

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 | BS242 Microbial Science BS243 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 Calculus I | 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 SOCI 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 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 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 VAFW 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 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 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 Microbiology** 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 |
| BS 466 | Genetics | 4 |
| BS 355 | Clinical Immunology | 3 |
| CH 361 | Analytical Chemistry | 3 |
| CH 363 | Analytical Chemistry Lab | 1 |
| | 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 |
| | Microbiology Program Elective | 3-4 |
| | Microbiology Program Elective | 3-4 |
| BS 494 | Biological Sciences Seminar II | 1 |
| | Microbiology Program Elective | 3-4 |
| | Microbiology Program Elective | 3-4 |
| | Non-major, Non-department Elective | 3-4 |
| | Non-major, Non-department Elective | 3-4 |

Suggested checklist for 3rd and 4th year at USciences for **BS in Biomedical Sciences** 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 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 | 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 |

(*) can be replaced by BS212 Functional Anatomy and histology and BS412 Human Physiology

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 substitute 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.