

## Exhibit 4

### TRANSFER ADVISING GUIDE

**Montgomery County Community College (MCCC) to University of the Sciences in Philadelphia  
A.S. Life Sciences (Biomedical Science Concentration) → B.S. Pharmacology and Toxicology**

**MCCC Associate of Science  
Life Sciences (Biomedical Science)**

**USciences Bachelor of Science  
Pharmacology and Toxicology**

Montgomery CCC Courses	Cr.	USciences Courses	Cr.
ENG101 English Composition I	3	WR101 Writing & Rhetoric I	3
ENG102 English Composition II	3	WR102 Writing & Rhetoric II	3
SPC120 Public Speaking	3	CO204 Public Speaking <i>(replaces CO101)</i>	3
BIO151 Principles of Biology I	4	BS109 General Biology I BS110 General Biology I Lab  [BS103 General Biology I for students transferring prior to Fall 19]	3 1
BIO152 Principle of Biology II <i>(serves as Elective Lab Science)</i>	4	BS119 General Biology II BS120 General Biology II Lab  [BS104 General Biology II for students transferring prior to Fall 19]	3 1
BIO131 Human Anatomy and Physiology I	4	BS205 Human Structure & Function I BS207 Human Structure & Function I Lab	3 1
BIO132 Human Anatomy and Physiology II	4	BS206 Human Structure & Function II BS208 Human Structure & Function II Lab	3 1
BIO141 Clinical Microbiology I <i>(request substitution instead of BIO140)</i>	4	BS243 Microbial Science BS244 Microbial Science Lab  [BS240 Basics of Microbiology for students transferring prior to Fall 19]	3 1
MAT131 Introduction to Statistics I	3	STX01 Statistics Elective <i>(serves as Elective)</i>	3
MAT190 Calculus and Analytic Geometry I <i>(serves as General Elective or Science Elective)</i>	4	MA110 Calculus I	3
CHE151 Principles of Chemistry I	4	CH101 General Chemistry I CH103 General Chemistry Laboratory I	3 1
CHE152 Principles of Chemistry II	4	CH102 General Chemistry II CH104 General Chemistry Laboratory II	3 1
CHE261 Organic Chemistry I <i>(serves as General Elective or Science Elective)</i>	4	CH201 Organic Chemistry I CH203 Organic Chemistry Laboratory I	3 1
CHE262 Organic Chemistry II <i>(serves as General Elective or Science Elective)</i>	4	CH202 Organic Chemistry II CH204 Organic Chemistry Laboratory II	3 1
Elective (Core Goals 9, 12 and 13) <b>Choose One:</b>	3	<i>(serves as GenEd MD Requirement)</i>	3

ANT104 Intro to Cultural Anthropology HIS101 History Western Civilization I HIS102 History Western Civilization II HIS205 History of U.S.: From 1877 HIS234 Asian Civilization HIS235 Modern China HIS260 History of Russia PSY137 Intro to Organizational Psychology PSY255 Human Sexuality SOC105 Social Policy & Ethics in Human Services SPC115 Interpersonal Communication		AN103 Introduction to Anthropology HI101 History Western Civilization I HI102 History Western Civilization II HIX01 History Elective HIX01 History Elective HIX01 History Elective HI311 History of Modern Russia PSX01 Psychology Elective PSX01 Psychology Elective SO321 Healthcare Administration CO320 Relational Communication	
Elective (Core Goals 6 and 7) <b>Choose One:</b> ART101 Art History I ART102 Art History II ART103 Art History III ENG201 Survey of English Literature I ENG221 Literature of the Western World I ENG222 Literature of the Western World II ENG246 African-American Literature MUS110 Music Appreciation	3	(serves as GenEd MD Requirement) ARX01 Art Elective ARX01 Art Elective ARX01 Art Elective ENX01 English Elective ENX01 English Elective ENX01 English Elective ENX01 English Elective MUX01 Music Elective	3
Elective (Core Goal 4) <b>Choose One:</b> CIS110 Information Systems for Management CIS111 Comp Science I: Programming and Concepts	3	(serves as Free Elective) CSX01 Computer Science Elective CS201 Computer Programming I	3
Elective (Core Goal 10) Exercise & Health Science <b>Choose One</b>	2-3	PE101/102 Physical Education I/II	1
<b>MCCC credits toward AS</b>	<b>63-64</b>	<b>Credits Accepted</b>	<b>61</b>
<b>Additional Courses Necessary to Enter USciences with Junior (U3) Status:</b>			
PHY121 General Physics I	4	PY201 Introductory Physics I	4
PHY122 General Physics II	4	PY202 Introductory Physics II	4
<b>Total MCCC Credits</b>	<b>71-72</b>	<b>Total Credits Accepted</b>	<b>69</b>

A minimum 2.7 cumulative GPA is required for admission.

A minimum grade of “B” in all science and mathematics courses (Prefixes: CHE, MAT, PHY, BIO). Students who do not meet these minimum grade requirements can still transfer under the terms of this articulation agreement, subject to USciences departmental review and approval.

The courses encompassed in the A.S. degree from MCCC 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 USciences departmental review and approval.

PC181-Pharm/Tox Orientation I (1 cr) and MA107-Precalculus will be waived for students transferring to USciences after earning the A.S. in Life Sciences. 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 MCCC 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:

- 6 credits in Social Sciences
- 6 credits in Humanities

Some or all of these 12 credits of coursework can be taken at MCCC or after transferring to USciences (currently included in the 3<sup>rd</sup> and 4<sup>th</sup> year at USciences). If the 12 credits are taken at MCCC, they should be selected from the following lists:

<p><b>6 credits in Humanities: Select TWO</b></p> <p><b>ARA</b> 101, 102</p> <p><b>ART</b> 101, 102, 103, 104, 105, 107, 108 111, 112, 121,122,130, 131, 135, 138, 139, 140, 141, 145, 148, 149, 151, 152, 155, 161, 171, 190, 197, 198, 199, 201, 202, 211, 213, 221, 222, 224, 231, 232, 233, 236, 237, 238, 239, 245, 246, 247, 261, 262, 265, 266, 267, 271, 272, 275, 299</p> <p><b>DAN</b> 101, 102, 103, 104, 110, 121, 122, 123, 131, 132,134, 135, 151, 155, 156, 157, 158, 161, 162, 204, 205, 206, 223, 224, 225, 251</p> <p><b>ENG</b> 165, 199, 201, 202, 211, 212, 221, 222, 228,235, 236, 237, 238, 245, 246, 248, 255, 256, 257, 265, 266, 275, 285, 299</p> <p><b>FRE</b> 101, 102, 190, 199, 201, 202, 251, 252, 261, 299</p> <p><b>GER</b> 101, 102, 111, 199, 201, 202, 251, 252, 299</p> <p><b>HIS</b> 101, 102, 103, 105, 107, 121, 122, 160, 203, 205, 210, 213, 214, 215, 216, 217, 218, 219, 224, 225, 234 235, 240, 241, 250, 260, 299</p> <p><b>IDS</b> 115, 138</p> <p><b>ITA</b> 101, 102, 215, 216, 251, 252, 299</p> <p><b>JPN</b> 101, 102, 199, 201, 202, 299</p> <p><b>MUS</b> 110, 112, 113, 114, 120, 133, 134, 135, 136, 140, 141, 150, 151, 152, 160, 161, 162, 163, 170, 171, 172, 173, 210, 211, 212, 213, 214, 221, 222, 231, 232, 233, 234, 235, 236, 240, 241, 299</p> <p><b>PHI</b> 100, 101, 110, 115, 116, 117, 120, 199, 215, 216, 221, 299</p> <p><b>SPA</b> 101, 102, 111, 112, 127, 199, 201, 202, 215, 216, 230, 251, 252, 299</p> <p><b>THA</b> 105, 106, 114, 150, 151, 201, 203, 205, 206, 250, 251, 290</p> <p><b>TUR</b> 101</p>	<p><b>GenEd Discipline Requirements – Humanities</b></p> <p>AC</p> <p>AR</p> <p> </p> <p> </p> <p> </p> <p>HU</p> <p> </p> <p>EN</p> <p> </p> <p>FR</p> <p>GE</p> <p>HI</p> <p> </p> <p>HU</p> <p>IT, HU</p> <p>HU</p> <p>MU</p> <p> </p> <p> </p> <p>PL</p> <p> </p> <p>SP</p> <p> </p> <p>HU</p> <p> </p> <p>HU</p>
<p><b>6 credits in Social Sciences: Select TWO</b></p> <p><b>ANT</b> 100, 104; <b>CJS</b> 220</p> <p><b>ECO</b> 121, 122, 130, 211, 221; <b>GEO</b> 130</p> <p><b>POL</b> 101, 124, 125, 201, 202, 231, 240, 245, 250, 280</p> <p><b>PSY</b> 101, 136, 137, 138, 200, 206, 208, 210, 214, 215, 216, 217, 218, 219, 231, 240, 245, 255, 299</p> <p><b>SOC</b> 101, 103, 105, 130, 220, 224, 230, 234, 244, 250, 254, 255</p> <p><b>SPC</b> 110, 111, 115, 120</p>	<p><b>GenEd Discipline Requirements – Social Sciences</b></p> <p>AN; SO 304</p> <p>EC; SS</p> <p>PO</p> <p>PS</p> <p> </p> <p>SO</p> <p> </p> <p>CO</p>

Suggested checklist for 3<sup>rd</sup> and 4<sup>th</sup> 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)*

<b>THIRD YEAR AT USCIENCES</b>		
PC 282	Pharm/Tox Orientation II	1
	General Education Soc Sciences Req.	6
WR 302	Scientific Writing	3
PC 330	Biomethods in PharmTox	3
PH 316	Pharmaceutics and Biopharmaceutics	3
PH 318	Pharmaceutics Lab	1
CH 346	Biochemistry	4
CH 356	Molec Biology/Genetics	3
PC 324	Pharm/Tox Seminar I	1
PC 320	Techniques in Pharm/Tox	2
	PharmTox Elective	3
	General Education Humanities Req.	3

<b>FOURTH YEAR AT USCIENCES</b>		
	General Education Humanities Req.	3
PC 411	Prin Medicinal Chem/Molec Pharmac	4
PC 440	Pharmacology	4
PC 401	Principles of Toxicology I	4
PC 402	Principles of Toxicology II	4
PC 331	Biochem Pharm Tox (Fall)	3
PC 424	Pharm/Tox Seminar II	1
	PharmTox Elective	6

## 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 ( <b>ONE</b> semester of lab required) <b>7 credits</b>	CHE151 CHE152
Mathematics <b>6 credits</b>	MAT131 & MAT190
Communication (written & oral) <b>9 credits</b>	ENG101 & ENG102 & SPC120
Social Sciences <b>6 credits</b>	<b>Choose Two USciences Courses:</b> PO (Political Science), PS (Psychology), SO (Sociology), AN (Anthropology), SS (Social Sciences), EC (Economics), CO (excluding CO 101 and CO 204)
Humanities <b>6 credits</b>	<b>Choose Two USciences Courses:</b> 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 <b>6 credits</b> (may be substituted by Social Sciences &/or Humanities courses)	<b>Choose One:</b> Elective (Core Goals 9, 12 and 13) ANT104, HIS101, HIS102, HIS205, HIS234, HIS235, HIS260, PSY137, PSY255, SOC105, SPC115  <b>Choose One:</b> Elective (Core Goals 6 and 7) ART101, ART102, ART103, ENG201, ENG221, ENG222, ENG246, MUS110
Physical Education <b>1 credit</b>	<b>Choose One:</b> Elective (Core Goal 10) Exercise & Health Science

### 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	BIO152	
Oral Communication	HIS101	OR USciences course
Reasoning & Problem Solving	BIO151	
Technology	BIO151	
Written Communication	HIS101	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.