ARTICULATION AGREEMENT

Lord Fairfax Community College Associate of Science

173 Skirmisher Lane Middletown, Virginia 22645

and

Shepherd University Bachelor of Science in Chemistry

301 N King Street Shepherdstown, WV 25443

Lord Fairfax Community College (hereafter referred to as LFCC), a community college in Middletown, Virginia and Shepherd University (hereafter referred to as SU) a state higher education institution in Shepherdstown, West Virginia agree to offer an articulated program leading to the award of an associate's degree in Science and a bachelor's degree in Chemistry. LFCC course agreements outlined below ensure that the transfer student will matriculate with junior standing.

I. PURPOSE

The purpose of this Articulation Agreement (the "Agreement") is to establish collaboration between SU and LFCC to facilitate the transfer and degree completion of students earning the Associate of Science degree at LFCC to the Bachelor of Science in Chemistry at Shepherd University. This Agreement provides a systematic plan for students to continue their higher education beyond their Associate's Degree from LFCC. The following general principles guide the operation of this Agreement:

II ADMISSIONS

Applicants successfully completing the articulated program with a 2.8 or better grade point average who have not matriculated at any other institution of higher education will be guaranteed transfer admission to SU upon completion of the SU admissions application process.

III. ACCEPTANCE OF CREDITS

A maximum of 72 credit hours from LFCC will be allowed toward fulfillment of the 120 credit hours required for baccalaureate completion.

A. General Education Credits:

All courses meeting general education requirements at LFCC will transfer to SU to satisfy lower-level general education requirements. A completed general education program shall transfer as indicated in Appendix A.

B. Credits Accepted from Other Institutions:

If courses from other institutions or other sources of academic credit are evaluated by LFCC and applied toward the Associate's Degree, the student must submit the score report to be evaluated by SU. Credit will be applied as determined by an SU evaluation.

C. Non-Direct Classroom Credits:

There is currently no maximum number of credits that will be accepted by SU toward degree requirements from non-direct classroom instruction (including CLEP, Co-op Education, AP, and other nationally recognized standardized examination scores). The policy on the transferring in of non-direct classroom credit can be found in SU's online catalog under "Miscellaneous Admission Information" Tech Prep credits will not transfer to SU. Credit awarded for experiential learning (life experience") is not recognized by, and is not transferable to SU.

IV. SCHOLARSHIPS AND FINANCIAL AID

LFCC students who have completed an Associate's Degree will be given every consideration for financial assistance and will be eligible to compete for need and non-need based academic scholarships at SU.

V. BENEFITS TO STUDENTS

SU offers the following benefits for LFCC students who transfer under this Agreement:

Application fee waiver

Transfer Advising Access

Transfer Orientation

Guaranteed Admission with completed A.S. in Science and a 2.8 GPA

Eligibility for T.O.P.S. program which could result in either a 25% or 35% tuition discount

VI. PROMOTION/OUTREACH

LFCC and SU agree to publicize this Agreement via, but not limited to marketing materials and information sessions. SU's logo and transfer pathway will be featured on LFCC's transfer agreements website. LFCC

and SU agree to collaborate to ensure successful transfer day visits, and advising sessions. Any and all marketing promotional, or publication material developed pursuant to this Agreement prepared or developed by one party must be reviewed and approved in writing by the other party prior to use. Neither party shall use the name or mark of the other party without prior consent.

VII. REVIEW OF AGREEMENT

A. LFCC and SU agree to monitor the performance of this Agreement and to review biennially.

B. SU will establish a mechanism to provide information on the academic progress of the LFCC student enrolled as a result of this Agreement, including but not limited to statistical data of aggregated student performance. Specific student outcomes may only be reported in the event of a student consenting to such in writing, and Shepherd will not have any obligation to solicit students to agree to such release of their information.

C. LFCC and SU agree to communicate program changes in a timely manner to avoid disruption of student progress toward degree completion.

VIII. TERMINATION

The Agreement may be terminated by either party for due cause and after adequate notice in writing to all parties. Termination of the Agreement will not affect any students currently enrolled at LFCC in the major at the time of termination if they remain continuously enrolled to graduation and enroll at SU within 6 months of their graduation from LFCC, and they shall be able to transfer credits pursuant to this Agreement

IX. APPENDICES

As part of this agreement, the following have been included:

A. Course-by-course articulations, including satisfaction of general education requirements at both LFCC and

SU

B. A Suggested Transfer Pathway, showing an example of bow students can complete an Associate's Degree from LFCC and a Bachelor's Degree from SU.

C. An academic advising sheet showing requirements for a completed associate's degree in Science at LFCC. LFCC students will follow this curriculum chart to ensure completion of their degree and a smooth transition into SU.

Appendix A: Course by Course Articulation Guide

		Course Title at LFCC	Credit			Course Title at Shepherd University	Credit
		History and Appreciation of					
ART	101	Art I	3	ART	103	Introduction to Visual Art (GL)	3
		History and Appreciation of	P				
ART	102	Art II	3	ART	103	Introduction to Visual Art (GL)	3
ART	111	Introduction to the Arts I	3	ART	103	Introduction to Visual Art (GL)	3
ART	112	Introduction to the Arts II	3	ART	103	Introduction to Visual Art (GL)	3
BIO	101	General Biology II	4	BIOL	104	General Biology	4
BIO	102	General Biology I	4	BIOL	103	General Biology	4
BIO	150	Introductory Microbiology	4	BIOL	302	Microbiology	4
CHM	111	College Chemistry I	4	CHEM	207	General Chemistry I	3
				CHEM	207L		1
CHM	112	College Chemistry II	4	CHEM	209	General Chemistry II	3
				CHEM	209L		1
CHM	241	Organic Chemistry I	3	CHEM	315	Organic Chemistry I	3
CHM	245	Organic Chemistry Lab I	1	CHEM	315L	Organic Chemistry Lab I	1
CHM	242	Organic Chemistry II	3	CHEM	316	Organic Chemistry II	3
CHM	246	Organic Chemistry Lab II	1	CHEM	316L	Organic Chemistry Lab II	1
CST	100	Principles of Public Speaking	3	COMM	202	Fundamentals of Speech	3
ECO	120	Survey of Economics	3	ECON	123	Contemporary Economics (CK,GL)	3
ECO	201	Principles of Macroeconomics	3	ECON	205	Principles of Macroeconomics(CK,GL)	3
ENG	111	College Composition I	3	ENGL	101	Writing and Rhetoric I	3
ENG	111	College Composition II	3	ENGL	102	Writing and Rhetoric II	3
		Survey of American Literature					
ENG	241	I	3	ENGL	204	Survey of American Literature (MD)	3
	c	Survey of American Literature					
ENG	242	I	3	ENGL	204	Survey of American Literature (MD)	3
ENG	246	Major American Writers	3	ENGL	204	Survey of American Literature (MD)	3
ENG	251	Survey of World Literature I	3	ENGL	208	Survey of World Literature I	3

ENG	252	Survey of World Literature II	3	ENGL	209	Survey of World Literature II	3
HIS	111	History of World Civilization I	3	HIST	101	History of Civilization: The Ancient and Medieval Worlds	3
HIS	112	History of World Civilization II	3	HIST	102	History of Civilization: Change and Global Connections in the Early Modern World	3
MTH	173	Calculus With Analytic Geometry I	4	MATH	207	Calculus I	4
		Calculus With Analytic					
MTH	174	Geometry II	4	MATH	208	Calculus II	4
MTH	240	Statistics	3	MATH	314	Statistics	3
MTH	241	Statistics I	3	MATH	314	Statistics	3
MTH	242	Statistics II	3	MATH	314	Statistics	3
MTH	271	Applied Calculus	4	MATH	205	Calculus with Applications	4
MUS	121	Music Appreciation I	3	MUS	111	Introduction to Music (GL)	3
MUS	122	Music Appreciation II	3	MUS	111	Introduction to Music (GL)	3
PHY	201	General College Physics I	4	PHYS	201	College Physics I	3
				PHYS	201L	College Physics Lab I	1
PHY	202	General College Physics II	4	PHYS	202	College Physics II	3
				PHYS	202L	College Physics Lab II	1
PHY	241	University Physics I	4	PHYS	221	General Physics I	3
				PHYS	221L	General Physics Lab I	1
PHY	242	University Physics II	4	PHYS	222	General Physics II	3
				PHYS	222L	General Physics Lab I	1
PLS	135	American National Politics	3	PSCI	101	American Federal Government (CK)	3
PSY	200	Principles Of Psychology	3	PSYC	101	Intro to Psychology (MD)	3
SOC	200	Principles of Sociology	3	SOCI	203	General Sociology (MD)	3

Appendix B, Suggested Transfer Pathway

Lord Fairfax Community College Associate of Science to Shepherd University B.S. in Chemistry, Traditional Concentration

	Tradi	tional Chem	istry Concentrat	ion	
	First Semester LFCC			Transfers to SU as	
	-	Credit			Credit
ENG 111	College Composition I	3	ENGL 101	Writing and Rhetoric I (SU Core Tier 1)	3
CHM 111	College Chemistry I	4	CHEM 207 CHEM 207L	General Chemistry I General Chemistry Lab I	3
humanities fine arts elective	Art 101 or Art 102 or Mus 121 or Mus 122	3		ART 103 or MUSI 111 (SU Core - Tier 2 Arts)	3
IT/Computer elective	CSC 200, ITE 115,ITE 119	3		elective credit used for SU Degree	3
SDV 100	College Success Skills	1	FYEX 101	First Year Experience	1
	Physical Education	1		elective credit used for SU Degree	1
	TOTAL	15	ŷ.		15
	Second Semester LFCC			Transfers to SU as	
		Credit			Credit
ENG 112	College Composition I	3	ENGL 102	Writing and Rhetoric II (SU Core – Tier 1)	3
CHM 112	College Chemistry II	4	CHEM 209L	General Chemistry II	3
			CHEM 209L	General Chemistry Lab II	1
MTH 163	Pre-Calculus	3		elective credit used for SU Degree	3
	HIS 111 or 112	3	HIST 101	(SU Core - Tier 1 History)	3
CST 100	Principles of Public Speaking	3	COMM 202	(SU Core - Tier 2 Humanities)	3
	TOTAL	16			16

	Trad	itional Che	mistry Concentra	ation	
	Third Semester LFCC			Transfers to SU as	
		Credit			Credit
CHM 241	Organic Chemistry I	3.	CHEM 316	Organic Chemistry II	3
CHM 245	Organic Chemistry Lab I	2	CHEM 316L	Organic Chemistry II Lab	1
				elective credit used for SU Degree	1
PHY 201	General College Physics I	4	PHYS 201	College Physics I	3
			Phys 201L	College Physics Lab I	1
Eng Lit	ENG 241 or 242 or 246 or 251 or 252	3		ENGL 204 or 208 or 209 (SU Core - Tier 2 Humanities)	3
social science elective	PLS 135 or PSY 200 or ECO 120 or ECO 201 or SOC 200	3		PSCI 101 or PYSC 101 or ECON 123 or ECON 205 or SOCI 203 (SU Core Tier 2 Social Sciences)	3
	TOTAL	15		TOTAL	15
	Fourth Semester LFCC			Transfers to SU as	
		Credit			Credit
CHM 242	Organic Chemistry II	3	CHEM 316	Organic Chemistry II	3
CHM 246	Organic Chemistry II Lab	2	CHEM 316L	Organic Chemistry II Lab	1
				elective credit used for SU Degree	1
PHY 202	General College Physics II	4	PHYS 202	College Physics II	3
			PHYS 202L	College Physics Lab II	1
social science elective	PLS 135 or PSY 200 or ECO 120 or ECO 201 or SOC 200	3		PSCI 101 or PYSC 101 or ECON 123 or ECON 205 or SOCI 203 (SU Core Tier 2 Social Sciences)	3
MTH 173	Calculus I	4	MATH 207	Calculus I	4
	TOTAL	16			16

		raditional (Chemistry Concen	tration			
	Fifth Semester SU		Sixth Semester SU				
		Credit			Credi		
CHEM 321	Analytical Chemistry	3	CHEM 322	Instrumental Analysis	3		
CHEM 321L	Analytical Chemistry Lab	1	CHEM 322L	Instrumental Analysis Lab			
MTH 208	Calculus II	4	CHEM 340	Physical Chemistry I			
GSPE 201	Fitness for Life (SU Core – Tier 2 Wellness)	3	CHEM 340L	Physical Chemistry Lab I	1		
	minor	3	CHEM 450	Research in Chemistry**	1		
			CHEM 325	Computers in Science	3		
				minor	3		
	TOTAL	14		TOTAL	15		
	Seventh Semester SU			Eighth Semester SU			
		Credit			Credit		
CHEM 450	Research in Chemistry**	2	CHEM 450	Research in Chemistry**	1		
CHEM 440	Physical Chemistry II	3		Science Elective*	4		
CHEM 440L	Physical Chemistry Lab I	1		minor	3		
CHEM 301	Inorganic Chemistry	4		Elective	2		
	minor	3		Social Science Elective (Core - Tier 2 Social Sciences)	3		
	minor	3		,			
	TOTAL	16		TOTAL	13		
				SU DEGREE TOTAL	120		
* Select from: a	any 300 level or above CHEM or	PHYS cour	se, GSCI 301, or (GSCI 302			

Appendix C, Suggested Transfer Pathway

Lord Fairfax Community College Associate of Science to Shepherd University B.S. in Chemistry, Biochemistry Concentration

		Biochemistr	y Concentration				
	First Semester LFCC		Transfers to SU as				
	***	Credit			Credit		
ENG 111	College Composition I	3	ENGL 101	Writing and Rhetoric I (SU Core Tier 1)	3		
CHM 111	College Chemistry I	4	CHEM 207	General Chemistry I	3		
			CHEM 207L	General Chemistry Lab I	1		
BIO 101	General Biology I	4	BIOL 103	General Biology I	4		
IT/Computer	CSC 200, ITE 115,ITE 119	3		elective credit used for SU Degree	3		
SDV 100	College Success Skills	1	FYEX 101	First Year Experience	1		
	TOTAL	15		TOTAL	15		
	Second Semester LFCC			Transfers to SU as			
		Credit	*		Credit		
ENG 112	College Composition II	3	ENGL 102	Writing and Rhetoric II (SU Core Tier 1)	3		
CHM 112	College Chemistry II	4	CHEM 209L	General Chemistry II	3		
			CHEM 209L	General Chemistry Lab II	1		
BIO 102	General Biology II	4	BIOL 104	General Biology I	4		
PED/HLT	Physical Education or Health	1		elective credit used for SU Degree	1		
MTH 163	Precalculus	3		elective credit used for SU Degree	3		
	TOTAL	15		TOTAL	15		

	Bi	ochemistry	Concentration	
	Third Semester LFCC	Transfers to SU as		
		Credit		
CHM 241	Organic Chemistry I	*3		Organic Chemistry II
CHM 245	Organic Chemistry I Lab	2		Organic Chemistry II Lab
				elective credit used for SU Degree
CST 100	Principles of Public Speaking	3	COMM 202	(SU Core)
MTH 271	Applied Calculus	4	MATH 205	Calculus with applications
social science elective	PLS 135 or PSY 200 or ECO 120 or ECO 201 or SOC 200	3	,	PSCI 101 or PYSC 101 or ECON 123 or ECON 205 or SOCI 203 (SU Core Tier 2 Social Sciences)
	TOTAL	15		TOTAL

	Fourth Semester LFCC			Transfers to SU as
		Credit	×	
CHM 241	Organic Chemistry II	3	CHEM 316	Organic Chemistry II
CHM 246	Organic Chemistry II Lab	2	CHEM 316L	Organic Chemistry II Lab
				elective credit used for SU Degree
humanities fine arts	Art 101 or Art 102 or Mus 121 or Mus 122	3		ART 103 or MUSI 111 (SU Core - Tier 2 Arts)
social science elective	PLS 135 or PSY 200 or ECO 120 or ECO 201 or SOC 200	3		PSCI 101 or PYSC 101 or ECON 123 or ECON 205 or SOCI 203 (SU Core Tier 2 Social Sciences)
	HIS 111 or 112	3	HIST 101	(SU Core - Tier 1 History)
Eng Lit	ENG 241 or 242 or 246 or 251 or 252	3		ENGL 204 or 208 or 209 (SU Core - Tier 2 Humanities)
	TOTAL	17		TOTAL

	Bio	ochemistry (Concentration				
	Fifth Semester SU		Sixth Semester SU				
		Credit			Credit		
CHEM 321	Analytical Chemistry	* 3	CHEM 322	Instrumental Analysis	3		
CHEM 321L	Analytical Chemistry Lab	1	CHEM 322L	Instrumental Analysis Lab	1		
PHY 201	College Physics I	3	PHY 202	College Physics II	3		
PHY 201L	College Physics Lab I	1	PHY 202L	College Physics Lab II	1		
Math 317	Statistics	3	CHEM 450	Research in Chemistry**	1		
GSPE 201	Fitness for Life (SU Core - Tier 2 Wellness)	3	CHEM 325	Computers in Science	3		
			BIOL 305	Cell Biology	4		
	TOTAL	14		TOTAL	16		
	Seventh Semester SU			Eight Semester SU			
		Credit	i i		Credit		
CHEM 450	Research in Chemistry**	2	CHEM 450	Research in Chemistry**	1		
CHEM 329	Biochemistry I	3	CHEM 330	Biochemistry II	3		
CHEM 329L	Biochemistry I Lab	1	CHEM 330L	Biochemistry II Lab	1		
	Science Elective*	3		Science Elective*	4		
BIOL 344	Genetics	4	CHEM 340	Physical Chemistry I	3		
	Social Science Elective (SU Core - Tier 2 Social Sciences)	3	CHEM 340L	Physical Chemistry Lab I	1		
	TOTAL	16		TOTAL	13		
				SU DEGREE TOTAL	121		

^{*} Select from: CHEM 436 Advanced Protein Chemistry 3; CHEM 301 Inorganic Chemistry 3; BIOL 302 Microbiology 4; BIOL 416 Molecular Biology 4; BIOL 404 Immunology 4; BIOL 418 Virology 4;

^{**}Serves as both the Writing in the Major and Capstone requirements

Signature Date 11/27/17

Dr. Kimberly Blosser

Vice President of Academic and Student Affairs Lord Fairfax Community College

Mary J.C. Hendrix 10/25/17
Signature Date

Mary J.C. Hendrix

President
Shepherd University

APPROVED AS TO FORM GENERAL COUNSEL