## Addendum C (9) Program-to-Program Articulation

## Luzerne County Community College, Biology Associate in Science Penn State, Baccalaureate Degree in Science

## Offered at Scranton

Luzerne Coun	ty Community College	A Commission	Penn State University, University College						
Associate in Science in Biology http://www.luzerne.edu/academics/catalog2015/degree.jsp?header =presciences.jpg&code=BIO&dept=1&sel=1&d=12			Bachelor of Science in Science http://bulletins.psu.edu/undergrad/programs/baccalaureate/S/SC%20BS						
REQUIREMENT	COURSE	CREDITS	REQUIREMENT	COURSE	CREDITS	DIRECT or SUBSTITUTION			
BIO 151 and BIO 152	Principles of Biology I and Principles of Biology II	4	Major Prescribed Course and Major Supporting Course	*BIOL 110 GN Biology: Basic Concepts and Biodiversity and BIOL XFRGN1	4	Direct Substitution			
BIO 225	Plant Biology	4	Major Supporting Course	BIOL XFRGN1	4	Substitution			
BIO 290 Research for Natural 3 Sciences		Major Supporting Course	BIOL XFRGN2	3	Substitution				
CHE 151 and CHE 152 Students must complete both LCCC courses.	nts must complete both and General 8 Chemistry II		Major Prescribed Courses and General Education Natural Sciences GN.	*CHEM 110/111 and CHEM 112/113 – Chemical Principles I and II and Experimental Chemistry I and II.	8	Direct			
CHE 251			Life Science Option – Major Additional Course; General Option – Major Supporting Course	CHEM 210 Organic Chemistry I + CHEM XFRGEN	3 + 1				
CHE 252 Organic Chemistry II		Life Science Option – Major Additional Course; General Option – Major Supporting Course	CHEM 212 Organic Chemistry II + CHEM XFRGEN	3 + 1	Direct				
CIS 118	Computer Applications for Science Majors	2	Not Transferrable						
ENG 101	English Composition	3	General Education Writing and Speaking (GWS)	ENGL 15 (GWS)Rhetoric and Composition	3	Direct			

MAT 107 Basic Statistics 3		3	Major Additional Course and General Education Quantification (GQ)	STAT 100 (GQ) Statistical Concepts and Reasoning (GQ)	3	Direct
MAT 151	Calculus I	4	Major Prescribed Course and General Education Quantification (GQ)	*MATH 140 (GQ)	4	Direct
SPE 125	Fundamentals of Speech	3	General Education Writing and Speaking (GWS)	CAS 100 (GWS) Effective Speech	3	Direct
Social Science Elective (Suggested SOC 101)	Principles in Sociology	3	General Education Social and Behavioral Sciences (GS)	SOC 1 Introductory Sociology (GS)	3	Direct
Health and Physical Education Elective	See Recommended General Education Courses	1	General Education Health and Physical Activity (GHA)	See recommended GHA list	1	Direct
Humanities Elective	See Recommended General Education Courses	3	General Education Humanities (GH)	See recommended GH list	3	Direct
Humanities Elective	See Recommended General Education Courses	3	General Education Humanities (GH)	See recommended GH list	3	Direct
Social Science Elective	See Recommended General Education Courses	3	Supporting course in major	See recommended GS list	3	Direct
FYE 101	First-Year Experience	1	Elective	PSU XFRGEN	1	Direct
Entrance to Salamos maior maior	Total LCCC 60 Credits	60		Total PSU Credits	58	

<sup>\*</sup>Entrance to Science major requires MATH 140(MATH 151) and at the following BIOL 110 (BIOL 152) and CHEM 110 (CHEM 151).

Penn State requires three credits of International Cultures (IL) and three credits of United States Cultures (US). The two courses that fulfill the IL and US requirements can also be used to fulfill General Education Arts, Humanities or Social Science requirements.

Two units in a single world language other than English are required. However, a student may be admitted with fewer than two units in a world language other than English, but must correct this deficiency by the time the student graduates from Penn State. This deficiency may be corrected by passing one three- or four-credit college-level world language course or by demonstrating proficiency equivalent to two units of high school world language study.

## **General Education Equivalencies**

The following Luzerne CC courses will meet PSU General Education requirements. Students should consult the program-to-program guides above when selecting general education courses and are advised to consult with PSU Undergraduate Admissions staff with questions. Additional Luzerne CC courses may satisfy PSU General Education courses upon submission of syllabi by the student and review and approval by PSU.

	Luzerne County Community College	1	Penn State University, University College					
REQUIREMENT	COURSE	CREDITS	REQUIREMENT	COURSE	CREDITS	DIRECT or SUBSTITUTION		
RECOMMENDED General Education Arts elective courses				Recommend taking two General Education Arts (GA) courses				
CAR 119	Drawing I	3	ART 20	Introduction to Drawing	3	Direct		
MUS 150	Music Appreciation	3	MUSIC 5	An Introduction to Western Music	3	Direct		
ART 110	Art Appreciation	3	ART H 100	Introduction to Art (IL)	3	Direct		
THR 100	Introduction to Theatre	3	THEA 100	The Art of the Theatre (US)(IL)	3	Direct		
RECOMME	NDED General Education <b>Humanities</b> elective con	urses	Re	ecommend taking <u>two</u> General Education <b>Humanities</b> (G.	H) courses			
PHI 150	Introduction to Philosophy	3	PHIL 1	Basic Problems of Philosophy	3	Direct		
PHI 151	Introduction to Ethics	3	PHIL 3	Persons, Moral Values, and the Good Life	3	Direct		
HIS 101	Western Civilization I	3	HIST 1	Western Heritage I (IL)	3	Direct		
HIS 102	Western Civilization II	3	HIST 2	Western Heritage II (IL)	3	Direct		
HIS 201	American History to 1865	3	HIST 20	American Civilization to 1877 (US)	3	Direct		
HIS 202	American History Since 1865	3	HIST 21	American Civilization Since 1877 (US)	3	Direct		
RECOMMEN	DED General Education Mathematics elective co	urses	R	ecommend taking General Education <b>Quantification</b> (GQ	) courses			
MAT 107	Basic Statistics	3	STAT 100	Elementary Statistics	3	Direct		
MAT 121	College Algebra	3	MATH 22	College Algebra II and Analytic Geometry	3	Direct		
MAT 151	Analytic Geometry and Calculus I	4	MATH 140	Calculus With Analytic Geometry I	4	Direct		
RECOMM	ENDED General Education <b>Science</b> elective cours	ies	Recommend taking three General Education Natural science (GN) courses, one with Lab					
CHE 111	Fundamentals of Chemistry	3	CHEM 101	Introductory Chemistry	3	Direct		
CHE 151 and CHE 152 Must complete both courses for PSU equivalency.	General Chemistry I and General Chemistry II	8	CHEM 110/111 CHEM 112/113	Chemical Principles I and Experimental Chemistry I and II	8	Direct		

GEO 111	World Physical Geography	3	GEOG 10	Physical Geography: An Introduction	3	Direct
PHY 131	General Physics I	4	PHYS 250	Introductory Physics I	4	Direct
PHY 132	General Physics I	4	PHYS 251	Introductory Physics II	4	Direct
PHY 151	Calculus-Based Physics I	4	PHYS 211	General Physics: Mechanics	4	Direct
PHY 152	Calculus-Based Physics II	4	PHYS 212	General Physics: Electricity & Magnetism	4	Direct

RECOMM	IENDED General Education Social Science electi	ve courses	Recommend	d taking <u>two</u> General Education <b>Social and behavioral</b>	sciences (C	GS) courses
CJU 130	Introduction to Criminal Justice	3	CRIM 100	Introduction to Criminal Justice	3	Direct
CJU 140	Criminal Law	3	CRIM 12 / SOC 12 / CRIMJ 12	Criminology	3	Direct
CJU 141	Delinquency and Juvenile Justice	3	SOC 13	Juvenile Delinquency	3	Direct
CJU 245	Crime and Criminology	3	CRIMJ XFR200	Criminology	3	Direct
ECO 151	Principles of Economics I	3	ECON 104	Introductory Macroeconomic Analysis and Policy	3	Direct
ECO 152	Principles of Economics II	3	ECON 102	Introductory Microeconomic Analysis and Policy	3	Direct
JOR 100	Introduction to Mass Communications	3	COMM 100 / AM ST 106	The Mass Media and Society	3	Direct
POS 101	American Government	3	PLSC 1	Introduction to American National Government	3	Direct
PSY 103	General Psychology	3	PSYCH 100	Introductory Psychology	3	Direct
PSY 217	Developmental Psychology	3	PSYCH 212	Introduction to Developmental Psychology	3	Direct
SOC 101	Principles in Sociology	3	SOC 1	Introductory Sociology	3	Direct
SOC 216	Contemporary Social Issues	3	SOC 5	Social Problems	3	Direct
SOC 217	The Family	3	SOC 30	Sociology of the Family	3	Direct
BUS 101	Introduction to Business	3	B A 100	Introduction to Business	3	Direct
GEO 112	World Cultural Geography	3	GEOG 40	World Regional Geography (IL)	3	Direct
SOC 103	Introduction to Women's Studies	3	WMNST 100	Introduction to Women's Studies (US)(IL)	3	Direct
SOC 218	Cultural Anthropology	3	ANTH 1	Introductory Anthropology (US)(IL)	3	Direct
SSC 103	Introduction to Women's Studies	3	WMNST 100	Introduction to Women's Studies (US)(IL)	3	Direct
RECOMMENDED General Education Health and Physical Activity elective courses			Recommend tak	ting 3 credits of General Education Health and Physica	al Activity (	GHA) courses
CJU 139	Survey of Drugs	3	BB H 143	Drugs, Behavior, and Health	3	Direct

HPE 107	High/Low Aerobic Dance	1-3	KINES XFR000	KINES XFR	3	Substitution
HPE 110	Basketball	1	KINES XFR000	KINES XFR	1	Substitution
HPE 127	Hatha Yoga I		KINES XFRGEN	KINES XFR	1	Substitution
HPE 128	Intro To Exercise Physiology		KINES XFR100	KINES XFR	3	Substitution
HPE 129	Strength & Conditioning		KINES XFRGHA	KINES XFR	1	Substitution
HPE 130	Nutrition & Wellness		NUTR 100 + NUTR XFRGEN		1.5+.5	Direct
HPE 131	Beginning Golf		KINES 29	Golf I	1	Direct
HPE 132	Basic Martial Arts		KINES XFRGEN	KINES XFR	1	Substitution
HPE 135	Weight/Nutrition Management		KINES XFRGHA	KINES XFR	1	Substitution
HPE 136	Group Stationary Bicycling		KINES XFRGEN	KINES XFR	1	Substitution
HPE 141	Volleyball		KINES XFRGEN	KINES XFR	1	Substitution
HPE 152	Intro to Physical Education		KINES XFR200	KINES XFR	3	Substitution
HPE 154	Safety and First Aid		NURS XFRGHA	NURS XFR	3	Substitution
HPE 155	Personal Health		BBH XFRGHA	BBH XFR	3	Substitution
HPE 165	Phys Ed for Young Children		KINES XFRGEN	KINES XFR	1	Substitution
HPE 201	Personal Training I		KINES XFR200	KINES XFR	3	Substitution
HPE 220	Voices in Sport & Society		KINES XFR100	KINES XFR	3	Substitution
HPE 230	Badminton		KINES XFRGEN	KINES XFR	1	Substitution
HPE 244	Coaching of Sport		KINES XFR400	KINES XFR	3	Substitution
HPE 248	Human Sexuality		BBH 146	Health & Human Sexuality	3	Direct
HPE 263	Introduction to Nutrition		NUTR XFR200	NUTR XFR	3	Substitution