

### Exhibit 13

#### TRANSFER ADVISING GUIDE

#### Delaware County Community College (DCCC) to University of the Sciences in Philadelphia A.S. Science for Health Professions → B.S. Pharmaceutical Sciences

##### DCCC Associate in Science Science for Health Professions

##### USciences Bachelor of Science Pharmaceutical Sciences

DCCC Courses	Cr.	USciences Courses	Cr.
ENG100 English Composition I	3	WR101 Writing & Rhetoric I	3
ENG112 English Composition II: Writing about Lit.	3	WR102 Writing & Rhetoric II	3
COMM100 Interpersonal Communication	3	CO101 Intro to Communication	3
DPR100 Introduction to Information Technology	3	ISX01 Information Science Elective <i>(serves as Free Elective)</i>	3
MAT152 Precalculus	4	MA107 Precalculus	3
MAT160 Calculus I <i>(serves as Mathematics Required Elective)</i>	4	MA110 General Calculus	3
MAT210 Statistics <i>(serves as Mathematics Required Elective)</i>	3	ST310 Intro to Biostatistics	3
CHE110 General Chemistry I <i>(serves as Scientific Inquiry Elective)</i>	4	CH101 General Chemistry I CH103 General Chemistry Laboratory I	3 1
CHE111 General Chemistry II <i>(serves as Laboratory Science Required Elective)</i>	4	CH102 General Chemistry II CH104 General Chemistry Laboratory II	3 1
CHE200 Organic Chemistry I <i>(serves Open Elective)</i>	4	CH201 Organic Chemistry I CH203 Organic Chemistry Laboratory I	3 1
CHE201 Organic Chemistry II <i>(serves Open Elective)</i>	4	CH202 Organic Chemistry II CH204 Organic Chemistry Laboratory II	3 1
BIO110 Intro 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
BIO111 Intro Biology II <i>(serves as Laboratory Science Required Elective)</i>	4	BS119 General Biology II BS120 General Biology II Lab  [BS104 General Biology II for students transferring prior to Fall 19]	3 1
PHY110 College Physics I <i>(serves as Math/Science Required Elective)</i>	4	PY201 Introductory Physics I	4
PHY111 College Physics II <i>(serves as Math/Science Required Elective)</i>	4	PY202 Introductory Physics II	4
Diversity and Social Justice – Social Sc <b>Choose One:</b> HIS110, 120, 150, 160 POL120 PSY205, 210, 220, 221, 235, 241, 242	3	<i>(serves as GenEd MD Requirement)</i> HIX01 PO101 PSX01, 200, 347, 301, 204, 200, 201	3

SOC110, 120, 180, 210/PSY225, 215		SO101, 205, 306, AN103, SO330	
Social Science Elective <b>Choose One:</b> ECO210, 220 EDU200 HIS100, 110, 120, 130, 140, 150, 160, 201, 250, 254, 255 POL120, 200 PSY200, 202, 204, 205, 210, 220, 221, 225, 235, 241, 242 SOC110, 120, 180, 210/PSY225, 215, 260	3	(serves as GenEd MD Requirement) EC101, 201 PL302 HIX01, X01, X01, 101, 102, X01, X01, X01, X01, X01, X01 P101 PS309, X01, X01, X01, 200, 347, 301, X01, 204, 200, 201 SO101, 205, 306, AN103, SO330, SSX01	3
Social Science Elective <b>Choose One:</b> ECO210, 220 EDU200 POL120, 200 PSY200, 202, 204, 205, 210, 220, 221, 225, 235, 241, 242 SOC110, 120, 180, 210/PSY225, 215, 260	3	(serves as GenEd Social Sciences Requirement) EC101, 201 PL302 P101 PS309, X01, X01, X01, 200, 347, 301, X01, 204, 200, 201 SO101, 205, 306, AN103, SO330, SSX01	3
Humanities Elective <b>Choose One:</b> ARB101, 102 ART100, 110 ASL100, 102 DRA110 ENG241, 250 FRE101, 102 GER101 HUM110, 142, 160 PHI100, 110 SPA101, 102	3	(serves as GenEd Humanities Requirement) AC101, 102 HUX01, ARX01 HUX01 HUX01 ENX01 FR101, 102 GE101 HUX01, HU340, RS310 PL101, ETX01 SP101, 102	3
<b>DCCC credits toward AS</b>	<b>67</b>	<b>Credits Accepted</b>	<b>65</b>
<b>Total DCCC Credits</b>	<b>67</b>	<b>Total Credits Accepted</b>	<b>65</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 DCCC 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.

PE101/102-Physical Education I/II (1 cr) and PH103-Pharmaceutical Sciences Orientation I (1 cr) will be waived for students transferring to USciences after earning the A.S. in Mathematics/Natural Science. 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 DCCC 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
- 3 credits in Humanities

Some or all of these 6 credits of coursework can be taken at DCCC or after transferring to USciences (currently included in the 3<sup>rd</sup> and 4<sup>th</sup> year at USciences). If the 6 credits are taken at DCCC, they should be selected from the following lists:

<p><b>3 credits in Social Sciences: Select ONE</b>                  ECO210, 220                  EDU200                  POL120, 200                  PSY200, 202, 204, 205, 210, 220, 221, 225, 235, 241, 242                  SOC110, 120, 180, 210/PSY225, 215, 260</p>	<p><b>GenEd Discipline Requirements – Social Sciences</b>                  EC101, 201                  PL302                  PO101                  PS309, X01, X01, X01, 200, 347, 301, X01, 204, 200, 201                  SO101, 205, 306, AN103, SO330, SSX01</p>
<p><b>3 credits in Humanities: Select ONE</b>                  ARB101, 102                  ART100, 110                  ASL100, 102                  DRA110                  ENG241, 250                  FRE101, 102                  GER101                  HUM110, 142, 160                  PHI100, 110                  SPA101, 102</p>	<p><b>GenEd Discipline Requirements – Humanities</b>                  AC101, 102                  HUX01, ARX01                  HUX01                  HUX01                  ENX01                  FR101, 102                  GE101                  HUX01, HU340, RS310                  PL101, ETX01                  SP101, 102</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)*

THIRD YEAR AT USCIENCES		
BS 205*	Human Structure and Function I	3
BS 206*	Human Structure and Function II	3
PH 203	Pharmaceutical Sciences Orientation	1
CH 346	Biochemistry	4
PH 316	Pharmaceutics and Biopharmaceutics I	3
PH 318	Pharmaceutics Lab	1
	General Education Humanities Req.	3
	General Education Social Sciences Req.	3
CH 356	Molec Biology/Genetics	3
PH 317	Pharmaceutics and Biopharmaceutics II	4
PH 391	Pharmaceutical Sciences Seminar I	1
	Free Electives	5

FOURTH YEAR AT USCIENCES		
PB 452	Legal Aspects of Drug Development	2
PH 450	Manufacturing Pharmacy I	2
PH 451	Manufacturing Pharmacy Lab	1
PH 402	Controlled Release Dosage Forms	2
PH 398	Research Methods in Pharmaceutics	2
PH 491	Pharmaceutical Sciences Seminar II	1
WR 302	Scientific Writing	3
CH 361	Analytical Chemistry	3
CH 363	Analytical Chemistry Lab	1
PH 400	Cosmetic Science	2
PH 401	Cosmetic Science Lab	2
PC 305	Fundamentals of Pharmacology	3
	Free Electives**	6

\* We strongly recommend transfer students to take BS205 and BS206 in the summer prior to entering USciences as U3 students.

\*\* Students transferring prior to Fall 18 will be required to take an additional 3 credit elective course.

### 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) <b>7 credits</b>	CHE110 & CHE111
Mathematics <b>6 credits</b>	MAT152 & MAT160
Communication (written & oral) <b>9 credits</b>	ENG100 & ENG112 & COMM100
Social Sciences <b>6 credits</b>	<p><b>Choose One:</b>            ECO210, 220            EDU200            POL120, 200            PSY200, 202, 204, 205, 210, 220, 221, 225, 235, 241, 242            SOC110, 120, 180, 210/PSY225, 215, 260</p> <p><b>Choose One USciences Course:</b>            PO (Political Science), PS (Psychology), SO (Sociology), AN (Anthropology), SS (Social Sciences),            EC (Economics), CO (excluding CO 101 and CO 204)</p>
Humanities <b>6 credits</b>	<p><b>Choose One:</b>            ARB101, 102            ART100, 110            ASL100, 102            DRA110            ENG241, 250            FRE101, 102</p>

		GER101 HUM110, 142, 160 PHI100, 110 SPA101, 102  <b>Choose One USciences Course:</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 (may be substituted by Social Sciences &/or Humanities courses)	<b>6 credits</b>	<b>Choose One:</b> HIS110, 120, 150, 160 POL120 PSY205, 210, 220, 221, 235, 241, 242 SOC110, 120, 180, 210/PSY225, 215  <b>Choose One:</b> ECO210, 220 EDU200 HIS100, 110, 120, 130, 140, 150, 160, 201, 250, 254, 255 POL120, 200 PSY200, 202, 204, 205, 210, 220, 221, 225, 235, 241, 242 SOC110, 120, 180, 210/PSY225, 215, 260
Physical Education	<b>1 credit</b>	<b>Waived</b>

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

<b>Skills, Values, and Attitudes</b>	<b>Community College Course</b>	<b>USciences Course</b> [RED = courses taken after transferring to USciences]
Ethics		See list of USciences courses approved for Ethics
Information Literacy	BIO111	
Oral Communication	SOC110	OR USciences course approved for Oral Comm
Reasoning & Problem Solving	BIO110	
Technology	BIO110	
Written Communication		See list of 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.