

Exhibit 11

TRANSFER ADVISING GUIDE

Brookdale Community College (Brookdale) to University of the Sciences in Philadelphia

A.S. Science Option, Mathematics/Science → B.S. Chemistry or B.S. Biochemistry or B.S. Pharmaceutical Chem

**Brookdale Associate in Science
Science Option**

**USciences Bachelor of Science
Biochemistry, Chemistry, Pharmaceutical Chem**

Brookdale Courses	Cr.	USciences Courses	Cr.
ENGL121 English Composition: The Writing Process	3	WR101 Writing & Rhetoric I	3
ENGL122 English Composition: Writing and Research	3	WR102 Writing & Rhetoric II	3
MATH153 Pre-calculus Mathematics	4	MA107 Pre-calculus	3
MATH171 Calculus I	4	MA122 Calculus I	4
MATH172 Calculus II	4	MA221 Calculus II	4
CHEM101 General Chemistry I (serves as Career Studies) <i>(online course NOT accepted for transfer)</i>	5	CH111 Principles of Chemistry I CH113 Principles of Chemistry Lab I	3 1
CHEM102 General Chemistry II (serves as Career Studies) <i>(online course NOT accepted for transfer)</i>	5	CH112 Principles of Chemistry II CH114 Principles of Chemistry Lab II	3 1
CHEM203 Organic Chemistry I (serves as Career Studies)	5	CH211 Principles of Organic Chemistry I CH213 Principles of Organic Chemistry Lab I	3 1
CHEM204 Organic Chemistry II (serves as Career Studies)	5	CH212 Principles of Organic Chemistry II CH214 Principles of Organic Chemistry Lab II	3 1
BIOL101 General Biology I (serves as Career Studies)	4	BS132 Introductory Biology I BS134 Introductory Biology I Lab [BS130 Introductory Biology I for students transferring prior to Fall 19]	3 1
PHYS121 General Physics I (serves as Science with lab)	4	PY211 Physics I	4
PHYS122 General Physics II (serves as Career Studies)	4	PY212 Physics II	4
COMP129 Information Technology	3	CS250 Information Technology <i>(serves as Elective)</i>	3
Social Sciences Elective Choose One	3	<i>(serves as GenEd Social Sciences Requirement)</i>	3
Humanities Elective Choose One	3-4	<i>(serves as GenEd MD Requirement)</i>	3
Humanities or Social Science Elective Choose One	3-4	<i>(serves as GenEd MD Requirement)</i>	3
Brookdale credits toward AS	62-64	Credits Accepted	57

Additional Course Necessary to Enter USciences with Junior (U3) Status in BS Biochemistry:			
BIOL102 General Biology II (serves as Career Studies)	4	BS133 Introductory Biology II BS135 Introductory Biology II Lab [BS130 Introductory Biology I for students transferring prior to Fall 19]	3 1
Total Brookdale Credits	66-68	Total Credits Accepted	61

A minimum 2.7 cumulative GPA is required for admission.

A minimum grade of “B” in all science and mathematics courses (Prefixes: CHEM, MATH, PHYS, BIOL). 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 Brookdale 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.

PE101/102-Physical Education I/II (1 cr), CH120-Orientation for the Chemical Sciences (1 cr) will be waived for students transferring to USciences after earning the A.S. in Science Option, Mathematics/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 Brookdale 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 Brookdale or after transferring to USciences (currently included in the 3rd and 4th year at USciences). If the 9 credits are taken at Brookdale, they should be selected from the following lists:

<p>3 credits in Social Sciences: Select ONE</p> <p>ANTH105, 115, 116 ECON105, 106, 107 HGEO105 POLI101, 105, 115 PSYC105, 106, 206, 207, 208, 226 SOCI101, 202, 215</p> <p>6 credits in Humanities: Select TWO</p> <p>AMSL101, 102 ARAB101, 102 ARTH105, 106, 107 CHNS101, 102 CINE105 ENGL155, 156, 158, 231, 232, 235, 236, 245, 246, 275 FRCH101, 102, 203, 204, 206, 207 GRMN101, 102, 203, 204 HIST105, 106, 107, 108, 125, 135, 136, 137, 145, 146, 215, 217, 225, 227 HUMN125 ITAL101, 102, 203, 204 JPNS101, 102, 203, 204 MUSI115, 116 PHIL105, 115, 225, 226, 227 PHTY105 PORT101, 102 RUSS101, 102 SPAN101, 102, 203, 204, 207, 215 THTR105, 135</p>	<p>GenEd Discipline Requirements – Social Sciences</p> <p>AN103, X01, X01 EC101, EC201, ECX01 SSX01 POX01 PS101, X01, 200, X01, 200, 201 SO101, 205, X01</p> <p>GenEd Discipline Requirements – Humanities</p> <p>HUX01, X01 AC101, 102 AR101, 340, 340 CI101, HUX01 HUX01 EN314, X01, 201, X01, 313, X01, X01, 334, 336, X01 FR101, 102, X01, X01, X01 GE101, 102, 201, 202 HIX01, X01, X01, X01, X01, X01, X01, 304, X01, X01, X01, X01, X01, X01 HUX01 HUX01, X01, X01, X01 HUX01, X01, X01, X01 MUX01, X01 PLX01, PL101, RS310, PLX01, ET303 HUX01 HUX01, X01 HUX01, X01 SP101, SP102, SP201, SP202, SP303, HUX01 HUX01, X01</p>
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Suggested checklist for 3rd and 4th year at USciences for **BS in Chemistry** 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		
MA 222	Calculus III	3
CH 331	Basic Inorganic Chemistry	3
CH 366	Principles of Analytical Chemistry	3
CH 367	Analyt and Phys Methods Lab I	1
CH 321	Physical Chemistry I	4
CH 300	Discussions in Chemistry	1
CO 204	Public Speaking	3
	GenEd Social Sciences Requirement	3
	GenEd Humanities Requirement	3
CH 322	Physical Chemistry II	4
CH 376	Instrumental Analysis	3
CH 368	Analyt and Phys Methods Lab II	1
CH 404	Literature of Chemistry	1

FOURTH YEAR AT USCIENCES		
CH 401	Seminar in Chemistry I	1
CH 423	Physical Chemistry Lab I	2
CH 431	Inorganic Chemistry	3
CH 341	Molecular Structure Biochemistry	3
	GenEd Humanities Requirement	3
CH 402	Seminar in Chemistry II	1
CH 425	Inorganic and Material Synth Lab	2
	Chemistry Electives	6
	Free Electives	5

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

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THIRD YEAR AT USCIENCES		
MA 222	Calculus III	3
CH 331	Basic Inorganic Chemistry	3
CH 300	Discussions in Chemistry	1
CH 321	Physical Chemistry I	4
CH 341	Molecular Structure Biochemistry	3
CH 366	Principles of Analytical Chemistry	3
CO 204	Public Speaking	3
CH 367	Analyt and Phys Methods Lab I	1
CH 322	Physical Chemistry II	4
CH 343	Intermediary Metabolic Biochemistry	3
CH 376	Instrumental Analysis	3
CH 368	Analyt and Phys Methods Lab II	1
CH 404	Literature of Chemistry	1

FOURTH YEAR AT USCIENCES		
	GenEd Humanities Requirement	6
	GenEd Social Sciences Requirement	3
CH 411	Medical Chemistry	3
CH 401	Seminar in Chemistry I	1
CH 423	Physical Chemistry Lab I	2
CH 402	Seminar in Chemistry II	1
	Pharmaceutical Chemistry Progr Elect	9-10
CH 464	Pharmaceutical Analytical Chemistry	3
CH 465	Pharmaceutical Analytical Chem Lab	1
	Free Electives	2

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

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THIRD YEAR AT USCIENCES		
ST 310	Intro to Biostatistics	3
CH 331	Basic Inorganic Chemistry	3
CH 320	Essentials of Physical Chemistry	4
CH 366	Principles of Analytical Chemistry	3
CH 367	Analyt and Phys Methods Lab I	1
CO 204	Public Speaking	3
CH 341	Molecular Structure Biochemistry	3
	GenEd Social Sciences Requirement	3
CH 444	Biochemistry Laboratory I	1
CH 300	Discussions in Chemistry	1
CH 404	Literature of Chemistry	1
BS 466	Genetics	4
CH 343	Intermediary Metabolic Chemistry	3
CH 445	Biochemistry Laboratory II	1

FOURTH YEAR AT USCIENCES		
CH 401	Seminar in Chemistry I	1
CH 423	Physical Chemistry Lab I	2
	Biochemistry Elective	6
BS 461	Cell Biology	4
	GenEd Humanities Requirement	6
	Free Elective	2
CH 402	Seminar in Chemistry II	1
CH 342	Nucleic Acid Biochemistry	3

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	PHYS121 PHYS122
Mathematics 6 credits	MATH153 MATH171
Communication (written & oral) 9 credits	ENGL121 & ENGL122 CO204
Social Sciences 6 credits	Choose One: Social Sciences Elective 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 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)
Multidisciplinary Inquiry 6 credits (may be substituted by Social Sciences &/or Humanities courses)	Choose One: Humanities Elective Choose One: Humanities or Social Science Elective
Physical Education 1 credit	Waived

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		CH300
Information Literacy		CH404
Oral Communication		CH401
Reasoning & Problem Solving	BIOL101	
Technology	BIOL101	
Written Communication		CH423

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