)	**26-27**	**DEPARTMENT REQUIREMENTS:** (8 Courses, 26 to 27 Credits)	**26-27**
Additional Physical Sciences Requirements (4 Courses, 14 Credits)	**14**	Additional Physical Sciences Requirements (4 Courses, 14 Credits)	**14**
PHY 1400 – Advanced General Physics II	4	PHY 1400 – Advanced General Physics II	4
EGR 2200 – Introduction to Electrical Engineering (3 crs.)	3	EGR 2200 – Introduction to Electrical Engineering (3 crs.)	3
EGR 2300 – Introduction to Engineering Thermodynamics (3 crs.)	3	EGR 2300 – Introduction to Engineering Thermodynamics (3 crs.)	3
Select one (1) from the following:		Select one (1) from the following:	
EPS 3100 - Meteorology		EPS 3100 - Meteorology	
EPS 3200 - Oceanography		EPS 3200 - Oceanography	
EPS 3300 - Physical Geology		EPS 3300 - Physical Geology	
EPS 3500 - Introduction to Astronomy		EPS 3500 - Introduction to Astronomy	
EPS 3600 - Planetology: A Trip Through the Solar System		EPS 3600 - Planetology: A Trip Through the Solar System	
EPS 3800 - Introduction to Earth Science		EPS 3800 - Introduction to Earth Science	
Additional Mathematics Requirements (2 Courses, 6 Credits)	**6**	Additional Mathematics Requirements (2 Courses, 6 Credits)	**6**
Select Two (2) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:		Select Two (2) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:	
MAT 1000 - College Trigonometry^		MAT 1000 - College Trigonometry^	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)	
MAT 1500 - Calculus I (Recommended)		MAT 1500 - Calculus I (Recommended)	
MAT 1600 - Calculus II (Recommended)		MAT 1600 - Calculus II (Recommended)	
MAT 2100 - Calculus III		MAT 2100 - Calculus III	
MAT 5500 - Differential Equations		MAT 5500 - Differential Equations	
MAT 5600 - Linear Algebra		MAT 5600 - Linear Algebra	
Additional Science and Mathematics Electives (2 Courses, 6 to 7 Credits)	**6 -7**	Additional Science and Mathematics Electives (2 Courses, 6 to 7 Credits)	**6 -7**
Elective Credits in CHM, CS, EGR, EPS, MAT, PHY, or SCI		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**	**ELECTIVES:** 0 - 1 credits sufficient to meet the required total 60 credits for the degree.	**0 - 1**

TOTAL CREDITS: 60	**60**	**TOTAL CREDITS: 60**	**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.		*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 select MAT 1000		^ Depending on Math placement, students may be required to select MAT 1000	
5. A.S. Science for Forensics			
HEGIS: 5619.00			
Program Code: 34472			
Change: Degree Requirements			
FROM:		**TO:**	
CUNY CORE	**CREDITS**	**CUNY CORE**	**CREDITS**
REQUIRED CORE: (4 Courses, 13Credits)	**13**	**REQUIRED CORE:** (4 Courses, 13Credits)	**13**
When Required Core Courses are specified for a category, they are required for the major		When Required Core Courses are specified for a category, they are required for the major	
ENG 1200 - Composition I	3	ENG 1200 - Composition I	3
ENG 2400 - Composition II	3	ENG 2400 - Composition II	3
Mathematical and Quantitative Reasoning*:	3	Mathematical and Quantitative Reasoning*:	3
		MAT 9010 - Introduction to Mathematics with College Algebra or	
MAT 9B0 - College Algebra for STEM Majors or		MAT 9B0 - College Algebra for STEM Majors or	
MAT 900 - College Algebra or		MAT 900 - College Algebra or	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or	
MAT 1500 – Calculus I		MAT 1500 – Calculus I	
Life and Physical Sciences*:	4	Life and Physical Sciences*:	4
BIO 1300 - General Biology I		BIO 1300 - General Biology I	
FLEXIBLE CORE: (6 Courses, 20 Credits)	**20**	**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.		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		A. World Cultures and Global Issues	
B. U.S. Experience In Its Diversity		B. U.S. Experience In Its Diversity	
C. Creative Expression		C. Creative Expression	

D. Individual & Society		D. Individual & Society	
E. Scientific World*:		E. Scientific World*:	
BIO 1400 - General Biology II		BIO 1400 - General Biology II	
CHM 1100 – General Chemistry I		CHM 1100 – General Chemistry I	
DEPARTMENT REQUIREMENTS: (6 Courses, 25 Credits)	**25**	**DEPARTMENT REQUIREMENTS:** (6 Courses, 25 Credits)	**25**
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:		*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)	**22**	Additional Physical Sciences Requirements (5 Courses, 22 Credits)	**22**
CHM 1200 – General Chemistry II	4	CHM 1200 – General Chemistry II	4
CHM 3100 – Organic Chemistry I	5	CHM 3100 – Organic Chemistry I	5
CHM 3200 – Organic Chemistry II	5	CHM 3200 – Organic Chemistry II	5
PHY 1300 – Advanced General Physics I	4	PHY 1300 – Advanced General Physics I	4
PHY 1400 – Advanced General Physics II	4	PHY 1400 – Advanced General Physics II	4
Additional Mathematics Requirement (1 Course, 3 Credits)	**3**	Additional Mathematics Requirement (1 Course, 3 Credits)	**3**
Select one (1) additional course beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:		Select one (1) additional course beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:	
MAT 1000 - College Trigonometry^		MAT 1000 - College Trigonometry^	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)		MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)	
MAT 1500 - Calculus I (Recommended)		MAT 1500 - Calculus I (Recommended)	
MAT 1600 - Calculus II (Recommended)		MAT 1600 - Calculus II (Recommended)	
ELECTIVES: 2 credits sufficient to meet the required total 60 credits for the degree.	**2**	**ELECTIVES:** 2 credits sufficient to meet the required total 60 credits for the degree.	**2**
Completion of MAT 1600 - Calculus II is HIGHLY recommended		Completion of MAT 1600 - Calculus II is HIGHLY recommended	
TOTAL CREDITS: 60	**60**	**TOTAL CREDITS: 60**	**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.		*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 select MAT 1000		^ Depending on Math placement, students may be required to select MAT 1000	
NEW COURSES			

Department of Mathematics and Computer Science			
1. MAT 9010 - Introduction to Mathematics with College Algebra			
Prerequisite: For students who are eligible for a corequisite course per CUNY Math placement guidelines and are in need of developmental support.			
Corequisite: NONE			
Pre-/Co-requisite: NONE			
Credits: 3			
Hours: 6 hours lab			

Course Description: This course is designed to provide students with an understanding of algebraic concepts, and skill and practice in the manipulation and utilization of these concepts. Such a background is essential for later mastery of a wide variety of courses in mathematics, computer studies, the sciences, and other areas. Topics include real numbers, absolute value, integer and rational exponents, polynomial operations, factoring techniques, roots and radicals, linear and quadratic equations, graphing techniques, systems of linear equations, Gaussian elimination, and an introduction to the study of functions. Students who have completed MAT 900 or MAT 9B0 will not receive credit for this course. This course is appropriate for students majoring in STEM areas.

2. MAT 2010 - Integrated Statistics			
Prerequisite: For students who are eligible for a corequisite course per CUNY Math placement guidelines and are in need of developmental support.			
Corequisite: NONE			
Pre-/Co-requisite: NONE			
Credits: 3			
Hours: 6 hours lab			

Course Description: Introduction to statistics, with integrated pre-algebra and algebra. Main statistics topics are descriptive measures, probability theory, the normal distribution, hypothesis testing, and regression analysis. This course is intended for students who have not achieved CUNY mathematics proficiency, and who want a first course in statistics. Students who have completed MAT 19A0, or MAT 2000, or MAT/BA 2200, or MAT/BIO 9100 will not receive credit for this course.

*** INFORMATIONAL ITEMS FOR COLLEGE COUNCIL ***			
CHANGES IN EXISTING COURSES			
Department of Allied Health, Mental Health and Human Services			
Change Pending Approval by Accrediting Body			
1. PSG 100 - The Science of Sleep and Circadian Rhythms			
Change: Pre-/Co-requisite			
FROM:		**TO:**	
Pre-/Co-requisite: ENG 1200, BIO 1100, and MAT 9B0 or MAT 900		Pre-/Co-requisite: ENG 1200, BIO 1100, and **MAT 9010 or** MAT 9B0 or MAT 900	
Change Pending Approval by Accrediting Body			
2. PSG 103 - Clinical Practicum in Sleep Medicine I			
Change: Pre-/Co-requisite			

FROM:		TO:	
Pre-/Co-requisite: PSG 101, PSG 102, PSG 106, MAT 900, and MAT 2000, BLS certification, and medical clearance from the internship site.		Pre-/Co-requisite: PSG 101, PSG 102, PSG 106, **or MAT 9010 or MAT 9B0 or** MAT 900, and **MAT 2010 or** MAT 2000, BLS certification, and medical clearance from the internship site.	
Corequisite: PSG 104 and PSG 105		Corequisite: PSG 104 and PSG 105	
Department of Mathematics and Computer Science			
1.MAT 500 - Introduction to Mathematical Thought			
Change: Prerequisite			
FROM:		**TO:**	
Prerequisite: For students who are eligible for a corequisite course per CUNY Math placement guidelines and likely to benefit from some developmental support, eligibility determined as follows: (1) Score of 40-56 on the Elementary Algebra portion of the ACCUPLACER CUNY Assessment Test in Math or (2) passed MAT M100 or (3) passed a Mathematics Department workshop culminating in passing the Departmental MAT M100		Prerequisite: **For students who are eligible for a corequisite course per CUNY Math placement guidelines and are in need of developmental support.**	
2. MAT 800 - Practical Mathematics for Today's World			
Change: Prerequisite			
FROM:		**TO:**	
Prerequisite: (1) Successful completion of the Elementary Algebra portion of the ACCUPLACER CUNY Assessment Test in Math, or (2) A passing score on both the Pre-Algebra and Elementary Algebra portion of the CUNY Mathematics Skills Test (COMPASS), or (3) Successful completion of both the Pre-Algebra and Elementary Algebra CUNY Mathematics remediation, or (4) Math		Prerequisite: **(1) Successful completion of CUNY Mathematics remediation; or (2) Mathematics Proficiency per CUNY guidelines.**	
3. MAT 1000 - College Trigonometry			
Change: Prerequisite			
FROM:		**TO:**	
Prerequisite: MAT 900 or MAT 9B0		Prerequisite: MAT 900 or **MAT 9010 or** MAT 9B0	
4. MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics			
Change: Prerequisite			
FROM:		**TO:**	

Prerequisite: MAT 900 or MAT 9B0 with a grade of "C" or higher		Prerequisite: MAT 900 or **MAT 9010 or** MAT 9B0 with a grade of "C" or higher	

5. MAT 2000 - Elements of Statistics			
Change: Credit Hours			
FROM:		**TO:**	
3 credits, 3 hours		3 credits, 4 hours (2 hours lecture, 2 hours lab)	
Change: Course Description			
FROM:		**TO:**	
Concepts of statistics and probability, their application to today's world and the ethical use of data to analyze problems and questions. Topics include tabulation and graphing of distributions, central and dispersal tendencies, comparison techniques, correlations and predictive techniques. Instruction and practice in the use of statistical calculators. Students who have completed MAT 19A0 or BA 2200/MAT 2200 or MAT 9100/BIO 9100 will <u>not</u> receive credit for this course.		Concepts of statistics and probability, their application to today's world and the ethical use of data to analyze problems and questions. Topics include tabulation and graphing of distributions, central and dispersal tendencies, comparison techniques, correlations and predictive techniques. Instruction and practice in the use of statistical calculators. Students who have completed MAT 19A0 or **MAT 2010 or** BA 2200/MAT 2200 or MAT 9100/BIO 9100 will <u>not</u> receive credit for this course.	

6. MAT/BA 2200 - Business Statistics			
Change: Prerequisite			
FROM:		**TO:**	
Prerequisite: R300 or MAT 9B0 with a grade of "C" or higher		Prerequisite: R300 or **MAT 9010 or** MAT 9B0 with a grade of "C" or higher	
Change: Course Description			
FROM:		**TO:**	
An introduction to probability and statistics as they apply to business applications including data summary measures, discrete random variables and probability distributions, sampling methodologies and analysis, hypothesis testing and regression analysis. Special emphasis will be given to solutions of practical business problems. Students who have completed MAT 19A0 or MAT 2000 or MAT 9100/BIO 9100 will <u>not</u> receive credit for this course.		An introduction to probability and statistics as they apply to business applications including data summary measures, discrete random variables and probability distributions, sampling methodologies and analysis, hypothesis testing and regression analysis. Special emphasis will be given to solutions of practical business problems. Students who have completed MAT 19A0 **or MAT 2010** or MAT 2000 or MAT 9100/BIO 9100 will <u>not</u> receive credit for this course.	

7.MAT/BIO 9100 - Biostatistics			
Change: Prerequisite			

FROM:		TO:	
Prerequisite: MAT 900 or MAT 9B0		Prerequisite: MAT 900 or **MAT 9010 or** MAT 9B0	

Change: Course Description			
FROM:		TO:	
An introduction to the theories and techniques relating to probability, statistics and data analysis as pertaining to biology. Discrete and continuous probability distributions are studied including binomial, normal and t-distributions. Classical and Bayesian statistics, estimation, hypothesis testing will be emphasized. SPSS software will be introduced and used in the laboratory achievements. Students who have completed MAT 19A0 or MAT 2000 or MAT 2200/BA 2200 will <u>not</u> receive credit for this course.		An introduction to the theories and techniques relating to probability, statistics and data analysis as pertaining to biology. Discrete and continuous probability distributions are studied including binomial, normal and t-distributions. Classical and Bayesian statistics, estimation, hypothesis testing will be emphasized. SPSS software will be introduced and used in the laboratory achievements. Students who have completed MAT 19A0 **or MAT 2010** or MAT 2000 or MAT 2200/BA 2200 will <u>not</u> receive credit for this course.	

Department of Physical Sciences

1.   CHM 100 - Preview of General Chemistry
Change: Pre-/Co-requisites

FROM:		TO:	
Pre-/Co-requisite: MAT 9B0 or MAT 900		Pre-/Co-requisite: **MAT 9010 or** MAT 9B0 or MAT 900	
Corequisite: CHM 1100		Corequisite: CHM 1100	

2.   CHM 200 - Introduction to Green Chemistry
Change: Pre-/Co-requisites

FROM:		TO:	
Pre-/Co-requisite: MAT 9B0 or MAT 900		Pre-/Co-requisite: **MAT 9010 or** MAT 9B0 or MAT 900	

3.   CHM 1100 - General Chemistry I
Change: Prerequisites

FROM:		TO:	

Prerequisite: MAT 9B0 or MAT 900 and CHM 200, or MAT 9B0 or MAT 900 and Chemistry Ready Placement Score placing into CHM 1100. Contact Department for Chemistry Ready Placement information, or Department Permission, **OR**		Prerequisite: **MAT 9010 or** MAT 9B0 or MAT 900 and CHM 200, or **MAT 9010 or** MAT 9B0 or MAT 900 and Chemistry Ready Placement Score placing into CHM 1100. Contact Department for Chemistry Ready Placement information, or Department Permission, **OR**	
Corequisite: CHM 100 based on Chemistry Ready Placement Score		Corequisite: CHM 100 based on Chemistry Ready Placement Score	
Pre-/Co-requisite: NONE		Pre-/Co-requisite: NONE	