KINGSBOROUGH COMMUNITY COLLEGE The City University of New York

CURRICULUM TRANSMITTAL COVER PAGE

Department: Math and Computer Science	Date:
A.S. Mathematics	
fitle Of Course Or Degree:	
Classic (All Citatal (Diagra check)	
<u>Change(s) Initiated:</u> (Please check)	
☐ Closing of Degree	☐ Change in Degree or Certificate Requirements
☐ Closing of Certificate	Change in Degree Requirements (adding concentration)
New Certificate Proposal	Change in Pre/Co-Requisite
☐ New Degree Proposal	Change in Course Designation
☐ New Course	Change in Course Description
☐ New 82 Course	Change in Course Title, Numbers Credit and/or Hour
Deletion of Course	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
*	D. Individual and Society
	☐ E. Scientific World
Other (please describe):	
PLEASE ATTACH MATERIAL TO ILLUS	TRATE AND EXPLAIN ALL CHANGES
DEPARTMENTAL ACTION	
Action by Department and/or Depart	tmental Committee if required:
Action by Department and/of Depart	tmental Committee, if required.
2/21/2018	Human
Date Approved: 2/21/2018 Sign:	ature, Committee Chairperson:
I have reviewed the attached materia	d/proposal
	and the second s
Signature, Department Chairperson:	- 16 yanx
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TO:

Spring 2018 Curriculum Committee

FROM:

Department of Mathematics & Computer Science

DATE:

February 21, 2018

RE:

Change in Degree Requirements for the A.S. in Mathematics

The Department of Mathematics & Computer Science is proposing a change in Degree Requirements for the A.S. in Mathematics.

Rationale for Change:

Adjustments to degree requirements per:

- 1. Credit changes for MAT 1500, MAT 1600, MAT 2100 and BA/MAT 2200.
- 2. Addition of MAT 3000: Introduction to Mathematical Concepts in Prof (1 credit) as requirement for the major.
- 3. Deletion of HE 1400 as a major requirement.

A.S. MATHEMATICS

College Requirements:

Successful completion of CUNY Tests in Reading and Writing and the COMPASS Math Skills Test with passing examination scores, unless otherwise exempt, or developmental courses may be required.

Civic Engagement Experiences:

Two (2) Civic Engagement experiences satisfied by Civic Engagement Certified or Civic Engagement Component courses or approved outside activity.

Writing Intensive Requirement:

One (1) Writing Intensive course in any discipline from any category below is required. Participation in a Learning Community that includes ENG 1200 or ENG 2400 also satisfies this requirement.

Refer to course descriptions for prerequisite, corequisite and/or pre-corequisite requirements

Required Core (4 Courses, 12 Credits):

When Required or Flexible Core Courses are specified for a category, they are required for the major.

ENG 1200 Freshman English I (3 crs.)

ENG 2400 Freshman English II (3 crs.)

Mathematical & Quantitative Reasoning Course - MAT 1500 - Calculus I (4 crs.) (3 crs.)* ^

Life & Physical Sciences Course (3 crs.)

*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.

Flexible Core (6 Courses, 19 Credits):

One course from each Group A to E.

A. World Cultures and Global Issues Designated Course

B. U.S. Experience in its Diversity Designated Course

C. Creative Expression Designated Course

D. Individual and Society Designated Course

E. Scientific World Designated Course, if not taken for Required Core*

- 1. MAT 1600 Calculus II (4 crs.) (3 crs.)* or
- 2. CS 1200 Introduction to Computing (4 crs.)* or

No more than two courses can be selected from the same discipline

Major Requirements (8 Courses, 25 Credits):

If not taken for the CUNY Required or Flexible Core, the following are required:

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MAT 2100 – Calculus III (4 crs.) (3 crs.)
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MAT 5500 – Differential Equations (3 crs.)

MAT 5600 - Linear Algebra (3 crs.)

MAT/BIO 9100 – Biostatistics (4 crs.) or MAT/BA 2200 – Business Statistics (4 crs.) (3 crs.)

CS 3500 – Discrete Structures (4 crs.)

MAT 3000 – Introduction to Mathematical Concepts in Proof (1 cr.)

HE 1400 - Critical Issues in Personal Health (1 cr.)

AND

Select two (2) courses from the following:

^{*}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.

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CS 13A0 – Advanced Programming Techniques (4 crs.)
CS 1400 – Computer and Assembly Language Programming (4 crs.)
MAT 1100 – Finite Mathematics (4 crs.)
MAT 3200 – Introduction to Set Theory (4 crs.)
MAT 7100 – Applications of Linear Algebra and Vector Analysis (4 crs.)
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Electives:

0 credits sufficient to meet required total of 60 credits ^ Note that MAT 9900 is the prerequisite to MAT 1500. MAT 9900 (if required) and 0-1 credit elective; **or** 3-4 credit elective

TOTAL CREDITS: 60