

Exhibit 2

TRANSFER ADVISING GUIDE

**Bucks County Community College to University of the Sciences in Philadelphia
A.S. Biology (1003) → B.S. Biology or BS Biomedical Sciences or BS Microbiology**

**Bucks Associate of Science
Biology (1003)**

**USciences Bachelor of Science
Biology or Biomedical Sciences or Microbiology**

Bucks Courses	Cr.	USciences Courses	Cr.
BIOL121 Biological Principles I	4	BS132 Introductory Biology I BS134 Introductory Biology I Lab [BS130 Introductory Biology I for students transferring prior to Fall 19]	3 1
BIOL122 Biological Principles II	4	BS133 Introductory Biology II BS135 Introductory Biology II Lab [BS131 Introductory Biology II for students transferring prior to Fall 19]	3 1
BIOL220 Principles of Ecology	4	BS377 Ecology <i>(serves as Elective)</i>	4
BIOL228 Microbiology	4	BS243 Microbial Science BS244 Microbial Science Lab [BS240 Basics of Microbiology for students transferring prior to Fall 19]	3 1
CHEM121 Chemistry I	4	CH101 General Chemistry I CH103 General Chemistry Laboratory I	3 1
CHEM122 Chemistry II	4	CH102 General Chemistry II CH104 General Chemistry Laboratory II	3 1
CHEM221 Organic Chemistry I	5	CH201 Organic Chemistry I CH203 Organic Chemistry Laboratory I	3 1
CHEM222 Organic Chemistry II	5	CH202 Organic Chemistry II CH204 Organic Chemistry Laboratory II	3 1
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
MATH125 Pre-Calculus	4	MA107 Pre-calculus	3
MATH140 Calculus I (<i>instead of MATH122</i>)	4	MA110 General Calculus	3
Social Sciences/Diversity Choose One ECON111 Principles of Economics: Macro POLI111 American National Government PSYC110 Introduction to Psychology SOC110 Introduction to Sociology	3	<i>(serves as GenEd MD Requirement)</i> EC101 Introduction to Macroeconomics PO101 Intro to Political Sci & Am Gov't PS101 Introduction to Psychology SO101 Introduction to Sociology	3

Arts/Humanities Choose One	3	<i>(serves as GenEd MD Requirement)</i>	3
Electives (6 credits): 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] AND PHYS106 Physics A	2 4	PE101/102 Physical Education I/II PY201 Introductory Physics I	1 4
Bucks credits toward AS	63	Credits Accepted	58
Additional Courses Necessary to Enter USciences with Junior (U3) Status:			
PHYS107 Physics B	4	PY202 Introductory Physics II	4
Social Sciences/Diversity Choose One CRIJ 100, 110,115,116,120,130,140,160,210,220, 230,250,260,270,275,280,285 ECON 111,112,120 POLI 130, 111,112,120 ,212 PSYC 100,110,160,180,181,185,190,200,205,215, 230,270,280 SOC1 120,130,140,150,160 SSWK 115,140,215,255	3	<i>(serves as GenEd Social Sciences Requirement)</i> SO207 Crime, Drugs and Policy EC101, EC201, ECX01 PO101, POX01 PS SO, AN SO	3
Total Bucks Credits	70	Total Credits Accepted	65

A minimum 2.7 cumulative GPA is required for admission.

A minimum grade of “B” in courses with prefixes: BIOL, MATH and COMP. 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.

BS101-Biological Sciences Orientation (1 cr) and BS204-Biological Sciences Colloquium (1 cr) and MI110-Intro to Health and Medical Professions (1cr) will be waived for students transferring to USciences after earning the A.S. in Biology (1003). However, the total credits required for graduation (includes transfer credits) will remain unchanged.

Graduation from USciences with a BS degree requires completion of specified courses and a total of 120-136 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 ECON 111,112,120 POLI 130, 111,112,120 ,212 PSYC 100,110,160,180,181,185,190,200,205,215, 230,270,280 SOCI 120,130,140,150,160 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 COMM 111,210,230 FREN 110,111,201,202,250,251 GRMN 110,111,201,202,250,251 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 HUMN 107,108,110-114,120,121,122,125,127, 128,129,166 ITAL 110,111,201,202 JOUR 155,175,275,276,277,278,280 JPNS 101,102 LITR 205,206,231,232,234,235,246,254,255,261,262, 264,271,273,275,277,278,279 MUSC 100,101,103,105,106,111,112,115,116,124, 129,130,188,201,202,206,211,212,215,216,230 PHIL 105,111,115,125,140,145 SPAN 110,111,201,202,250,251 VAF 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 VAFW 100,133,136,137,138,140,145,180,181, 190,280</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>

Suggested checklist for 3rd and 4th year at USciences for **BS in Biology** 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 YEAR AT USCIENCES		
	GenEd Social Sciences Requirement	3
CH 34X	Biochemistry	3-4
	Quantitative Science Requirement	3-4
	Biology Elective	3-4
	GenEd Humanities Requirement	6
	Free Elective	3
BS 466	Genetics	4
	Natural Science Elective	3-5
	Elective	3

FOURTH YEAR AT USCIENCES		
BS 493	Biological Sciences Seminar I	1
	Elective	3-6
	Biology Elective	3-6
BS 494	Biological Sciences Seminar II	1
	Free Elective(s)	3-9
	Biology Elective(s)	3-9

Suggested checklist for 3rd and 4th year at USciences for **BS in Biomedical Sciences** based on current approved curriculum:

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THIRD YEAR AT USCIENCES		
CH 34X	Biochemistry	3-4
BS 205 or BS 310	Anatomy and Physiology I	3
BS 207	Anatomy and Physiology I Lab – Optional	1
	Clinical Biology elective	3-4
	GenEd Humanities Requirement	6
	GenEd Social Sciences Requirement	3
BS 206 or BS 311	Anatomy and Physiology II	3
BS 208	Anatomy and Physiology II Lab – Optional	1
	Elective	3
BS 466	Genetics	4
ST 310	Biostatistics or Free Elective	3

FOURTH YEAR AT USCIENCES		
BS 493	Biological Sciences Seminar I	1
	Electives	10
BS 494	Biological Sciences Seminar II	1
	Electives	10
	Science Elective(s)	2-4
	Free Elective(s)	6

Suggested checklist for 3rd and 4th year at USciences for **BS in Microbiology – Applied Microbiology & Biotechnology Track** based on current approved curriculum:
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THIRD YEAR AT USCIENCES		
CH 34X	Biochemistry	3-4
BS 343	Microbial Genetics	4
BS 34X	Trends in Microbiology	3
	Applied Microbiology Elective	9-12
	GenEd Humanities Requirement	6
	GenEd Social Sciences Requirement	3

FOURTH YEAR AT USCIENCES		
BS 493	Biological Sciences Seminar I	1
BS 453	Microbial Physiology	4
BS 464	Biotechnology Lecture	3
BS 461	Cell Biology	4
BS 476	Molecular Biology Lab	2
	Free Electives	3
	Applied Micro Electives	6-8

* for students transferring prior to Fall 18 the checklist differs from the one reported above; please contact USciences Transfer Advising office for the specific curriculum.

Suggested checklist for 3rd and 4th year at USciences for **BS in Microbiology – Medical Microbiology & Immunology Track** 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 YEAR AT USCIENCES		
CH 34X	Biochemistry	3-4
BS 343	Microbial Genetics	4
BS 34X	Trends in Microbiology	3
BS 343	Microbial Genetics	4
	Med Micro Electives	9-12
	GenEd Humanities Requirement	6
	GenEd Social Sciences Requirement	3

FOURTH YEAR AT USCIENCES		
BS 493	Biological Sciences Seminar I	1
BS 453	Microbial Physiology	4
	Med Micro Elective	3-4
	Microbiology Program Elective	3-4
BS 355	Clinical Immunology	3
BS 494	Biological Sciences Seminar II	1
BS 308	Parasitology	3
BS 450	Virology	3
	Free Elective	3

* for students transferring prior to Fall 18 the checklist differs from the one reported above; please contact USciences Transfer Advising office for the specific curriculum.

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	CHEM121 CHEM122
Mathematics 6 credits	MATH125 & MATH140
Communication (written & oral) 9 credits	COMP110 & COMP111 & COMM110
Social Sciences 6 credits	<p>Choose One: CRIJ 100, 110,115,116,120,130,140,160,210,220, 230,250,260,270,275,280,285 ECON 111,112,120 POLI 130,111,112,120 ,212 PSYC 100,110,160,180,181,185,190,200,205,215, 230,270,280 SOCI 120,130,140,150,160 SSWK 115,140,215,255</p> <p>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)</p>
Humanities 6 credits	<p>Choose Two USciences Courses: 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)</p>
Multidisciplinary Inquiry 6 credits (may be substituted by Social Sciences &/or Humanities courses)	<p>Choose One: ECON111 Principles of Economics: Macro POLI111 American National Government PSYC110 Introduction to Psychology SOCI110 Introduction to Sociology</p> <p>Choose One: Arts/Humanities</p>
Physical Education 1 credit	<p>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]</p>

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	BS493 Biological Sciences Seminar I
Oral Communication	SOCI110	OR USciences course
Reasoning & Problem Solving	BIOL121	
Technology	BIOL121	
Written Communication	PSYCH110	OR USciences course

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