## CURRICULUM TRANSMITTAL COVER PAGE

## Department: Physical Sciences <br> Date: $2 / 17 / 22$

## Title of Course/Degre//Concentration/Certificate:AS Physics

Changes) Initiated: (Please check)

| $\square$ | Closing of Degree |
| :--- | :--- |
| $\square$ | Closing of Certificate |
| $\square$ | New Certificate Proposal |
| $\square$ | New Degree Proposal |
| $\square$ | New Course |
| $\square$ | New 82 Course (Pilot Course) |
| $\square$ | Deletion of Courses) |


$\square$ Change in Program Learning Outcomes Other (please describe): $\qquad$

## Please attach material to illustrate and explain all changes

## DEPARTMENTAL ACTION

Action by Department and/or Departmental Committee, if required:
Date Approved: 18 Fe G. 2022 Signature, Committee Chairperson: $\qquad$
If submitted Curriculum Action affects another Department, signature of the affected Departments) is required:
Date Approved: $\qquad$ Signature, Department Chairperson: $\qquad$
Date Approved: $\qquad$ Signature, Department Chairperson: $\qquad$
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Date Approved: $\qquad$ Signature, Department Chairperson: $\qquad$
Date Approved: $\qquad$ Signature, Department Chairperson: $\qquad$
I have reviewed the attached material/proposal
Signature, Department Chairperson: $\qquad$

TO: $\quad$ Special Meeting of the Curriculum Committee Meeting
FROM: Dr. John Mikalopas, Chair, Department of Physical Sciences
DATE: $\quad 2 / 17 / 22$

RE: $\quad$ 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.

| 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 major |  |
|  | 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 |  |
|  |  |  |
|  | 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 |  |
|  |  |  |
|  | 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 |
|  |  |  |
|  | 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 |
|  | 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) |  |
| :---: | :---: | :---: |
|  | 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 |  |
|  |  |  |
|  | ELECTIVES: $0-1$ 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 |  |


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