

Exhibit 20

TRANSFER ADVISING GUIDE

Bucks County Community College to University of the Sciences in Philadelphia A.S. Science (1117) → B.S. Humanities and Science

Bucks Associate of Science Science (1117)

USciences Bachelor of Science Humanities and Science

Bucks Courses	Cr.	USciences Courses	Cr.
COMP110 English Composition I	3	WR101 Writing & Rhetoric I	3
COMP111 English Composition II	3	WR102 Writing & Rhetoric II	3
COMM110 Effective Speaking	3	CO101 Introduction to Communication	3
CISC110 Intro to Information Systems	3	CSX01 Computer Science Elective <i>(serves as Elective)</i>	3
CHEM121 Chemistry I	4	CH101 General Chemistry I CH103 General Chemistry Laboratory I	3 1
CHEM122 Chemistry II <i>(serves as Sciences Elective)</i>	4	CH102 General Chemistry II CH104 General Chemistry Laboratory II	3 1
PHYS106 Physics A	4	PY201 Introductory Physics I <i>(replaces PY200)</i>	4
PHYS107 Physics B <i>(serves as Sciences Elective)</i>	4	PY202 Introductory Physics II	4
BIOL121 Biological Principles I	4	BS105 General Biology I BS107 General Biology I Lab [BS103 General Biology I for students transferring prior to Fall 19]	3 1
BIOL122 Biological Principles II <i>(serves as Sciences Elective)</i>	4	BS106 General Biology II BS108 General Biology II Lab [BS104 General Biology II for students transferring prior to Fall 19]	3 1
MATH125 Pre-Calculus <i>(serves as Math Elective)</i>	4	MA107 Pre-Calculus	3
MATH140 Calculus I <i>(serves as Math Elective)</i>	4	MA122 Calculus I	4
MATH141 Calculus II <i>(serves as Math Elective)</i>	4	MA221 Calculus II	4
Diversity: Choose One	3	<i>(serves as GenEd Social Sciences Requirement)</i>	3
ECON111 Principles of Economics: Macro POLI111 American National Government PSYC110 Introduction to Psychology SOC110 Introduction to Sociology		EC101 Introduction to Macroeconomics PO101 Intro to Political Sci & Am Gov't PS101 Introduction to Psychology SO101 Introduction to Sociology	

Social/Behavioral Science: Choose any one from: ECON, POLI, PSYC, SOCI	3	<i>(serves as GenEd MD Requirement)</i>	3
Arts/Humanities Choose One	3	<i>(serves as GenEd MD Requirement)</i>	3
Electives (6 credits) TWO semesters of the same foreign language Choose: FREN, GRMN, ITAL, JPNS, or SPAN	6	Major Distribution course Foreign Language (2 semesters)	6
Bucks credits toward AS	63	Credits Accepted	62
Additional Courses Necessary to Enter USciences with Junior (U3) Status:			
Choose One [KINS 106,110,116,118,120,122,124,129, 130,133,134,135,141,142,145,150,154,155,156, 170,172,175-179,188,189]	2	PE101/102 Physical Education I/II	1
Total Bucks Credits	65	Total Credits Accepted	63

A minimum 2.5 cumulative GPA is required for admission.

A minimum grade of “B” in COMP110 and COMP111. Students who do not meet these minimum grade requirements can still transfer under the terms of this articulation agreement, subject to departmental review and approval.

The courses encompassed in the A.S. degree from Bucks must be completed within the three years preceding matriculation at USciences. Students who take more than 3 years to complete the A.S. degree can still transfer under this articulation agreement, subject to departmental review and approval.

Transfer students are required to participate in HU101-Orientation to Humanities (1 cr, Pass/Fail) which is a relaxed introduction to the various Humanities subjects, with modest weekly reading assignments, and class discussion; no writing requirements.

Graduation from USciences with a BS degree requires completion of specified courses and a total of 121-136 credit hours, depending upon the degree program. In order to enter USciences with U3 (junior) status and to facilitate the completion of a BS degree in two years of study at USciences, all students are strongly advised to complete more than 60 total credits of course work which is eligible for transfer to USciences. Students interested in transferring to USciences are strongly urged to contact the USciences Admission Office early in their enrollment at Bucks for advising.

In addition to the coursework provided in the above table, the following types of courses will be needed to complete the *General Education Discipline Requirements* in USciences' General Education Curriculum:

- 3 credits in Social Sciences
- 6 credits in Humanities

Some or all of these 9 credits of coursework can be taken at Bucks or after transferring to USciences (currently included in the 3rd and 4th year at USciences). If the 9 credits are taken at Bucks, they should be selected from the following lists:

<p>3 credits in Social Sciences: Select ONE</p> <p>CRIJ 100, 110,115,116,120,130,140,160,210,220, 230,250,260,270,275,280,285</p> <p>ECON 111,112,120</p> <p>POLI 130, 111,112,120 ,212</p> <p>PSYC 100,110,160,180,181,185,190,200,205,215, 230,270,280</p> <p>SOCI 120,130,140,150,160</p> <p>SSWK 115,140,215,255</p>	<p>GenEd Discipline Requirements – Social Sciences</p> <p>SO207 Crime, Drugs and Policy EC101, EC201, ECX01 PO101, POX01</p> <p>PS SO, AN SO</p>
<p>6 credits in Humanities: Select TWO</p> <p>AMSL 110,111</p> <p>COMM 111,210,230</p> <p>FREN 110,111,201,202,250,251</p> <p>GRMN 110,111,201,202,250,251</p> <p>HIST 101,111,112,121,126,131,136,139,140,141, 143,144,146,149,151-156,159,160,170,172-178,180, 190,194-199,200-208,210,214,216,217,218,219,239, 245,281,288</p> <p>HUMN 107,108,110-114,120,121,122,125,127, 128,129,166</p> <p>ITAL 110,111,201,202</p> <p>JOUR 155,175,275,276,277,278,280</p> <p>JPNS 101,102</p> <p>LITR 205,206,231,232,234,235,246,254,255,261,262, 264,271,273,275,277,278,279</p> <p>MUSC 100,101,103,105,106,111,112,115,116,124, 129,130,188,201,202,206,211,212,215,216,230</p> <p>PHIL 105,111,115,125,140,145</p> <p>SPAN 110,111,201,202,250,251</p> <p>VAFV 100,110,141,147,148,149,151,157,160,161, 165,167,168,169,171,181,191-196,200,202,203, 210,211,242,246,249,257,260,261,271,282</p> <p>VAFW 100,133,136,137,138,140,145,180,181, 190,280</p> <p>WMST 110</p>	<p>GenEd Discipline Requirements – Humanities</p> <p>HUX01 HUX01 FR, HU GE, HU HI, HU</p> <p>HU</p> <p>IT, HU EN HU EN</p> <p>MU</p> <p>SP AR</p> <p>AR</p> <p>HU</p>

Suggested checklist for 3rd and 4th year at USciences based on current approved curriculum:
(this checklist is for planning purpose only and it is subject to changes; it does not constitute a contract)

THIRD and FOURTH YEAR AT USCIENCES		
HU101	Orientation to Humanities	1
	*Major Distribution Choose 4: English Fine Arts History Philosophy Classic Religious Study	12
	GenEd Humanities Requirement	6
	GenEd Social Science Requirement	3
	Humanities Elective	27
	Science Elective	4
HU494	&Pre-Capstone	3
HU495	&Capstone	3

* students transferring prior to Fall 19 will have to complete Fine Arts, English, Philosophy, History and Ethics

& students transferring prior to Fall 19 will have to complete Senior Seminar instead of HU494-495

Progress in Completing USciences' General Education Curriculum

[For the most recent information, see the current USciences Catalog on its website]

Discipline Requirements (minimum of 41 credits)

Discipline Requirement	Community College Courses // USciences Courses*
Natural Science (ONE semester of lab required) 7 credits	BIOL121 BIOL122
Mathematics 6 credits	MATH125 & MATH140
Communication (written & oral) 9 credits	COMP110 & COMP111 & COMM110
Social Sciences 6 credits	Choose One: ECON111 Principles of Economics: Macro POLI111 American National Government PSYC110 Introduction to Psychology SOC110 Introduction to Sociology Choose One USciences Course: PO (Political Science), PS (Psychology), SO (Sociology), AN (Anthropology), SS (Social Sciences), EC (Economics), CO (excluding CO 101 and CO 204)
Humanities 6 credits	Choose Two USciences Course: AC (Arabic), AR (Art), , CI (Chinese), CA (Classics), EN (excluding EN 101 and EN 102), FR (French), GE (German), LA (Latin), HI (History), HU (Humanities), MU (Music), PL (Philosophy), RS (Religious Studies), SP (Spanish), WC (World Cultures)
Multidisciplinary Inquiry 6 credits (may be substitute by Social Sciences &/or Humanities courses)	Choose any one from: ECON, POLI, PSYC, SOCI Choose One: Arts/Humanities
Physical Education 1 credit	Choose One: [KINS 106,110,116,118,120,122,124,129, 130,133,134, 135, 141,142,145,150,154,155,156, 170,172,175-179,188,189]

Skills, Values, and Attitudes (one approved course for each)

Skills, Values, and Attitudes	Community College Course	USciences Course [RED = courses taken after transferring to USciences]
Ethics		See list of USciences courses approved for Ethics
Information Literacy	BIOL122	
Oral Communication	SOCI110	OR USciences course approved for Oral Communication
Reasoning & Problem Solving	BIOL121	
Technology	BIOL121	
Written Communication	PSYC110	OR USciences courses approved for Written Com

Skills requirement is usually fulfilled by taking courses that satisfy discipline requirements that are also approved for one or more GenEd skill.