



**ACADEMIC PROGRAM ARTICULATION AGREEMENT BETWEEN
FREDERICK COMMUNITY COLLEGE
AND
SHEPHERD UNIVERSITY REGARDING TRANSFER FROM THE A. S.
DEGREE IN STEM TO B.S. WITH A CONCENTRATION IN CHEMISTRY
(TRADITIONAL)**

This Academic Program Articulation Agreement (“Agreement”) is entered into by and between Frederick Community College (FCC) and Shepherd University (the “Receiving Institution”) (collectively, the “Institutions”) to facilitate the transfer of academic credits from the A.S. degree in STEM, for the completion of B.S. with a concentration in Chemistry (Traditional) (the “Program(s)”).

A. Qualifying Students

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

1. Are graduates of the A.S. degree in STEM at FCC;
2. Are enrolled at FCC, in good standing; and maintaining a 2.0 cumulative grade point average in order to transfer;
3. Are accepted for admission to the Shepherd University.

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 into from Frederick Community College into Shepherd University for the completion of the B.S. with a concentration in Chemistry (Traditional).
2. At least 60 credits but not more than 72 credits of general education, elective, and major courses that a student earns at Frederick Community College toward an associate degree shall be transferable to Shepherd University toward a bachelor’s degree.
3. All FCC courses meeting general education requirements at FCC will transfer and apply toward the general education requirements at Shepherd University.
4. Courses that the Shepherd University will accept credits towards completion of the B.S. with a concentration in Chemistry include:

FCC Course			Shepherd University Comparable Course			
Semester 1						
Course Number	Course Name	Credits	Course Number	Course Name	Credits	Applied to*
ENGL 101	English Composition	3	ENGL 101	Writing & Rhetoric I	3	T1-EN
CHEM 101	General Chemistry I	4	CHE 207/CHE M 207L	General Chemistry II with Lab	4	T1-LS
MATH 185	Calculus I	4	MATH 207	Calculus I	4	T1-MA
GenEd	Humanities Elective	3	HUMANITIES	Core Curriculum Humanities (GL/MD/CK)	3	T2-HM
PHED 165 or NUTR 102	Fitness for Living OR Nutrition in a Changing World	3	GSPE 210 or NUTR 120	Fitness for Life OR Food and Wellness	3	T2-WE
Total Credits					17	

FCC Institution Course			Shepherd University Comparable Course			
Semester 2						
Course Number	Course Name	Credits	Course Number	Course Name	Credits	Applied to*
CHEM 102	General Chemistry II	4	CHEM 209/209 L	General Chemistry I with Lab	4	T1-LS
BSCI 150	Principles of Biology I	4	BIOL 211	Fundamentals of Biology I	4	
GenEd	Social/Behavioral Elective	3	SOCIAL SCIENC E	Core Curriculum Social Science (GL/MD/CK)	3	T2-SO
MATH 195	Calculus II	4	MATH 208	Calculus II	4	
Total Credits					15	

FCC Institution Course			Shepherd University Comparable Course			
Semester 3						
Course Number	Course Name	Credits	Course Number	Course Name	Credits	Applied to*
PHYS 151	General Physics I	4	PHYS 221/221 L	General Physics I with Lab	4	T1-HI
COMM 101 or COMM 111	Public Speaking OR Intro Comm Studies	3	COMM 202 or COMM 203	Fundamentals of Speech (GL/MD) OR Communications and new Media (CK)	3	T2-HM
PSYC 101	General Psychology	3	SOCIAL SCIENC E	PSYC 101 Introduction to Psychology	3	T2-SO
CHEM 201	Organic Chemistry	4	CHEM 315/315 L	Organic Chemistry I with Lab	4	

GenEd	ARTT 101/MUSC 111/MUSC 101/ THEA 101	3	ARTS	ART 103/MUSC 103/MUSC 111/THEA 204 (GL/MD)	3	T2-AR
Total Credits					17	

FCC Course			Shepherd University Comparable Course			
Semester 4						
Course Number	Course Name	Credits	Course Number	Course Name	Credits	Applied to*
ENGL 102	English Composition & Literature (Elective)	3	ENGL 102	Writing and Rhetoric II	3	T1-ENG
PHYS 252	General Physics II	4	PHYS 222/222 L	General Physics II with Lab	4	
SOCY 101	Introduction to Sociology	3	SOCI 203	General Sociology	3	T2-SO
CHEM 202	Organic Chemistry II	4	CHEM 316/316 L	Organic Chemistry II with Lab	4	
Total Credits					14	

5. Courses that students will take at Shepherd University towards completion of the B.S. with a concentration in Chemistry (Traditional) include:

Fall Year 3 Shepherd University		Credit	Spring Year 3 Shepherd University		Credit
CHEM 301	Inorganic Chemistry	3	CHEM 322	Instrumental Analysis	3
CHEM 321	Analytical Chemistry	3	CHEM 322L	Instrumental Analysis Lab	1
CHEM 321L	Analytical Chemistry Lab	1	CHEM 340	Physical Chemistry I	3
Minor	Minor	3-4	CHEM 340L	Physical Chemistry I Lab	1
HISTORY	Core Curriculum History	3	CHEM 450	Research in Chemistry	3
			Minor	Minor	3-4
Total Credits		13-14	Total Credits		12-13

Fall Year 4 Shepherd University		Credit	Spring Year 4 Shepherd University		Credit
CHEM 440	Physical Chemistry II	3	CHEM 325	Computers in Science	3
CHEM 440L	Physical Chemistry II Lab	1	CHEM 450	Research in Chemistry	1
CHEM 450	Research in Chemistry	2	Science Elective	Science Elective	3-4
Science Elective	Science Elective	3-4	Minor	Minor	3-4
Minor	Minor	3-4	Minor	Minor	3-4
Minor or Elective	Minor or Elective	3-4			
Total Credits		15-18	Total Credits		13-16

6. Shepherd University shall designate, and shall provide FCC, the contact information for a staff person at the Shepherd University who is responsible for the oversight of the transfer of Qualifying Students. FCC shall designate, and shall provide to the Shepherd University, the contact information for a staff person at the FCC who is responsible for the oversight of the transfer of Qualifying Students.

	FCC	Shepherd University
Name of staff person responsible for oversight	Dr. Jacob N. Ashby	Dr. Ben Martz
Title of staff person	Assistant Dean, Assessment and Articulation	Interim Provost and Vice President of Academic Affairs
Email address	jashby@frederick.edu	bmartz@shepherd.edu
Telephone Number	301-624-2802	304 876 5176

7. Shepherd University and Frederick Community College currently have a dual admissions agreement. This agreement will not preclude students from participation and students may apply for and receive the benefits of dual admissions. Those students would then be subject to the policies of said program should they apply.
8. 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).
9. Each Institution shall adhere to all applicable transfer requirements set forth in the Annotated Code of Maryland and the Code of Maryland Regulations.
10. 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.
11. Should either Institution make changes to program requirements, the institution will inform the partner 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 it is signed by all appropriate and authorized representatives of each Institution.

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.
3. Both Institutions agree to review the terms of the agreement once every 2 year(s).

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.

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

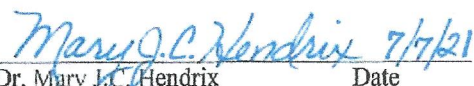
1. There are no third-party beneficiaries to this Agreement.


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 executed this Agreement by their duly authorized representatives.

 7/7/21
 Dr. Mary J. C. Hendrix Date
 President
 Shepherd University

 7/1/21
 Dr. Jacquelyn Cole Date
 Department Chair of Chemistry
 Shepherd University

 7/1/21
 Dr. Robert Warburton Date
 Dean for the College of Science, Technology,
 Engineering, and Mathematics
 Shepherd University

 7/15/21
 Dr. Tony D. Hawkins, Date
 Provost/Executive Vice President
 Academic Affairs, Continuing Education,
 and Workforce Development
 Frederick Community College

 7/15/21
 Teresa Calzonetti, Date
 Department Chair of Science
 Frederick Community College

2+2 Chemistry - Traditional Transfer Agreement with Shepherd U and Frederick CC

Frederick Community College Course				Shepherd University Equivalent Course			
YEAR ONE				YEAR ONE			
Fall Course ID	Course Title	Cred.	CORE	Fall Course ID	Course Title	Cred.	CORE
ENGL 101	Written English I	3		ENGL 101	Writing and Rhetoric I	3	T1-ENG
CHEM 101	General Chemistry I	4		CHEM 207/207L	General Chemistry I with Lab	4	T1-LS
MATH 185	*Calculus I	4		MATH 207	Calculus I	4	T1-MA
GenEd ¹	*Humanities Elective ¹	3		HUMANITIES	Core Curriculum Humanities (GL/MD/CK)	3	T2-HM
PHED 165 or NUTR 102	Fitness for Living <u>or</u> Nutrition in a Changing World	3		GSPE 210 or NUTR 120	Fitness for Life or Food for Wellness	3	T2-WE
FALL TOTAL	YEAR 1	17hrs		FALL TOTAL	YEAR 1	17hrs	
Spring Course ID	Course Title	Cred.	CORE	Spring Course ID	Course Title	Cred.	CORE
CHEM 102	General Chemistry II	4		CHEM 209/209L	General Chemistry II with Lab	4	T1-LS
BSCI 150	Principles of Biology I	4		BIOL 211	Fundamentals of Biology I	4	
GenEd ¹	*Social/Behavioral Elective ¹	3		SOCIAL SCIENCE	Core Curriculum Social Science (GL/MD/CK)	3	T2-SO
MATH 195	Calculus II	4		MATH 208	Calculus II	4	
SPRING TOTAL	YEAR 1	15hrs		SPRING TOTAL	YEAR 1	15hrs	
YEAR TWO				YEAR TWO			
Fall Course ID	Course Title	Cred.	CORE	Fall Course ID	Course Title	Cred.	CORE
PHYS 151	*General Physics I	4		PHYS 221/221L	General Physics I with Lab	4	
COMM 103; COMM 101 or COMM 111	Public Speaking; Intro Comm Studies or Intro Mass Comm	3		COMM 202; COMM 203	Fundamentals of Speech; (GL/MD) Communication and New Media (CK)	3	T2-HM
PSYC 101	General Psychology	3		PSYC 101	Introduction to Psychology (MD)	3	T2-SO
CHEM 201	Organic Chemistry I	4		CHEM 315/315L	Organic Chemistry I with Lab	4	
GenEd ¹	ARTT100/MUSC111/MUSC101/THEA101	3		ARTS	ART103/MUSC103/MUSC111/THEA204 (GL/MD)	3	T2-AR
FALL TOTAL	YEAR 2	17hrs		FALL TOTAL	YEAR 2	17hrs	
Spring Course ID	Course Title	Cred.	CORE	Spring Course ID	Course Title	Cred.	CORE
ENGL 102	*English Composition & Literature (Elective)	3		ENGL 102	Writing and Rhetoric II	3	T1-ENG
PHYS 252	*General Physics II (Elective)	4		PHYS 222/222L	General Physics II with Lab	4	
SOCY 101	Introduction to Sociology	3		SOCI 203	General Sociology (MD)	3	T2-SO
CHEM 202	Organic Chemistry II	4		CHEM 316/316L	Organic Chemistry II with Lab	4	
SPRING TOTAL	YEAR 2	14hrs		SPRING TOTAL	YEAR 2	14hrs	63
Shepherd University Courses							

YEAR THREE				YEAR THREE			
Fall Course ID	Shepherd Course Title	Cred.	CORE	Spring Course ID	Shepherd Course Title	Cred.	CORE
CHEM 301	Inorganic Chemistry	3		CHEM 322	Instrumental Analysis	3	
CHEM 321	Analytical Chemistry	3		CHEM 322L	Instrumental Analysis Lab	1	
CHEM 321L	Analytical Chemistry Lab	1		CHEM 340	Physical Chemistry I	3	
Minor ³	Minor ³	3-4		CHEM 340L	Physical Chemistry I Lab	1	
HISTORY	Core Curriculum History	3	T1-HIST	CHEM 450	Research in Chemistry	1	T2-WM
				Minor ³	Minor ³	3-4	
FALL TOTAL	YEAR 3	13-14hrs		SPRING TOTAL	YEAR 3	12-13hrs	
YEAR FOUR				YEAR FOUR			
Fall Course ID	Shepherd Course Title	Cred.	CORE	Spring Course ID	Shepherd Course Title	Cred.	CORE
CHEM 440	Physical Chemistry II	3		CHEM 325	Computers in Science	3	
CHEM 440L	Physical Chemistry II Lab	1		CHEM 450	Research in Chemistry	1	T3-CAP
CHEM 450	Research in Chemistry	2	T2-WM	Science Elective ²	Science Elective ²	3-4	
Science Elective ²	Science Elective ²	3-4		Minor ³	Minor ³	3-4	
Minor ³	Minor ³	3-4		Minor ³	Minor ³	3-4	
Minor ³ or Elective	Minor ³ or Elective	3-4					
FALL TOTAL	YEAR 4	15-18hrs		SPRING TOTAL	YEAR 4	13-16hrs	
			TOTAL	CREDITS	FOR ALL FOUR YEARS	120-124	

* Part of Shepherd's Core Curriculum

¹ Choose electives that transfer to Shepherd.

² Choose 2 from the list: Any 300-level or above CHEM course; any 300-level or above PHYS course; GSCI 301; GSCI 302

³ Choose a minor with the help of your advisor. Some minors have pre-requisites.

Approved By: Mary J.C. Hendrix 7-7-21
 Mary J.C. Hendrix, President
 Shepherd University
 Date

Approved By: Tony D. Hawkins 7/19/21
 Tony D. Hawkins, Provost
 Frederick Community College
 Date