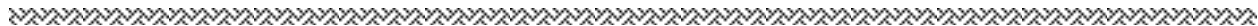




**ARTICULATION AGREEMENT FORM**

**A. SENDING AND RECEIVING INSTITUTIONS**

Sending College: Borough of Manhattan Community College  
Department: Mathematics  
Program: Mathematics  
Degree: Associate in Science



Receiving College: Harpur College of Arts and Sciences, Binghamton University (SUNY)  
Department: Mathematical Sciences  
Program: Mathematics  
Degree: Bachelor of Arts (B.A.)

**B. ADMISSION REQUIREMENTS FOR SENIOR COLLEGE PROGRAM**

Students with an A.A. or An A.S. degree must have a minimum of a 3.0 cumulative grade point average for acceptance to Binghamton University. Student below the 3.0 minimum GPA may be considered for conditional Acceptance when:

- All relevant transfer admissions criteria are met;
- Space is available in the entering class; and
- A completed application is received by March 15 for fall admission and November 15 for spring admission.

Harpur College requires at least 44 credits taken in residence at Binghamton University and a total of at least 126 credits (including transfer credit) to graduate. Courses must have a grade of C- or better to be accepted as transfer credit into Harpur College. Courses for some majors may require a higher grade to be accepted as credit toward the major. Math courses require a grade of “C” or higher to be accepted as credit toward the major. A student who has received credit for a course may not take one of its prerequisites for credit at a later time.

Total transfer credits granted toward the baccalaureate degree: **60**  
Total additional credits required at the senior college to complete baccalaureate degree: **66**  
Total credits required to complete the baccalaureate degree: **126**

## C. Transfer Credit Awarded

Borough of Manhattan Community College graduates who complete the Associate in Arts (A.A.) degree in Mathematics will receive 60 credits toward the Bachelor of Arts (B.A) degree in Mathematics at Harpur College of Arts and Sciences, Binghamton University (SUNY). To be prepared to pursue the B.A. in Mathematics at Harpur College students must take the courses indicated in the footnotes below.

### Pathways Mathematics Curriculum

<i>Common Core</i>	
<b><i>Required Common Core</i></b>	
English Composition	6
Mathematical & Quantitative Reasoning <sup>1</sup>	3
Life & Physical Sciences <sup>2</sup>	3
<i>Total Required Common Core</i>	12
<b><i>Flexible Core</i></b>	
Creative Expression <sup>3</sup>	6
World Culture & Global Issues <sup>4</sup>	3
U.S. Experience in its Diversity <sup>5</sup>	3
Individual & Society <sup>6</sup>	3
Scientific World <sup>7</sup>	3
<i>Total Flexible Core</i>	18
<i>Total Common Core</i>	30
<b>Curriculum Requirements</b>	
MAT 301 – Analytic Geometry & Calc I	4
MAT 302 – Analytic Geometry & Calc II	4
MAT 303 – Analytic Geometry & Calc III	4
MAT 315 – Linear Algebra	3
Program Electives: Choose 3 or 4 for a total of 10 credits: MAT 200, MAT 209, MAT 320, MAT 501, MAT 505, MAT 601, CSC 210	10
MLD Course	3
HED 100 – Health Education	2
<i>Total Curriculum Credits</i>	30
<b><i>Total Program Credits</i></b>	<b>60</b>

1. Students are required to take MAT 206.

2. Students are required to take BIO 210, CHE 201, PHY 210, or PHY 215.

3. Students are advised to take ART 251, MUS 102, MUS 103, THE 100 to satisfy GEN Ed requirements.

4. Modern Foreign Language course (Spanish, French, Italian, Chinese, or Arabic)

5. Students are advised to take SOC 125, AFN 123 or AFN 124 to satisfy GEN ED requirements

6. Students are advised to take SOC 100 or ANT 115/ LIN 100 to satisfy GEN ED requirements.

7. Students are advised to take BIO 220, CHE 202, PHY 220, or PHY 225.

### D. Courses to be Completed at the Senior College for the Bachelor of Arts Degree

Course and Title	Credits
<b><i>General Education (Liberal arts, Core, Distribution) and other Required Courses</i></b>	
Harpur Writing Requirement Courses	8-12
Global Interdependencies or Pluralism	4
Humanities	4
Physical Activity Course	1
Foreign Language <sup>8</sup>	0-4
Oral Communication or Aesthetics	2-4
<b>Subtotal</b>	<b>19-29</b>
<b><i>Prerequisite and Major Courses</i></b>	
MATH 227 Infinite Series	2
MATH 330 Number Systems	4
<b><i>One paired set of courses selected from:</i></b>	8
MATH 401 Modern Algebra I - MATH 402 Modern Algebra II	
MATH 401 Modern Algebra I – MATH 404 Advanced Linear Algebra	
MATH 401 Modern Algebra I - MATH 407 Intro Theory of Numbers	
MATH 478 Real Analysis I- MATH 479 Real Analysis II	
MATH 375 Complex Variables - MATH 478 Real Analysis I	
MATH 478 Real Analysis I – MATH 461 Typology	
MATH 461 Typology – MATH 462	
MATH 356- MATH 372	
MATH 371 Ordinary Differential Equations- MATH 471 Partial Differential Equations	
MATH 372- MATH 471 Partial Differential Equations	
MATH 371 Ordinary Differential Equations – MATH 472 Dynamical Systems	
MATH 372- MATH 472 Dynamical Systems	
MATH 447 – MATH 448 Into to Probability& Statistics I & II	
MATH 447- MATH 450 Actuarial Math I	
MATH 381 Graph Theory –MATH 386 Combinatorics	
CS 333-350, 333-432, 471-472, 333-373;	
3 additional MATH courses numbered above 330	12
<b>Subtotal</b>	<b>26</b>
<b><i>Electives</i></b>	
	<b>11-21</b>
<b>Total Credits to be Completed at Harpur College</b>	<b>66</b>
<b>Total Credits transferred from BMCC</b>	<b>60</b>
<b>Total Credits Required for the B.A. in Mathematics</b>	<b>126</b>

8. Students who have completed a fourth-level high school language with a passing grade or third-level high school language with a Regents score of 85 or better (or, for students who did not take the Regents examination, a course grade of 85 or better) are considered to have completed two semesters of a college-level language and can fulfill the requirement by completing either the third semester college-level course of that language or the second semester college level course of a second foreign language.

## **E. Articulation Agreement Follow-up Procedures**

### **1. Procedures for reviewing, updating, modifying or terminating agreement:**

When either of the degree programs involved in this agreement undergoes a change, the agreement will be reviewed and revised accordingly by faculty from each institution's respective departments, selected by their Chairpersons.

### **2. Procedures for evaluating agreement, i.e., tracking the number of students who transfer under the articulation agreement and their success:**

Each semester Harpur College will provide the Borough of Manhattan Community College the following information: a) the number of BMCC students who applied to the program; b) the number of BMCC students who were accepted into the program; c) and the number of BMCC students who enrolled; d) the aggregate GPA of these enrolled students.

### **3. Sending and receiving college procedures for publicizing agreement, e.g., college catalogs, transfer advisers, Websites, etc.:**

This articulation agreement will be publicizing on the Borough of Manhattan Community College's website, and Binghamton University website. Transfer advisors at BMCC will promote this agreement with eligible students.

## **F. Additional Information (e.g., financial aid, scholarships)**

Binghamton University extends scholarship opportunities to members of Phi Theta Kappa who have displayed above-average academic achievement in the community college setting. Binghamton University invites chapter members of PTK to apply for consideration for these competitive scholarships. **Scholarships are offered for new fall enrollment only and the deadline for consideration is March 15.**

**Effective Date: Fall 2015**