# KINGSBOROUGH COMMUNITY COLLEGE The City University of New York

# **CURRICULUM TRANSMITTAL COVER PAGE**

ment:	Date:
of Course/Degree/Concentration/	Certificate:
Change(s) Initiated: (Please che	
Closing of Degree	Change in Degree or Certificate
Closing of Certificate	Change in Degree: Adding Concentration
New Certificate Proposal	Change in Degree: Deleting Concentration
New Degree Proposal	Change in Prerequisite, Corequisite, and/or Pre-/Co-requi
□ New Course	☐ Change in Course Designation
☐ New 82 Course (Pilot Course	· · · · · ·
☐ Deletion of Course(s)	☐ Change in Course Title, Number, Credits and/or Hours
	☐ Change in Academic Policy
	☐ Pathways Submission:
	Life and Physical Science
	☐ Math and Quantitative Reasoning
	A. World Cultures and Global Issues
	☐ B. U.S. Experience in its Diversity
	☐ C. Creative Expression
☐ Change in Program Learnin☐ Other (please describe):	D. Individual and Society  E. Scientific World
Other (please describe):	<ul><li>D. Individual and Society</li><li>E. Scientific World</li></ul>
Other (please describe):	D. Individual and Society  E. Scientific World  ag Outcomes
Other (please describe):  PLEASE ATTACH MATERIAL TO I  DEPARTMENTAL ACTION	D. Individual and Society  E. Scientific World  ag Outcomes
Department and/or D	D. Individual and Society E. Scientific World ag Outcomes  LLUSTRATE AND EXPLAIN ALL CHANGES
Department and/or D Date Approved: 18 Feb. 2022	D. Individual and Society E. Scientific World  ag Outcomes  LLUSTRATE AND EXPLAIN ALL CHANGES  repartmental Committee, if required: Signature, Committee Chairperson:  Signature Committee Chairperson:
Department and/or D Date Approved: 18 Feb. 2022  If submitted Curriculum Action required:	D. Individual and Society E. Scientific World  ag Outcomes  LLUSTRATE AND EXPLAIN ALL CHANGES  repartmental Committee, if required:
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TO: Special Meeting of the Curriculum Committee Meeting

FROM: Dr. John Mikalopas, Chair, Department of Physical Sciences

DATE: 2/17/22

RE: Degree Change for the A.S. Physics

The Department of Physical Sciences is proposing a degree change for the A.S. Physics

#### Change:

1. Under Required Core, Mathematics and Quantitative Reasoning, the **addition** of MAT 9010 – Introduction to Mathematics with College Algebra

#### **Rationale for Change:**

CUNY had mandated the elimination of stand-alone developmental courses effective Fall 2022. MAT 9010 replaces the developmental pathway of MAT M100 to MAT M200 to MAT R300 that lead to MAT 900. The update to the degree requirements reflects this pathway.

### **CURRENT**

Add/Delete/Change	A.S. PHYSICS	
	HEGIS: 5619.00	
	PROGRAM CODE: 01042	
	CUNY CORE	CREDITS
	REQUIRED CORE: (4 Courses, 13 Credits)	13
	When Required Core Courses are specified for a category, they are required for the	
	Imajor	
	ENG 1200 - Composition I	3
	ENG 2400 - Composition II	3
	Mathematical & Quantitative Reasoning*:	4
	Mathematical and Quantitative Reasoning*:	3
ADD	MAT 9010 - Introduction to Mathematics with College Algebra or	
	MAT 9B0 - College Algebra for STEM Majors or	
	MAT 900 - College Algebra or	
	MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or	
	MAT 1500 – Calculus I	
	Life and Physical Sciences*:	4
	CHM 1100 - General Chemistry I	
	OTHER TION CONSTANT CHARMAN TO	
	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*:	
	CHM 1200 - General Chemistry II	
	PHY 1300 – Advanced General Physics I	
	Titi 1000 – Advanced General Hysics 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 (3 crs.)	3
	EGR 2300 – Introduction to Engineering Thermodynamics (3 crs.)	3
	Colort one (1) from the following:	
	Select one (1) from the following:  EPS 3100 - Meteorology	
	EPS 3200 - Oceanography EPS 3300 - Physical Geology	
EPS 3600 - Plane	EPS 3500 - Introduction to Astronomy	
	EPS 3600 - Planetology: A Trip Through the Solar System EPS 3800 - Introduction to Earth Science	
	EFS 3000 - INDOUGUOU TO EARTH SCIENCE	
	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 <sup>^</sup>	

### **CURRENT**

Г	Turz 400 A 1 1 0 A 1 D	
	MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)	
	MAT 1500 - Calculus I (Recommended)	
	MAT 1600 - Calculus II (Recommended)	
	MAT 2100 - Calculus III	
	MAT 5500 - Differential Equations	
	MAT 5600 - Linear Algebra	
	Additional Science and Mathematics Electives (2 Courses, 6 to 7 Credits)	6 -7
	Elective Credits in CHM, CS, EGR, EPS, MAT, PHY, or SCI	
	<b>ELECTIVES</b> : 0 - 1 credits sufficient to meet the required total 60 credits for the degree.	0 - 1
	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.	
	^ Depending on Math placement, students may be required to select MAT 1000	

### **PROPOSED**

Add/Delete/Change	A.S. PHYSICS	
	HEGIS: 5619.00	
	PROGRAM CODE: 01042	
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	REQUIRED CORE: (4 Courses, 13 Credits)	13
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	PHY 1300 – Advanced General Physics I	
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	PHY 1400 – Advanced General Physics II	4
	EGR 2200 – Introduction to Electrical Engineering (3 crs.)	3
	EGR 2300 – Introduction to Engineering Thermodynamics (3 crs.)	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)	6
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# **PROPOSED**

MAT 4400 Available Operation and Dry Oplanting Mathematics (Decreased and	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)	
MAT 1500 - Calculus I (Recommended)	
MAT 1600 - Calculus II (Recommended)	
MAT 2100 - Calculus III	
MAT 5500 - Differential Equations	
MAT 5600 - Linear Algebra	
Additional Science and Mathematics Electives (2 Courses, 6 to 7 Credits)	6 -7
Elective Credits in CHM, CS, EGR, EPS, MAT, PHY, or SCI	
<b>ELECTIVES</b> : 0 - 1 credits sufficient to meet the required total 60 credits for the degree.	0 - 1
TOTAL CREDITS: 60	60
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