ACADEMIC PROGRAM ARTICULATION AGREEMENT BETWEEN HAGERSTOWN COMMUNITY COLLEGE AND FROSTBURG STATE UNIVERSITY REGARDING TRANSFER FROM ASSOCIATE OF SCIENCE IN ARTS AND SCIENCES (CHEMISTRY CONCENTRATION) TO BACHELOR OF SCIENCE IN CHEMISTRY

This Academic Program Articulation Agreement ("Agreement") is entered into by and between Hagerstown Community College (the "Sending Institution") and Frostburg State University (the "Receiving Institution") (collectively, the "Institutions") to facilitate the transfer of academic credits from Associate of Science in Arts and Sciences (Chemistry Concentration), HEGIS code 491001 and CIP code 240101 for the completion of Bachelor of Science in Chemistry, HEGIS code 190500 and CIP code 400501.

A. Qualifying Students

This Agreement pertains to the transfer of "Qualifying Students", *i.e.*, those students who:

1. Have successfully completed the program at the Sending Institution;
2. Are enrolled in the Sending Institution, in good standing; and
3. Are accepted for admission to the Receiving Institution.

B. Responsibilities of the Institutions

The Institutions agree to implement the transfer of Qualifying Students in accordance with applicable law and the following requirements and protocols:

1. A Qualifying Student may transfer from the Sending Institution into the Receiving Institution for the completion of the Program.

2. Students may transfer up to 70 credit hours. Courses that the Receiving School will accept credits towards completion of the Program include:

Sending Institution Course			Receiving Institution Comparable Course			
Course Number	Course Name	Credits	Course Number	Course Name	Credits	Applied to*
BIO 113	Principles of Biology I	4.0	BIOL 149	General Biology I	4.0	GEP Group C and Free Electives
BIO 114	Principles of Biology II	4.0	BIOL 150	General Biology II	4.0	Free Electives
BIO 203	Human Anatomy & Physiology I	4.0	BIOL 321	Anatomy and Physiology I	4.0	Free Electives
BIO 204	Human Anatomy & Physiology II	4.0	BIOL 322	Anatomy and Physiology II	4.0	Free Electives
CHM 101	Introductory College Chemistry	4.0	CHEM 100	Chemistry and Society	4.0	Free Electives and GEP Group C
CHM 103	General Chemistry I	4.0	CHEM 201	General Chemistry I	4.0	GEP Group C and Major

Sending Institution Course			Receiving Institution Comparable Course			
Course Number	Course Name	Credits	Course Number	Course Name	Credits	Applied to*
CHM 104	General Chemistry II	4.0	CHEM 202	General Chemistry II	4.0	Major
CHM 203	Organic Chemistry I	4.0	CHEM 311 & 312	Organic Chemistry I and Organic Chemistry I Lab	4.0	Major
CHM 204	Organic Chemistry II	4.0	CHEM 321 & 322	Organic Chemistry II and Organic Chemistry II Lab	4.0	Major
CHM 269	Internship I	1.0-3.0		Non-transferable		
CHM 270	Internship II	1.0-3.0		Non-transferable		
ENG 101	English Composition	3.0	ENGL 101	First-Year Composition	3.0	GEP Core
MAT 109	Statistics	3.0	MATH 109	Probability and Statistics	3.0	GEP Core and Free Electives
MAT 160	Precalculus I	4.0	MATH 119	College Algebra	3.0	GEP Core and Free Electives
MAT 161	Precalculus II	4.0	MATH 120	Precalculus	3.0	GEP Core and Free Electives
MAT 203	Calculus I	4.0	MATH 236	Calculus I	4.0	Major and GEP Core
MAT 204	Calculus II	4.0	MATH 237	Calculus II	4.0	Free Electives
MAT 205	Calculus III	4.0	MATH 238	Calculus III	4.0	Free Electives
MAT 206	Differential Equations	4.0	MATH 432	Differential Equations	3.0	Free Electives
PHS 108	Introductory Physical Geology	4.0	PHYS 207	Physical Geology and Geomorphology	4.0	Free Electives
PHY 201	General Physics I	4.0	PHYS 215	General Physics I	4.0	Major and GEP Group C
PHY 202	General Physics II	4.0	PHYS 216	General Physics II	4.0	Major
PHY 203	Principles of Physics I	4.0	PHYS 261	Principles of Physics I	4.0	Major and GEP Group C
PHY 204	Principles of Physics II	4.0	PHYS 262	Principles of Physics II	4.0	Major

3. All Chemistry majors must earn a C or better in General Chemistry I and II, Organic Chemistry I and II, and Quantitative Analytical Chemistry.

4. All Chemistry majors must select one of the following: the Traditional Track, Professional Concentration, Biochemistry Concentration, or Pre-Pharmacy Concentration. The Traditional Track is recommended for students wishing to enter the workforce following graduation. For students entering health professions or biomedical research, the Biochemistry Concentration or Pre-Pharmacy Concentration are suitable choices. The Professional Concentration is a strong program for graduate school preparation.

5. The Receiving Institution shall designate, and shall provide to the Sending Institution, the contact information for a staff person at the Receiving Institution who is responsible for the oversight of the transfer of Qualifying Students. The Sending Institution shall designate, and shall provide to the Receiving Institution, the contact information for a staff person at the Sending Institution who is responsible for the oversight of the transfer of Qualifying Students.

	Sending Institution	Receiving Institution
Name of staff person responsible for oversight	Dr. Kathleen Jordan-D'Ambrisi	Dr. Linda Steele
Title of staff person	Dean of Academic Programs, Curriculum & Assessment	Transfer and Articulation Coordinator
Email address	kmdambrisi@hagerstowncc.edu	lsteele@frostburg.edu
Telephone Number	240-500-2437	301-687-4137

Should the staff person or position change, the institution will promptly provide new contact information to the partner institution and inform the Maryland Higher Education Commission of the change.

Additional contact information:

	Sending Institution	Receiving Institution
Name of person	Dr. Carlee Ranalli	Dr. Holly Currie
Title of person	Acting Director, Mathematics and Science Division	Chair of Physical and Environmental Sciences
Email address	ckranalli@hagerstowncc.edu	hncurrie@frostburg.edu
Telephone Number	240-500-2248	301-687-4359

6. If the Qualifying Student is using federal Title 38 VA Education Benefits (GI Bill® Education Benefits), the Institutions shall adhere to all applicable U.S. Department of Veterans Affairs' regulations, including the regulations governing the awarding prior credit, as regulated under Title 38, Code of Federal Regulations, Sections 21.4253(d)(3) and 21.4254(c)(4).

7. Each Institution shall adhere to all applicable transfer requirements set forth in the Annotated Code of Maryland and the Code of Maryland Regulations.

8. Each Institution shall advise students regarding transfer opportunities under this Agreement, and shall advise students of financial aid opportunities and implications associated with the transfer.

9. Should either Institution make changes to program requirements, the institution will inform the other Institution immediately. The articulation agreement should be updated to reflect the changes and forwarded to the Maryland Higher Education Commission.

C. Term and Termination

1. This Agreement shall be effective on the date that last signed by the appropriate and authorized representatives of each Institution ("Effective Date") and shall remain in effect for one (1) year. This agreement shall automatically renew for one (1) year terms, unless terminated as set forth below.

2. Either Institution may, at its sole discretion, terminate this Agreement upon delivering 60 days written notice to the other Institution and the Maryland Higher Education Commission. The Institutions agree that termination shall include an agreement that students currently enrolled in the program at the time of termination shall be permitted to complete the program as described herein.

3. Both Institutions agree to meet once every year to review the terms of this Agreement.

D. Amendment

1. This Agreement constitutes the entire understanding and agreement of the Institutions with respect to their rights and obligations in carrying out the terms of the Agreement, and supersedes any prior or contemporaneous agreements or understandings.

2. This Agreement may be modified only by written amendment executed by both Institutions.

E. Governing Law

This Agreement shall be governed by, and construed in accordance with, the laws of the State of Maryland.

F. Counterparts

This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement. This Agreement may be executed by way of electronic signature and signature pages may be exchanged electronically, and such signatures will be deemed original signatures.

G. Notice of Agreement

1. The Institutions agree to provide a copy of this Agreement, with any amendments, to the Maryland Higher Education Commission.

2. The Institutions agree to provide copies of this Agreement to all relevant individuals and departments of the Institutions, including but not limited to students, academic department chairs participating in the transfer, offices of the president, registrar's offices, and financial aid offices.

H. No Third-Party Beneficiaries

There are no third-party beneficiaries to this Agreement.

I. Representations and Warranties of the Parties

Both Institutions represent and warrant that the following shall be true and correct as of the Effective Date of this Agreement, and shall continue to be true and correct during the term of this Agreement:

1. The Institutions are and shall remain in compliance with all applicable federal, state, and local statutes, laws, ordinances, and regulations relating to this Agreement, as amended from time to time.

2. Each Institution has taken all action necessary for the approval and execution of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

Hagerstown Community College

By: _____
Dr. James Klauber
President
10/12/2026
Date

_____
Dawn Schoenenberger
Vice President for Academic Affairs and Student Services
10-08-26
Date

_____
Dr. Kathleen Jordan-D'Ambrisi
Dean of Academic Program, Curriculum & Assessment
10-07-2026
Date

Frostburg State University

By: _____
Dr. Shadow JQ Robinson
President
10/27/2026
Date

_____
Dr. Michael Mathias
Provost and Vice President for Academic Affairs
10/21/2026
Date

_____
Dr. Steven Combs
Dean of Humanities, Arts, and Sciences
10/21/26
Date

Appendix A – Transfer Guide

A.S. in Arts and Sciences (Chemistry Concentration) to B.S. in Chemistry
Degree Requirements/Recommended Course Sequence

Course Prefix and Number	Course Title	Credits
	HAGERSTOWN COMMUNITY COLLEGE	
ENGL 101	ENGLISH COMPOSITION	3
MAT 203	Calculus I	4
CHM 103	General Chemistry 1*	4
Gen Ed	Arts/Humanities	3
Gen Ed	Behavioral/Social Science	3
	Semester 1 Total	17
Gen Ed	English	3
CHM 104	General Chemistry 2*	4
Gen Ed	Arts/Humanities	3
PHY 201 or 203	General Physics I or Principles of Physics I	4
MAT 204	Calculus II (recommended elective)	4
	Semester 2 Total	18
PHY 202 or 204	General Physics II or Principles of Physics II	4
CHM 203	Organic Chemistry I*	4
Gen Ed	Diversity	3
Elective	Recommended: MAT 205 (traditional/professional students), BIO 113 or 114 (biochemistry/professional students), or MAT 109 (pre-pharmacy)	3-4
	Semester 3 Total	14-15
Gen Ed	Behavioral/Social Science	3
Elective	Recommended: MAT 205 (traditional/professional students), BIO 113 or 114 (biochemistry/professional students), or MAT 109 (pre-pharmacy)	3-4
CHM 204	Organic Chemistry II*	4
Elective	Recommended: MAT 205 (traditional/professional students), BIO 113 or 114 (biochemistry/professional students), or MAT 109 (pre-pharmacy)	3-4
	Semester 4 Total	13-15
	Total Credits	*62-65*

FROSTBURG STATE UNIVERSITY

Course Prefix and Number	Course Title	Credits
CHEM 191	Introductory Seminar in Chemistry	1
CHEM 304	Computational Techniques	2
CHEM 320	Analytical Chemistry*	4
	Specialization courses	8
	Semester 5 Total	15
CHEM 493	Advanced Chemical Research	2
ENGL	Advanced Composition	3
PSES 305	Research Methods in Physical and Environmental Sciences	1
Gen Ed	Arts or Humanities (dependent upon courses taken at HCC)	3
	Specialization courses	4
	Semester 6 Total	13
CHEM 441 and 445	Physical Chemistry I (lecture and lab)	4
PSES 491	Seminar in Physical and Environmental Sciences	1
CHEM 493	Advanced Chemical Research	1
	Specialization courses/general electives	7-8
	Semester 7 Total	13-14
PSES 492	Capstone Experience	1
CHEM 493	Advanced Chemical Research	1
	Specialization courses/general electives	10-12
	Semester 8 Total	12-14
	Total Credits	***55-58***

*Must earn a grade of C or better

All Chemistry majors must complete one of the following:

- Traditional Track – 12 credits. Recommended for students wishing to enter the workforce after graduation.
- Professional Concentration – 34 credits. Strong program for graduate school preparation.
- Biochemistry Concentration – 27 credits. Suitable choice for students entering health professions or biomedical research.
- Pre-Pharmacy Concentration – 38 credits. Suitable choice for students entering health professions.