

## Exhibit 10

### TRANSFER ADVISING GUIDE

#### Mercer County Community College (MCCC) to University of the Sciences in Philadelphia A.S. Chemistry → B.S. Physics (Biophysics, Medical Physics, Pre-Med Tracks)

#### MCCC Associate in Science Chemistry

#### USciences Bachelor of Science Physics (Biophysics, Medical Physics, Pre-Med)

MCCC 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
CMN111 Speech: Human Communication OR CMN112 Public Speaking	3	CO101 Intro to Communication OR CO204 Public Speaking	3
CHE101 General Chemistry I	4	CH111 Principles of Chemistry I CH113 Principles of Chemistry Lab I	3 1
CHE102 General Chemistry II	4	CH112 Principles of Chemistry II CH114 Principles of Chemistry Lab II	3 1
CHE201 Organic Chemistry I (serves as Chemistry Elective)	5	CH211 Principles of Organic Chemistry I CH213 Principles of Organic Chemistry Lab I	3 1
CHE202 Organic Chemistry II	5	CH212 Principles of Organic Chemistry II CH214 Principles of Organic Chemistry Lab II	3 1
MAT146 Pre-calculus	4	MA107 Precalculus	3
MAT151 Calculus I (serves as Math Elective)	4	MA122 Calculus I	4
MAT152 Calculus II (serves as Math Elective)	4	MA221 Calculus II	4
MAT251 Calculus III (serves as Technical Elective)	4	MA222 Calculus III	4
PHY115 University Physics I (serves as Technical Elective)	4	PY211 Physics I	4
PHY215 University Physics II (serves as Technical Elective)	4	PY212 Physics II	4
BIO101 General Biology I (serves as Technical Elective)	4	BS132 Introductory Biology I BS134 Introductory Biology I Lab  [BS130 Introductory Biology I for students transferring prior to Fall 19]	3 1
Social Science GenEd Elective <b>Choose One</b>	3	(serves as GenEd Social Sciences Requirement)	3
Humanities GenEd Elective <b>Choose One</b>	3	(serves as GenEd MD Requirement)	3
GenEd Elective (either Soc Sc or Humanities) <b>Choose One</b>	3	(serves as GenEd MD Requirement)	3
<b>Choose One:</b>	2	PE101/102 Physical Education I/II	1

HPE110 Concepts of Health and Fitness HPE111 Living with Health CSW100 College Success and Personal Wellness			
<b>MCCC credits toward AS</b>	<b>66</b>	<b>Credits Accepted</b>	<b>62</b>
<b>Additional Courses Necessary to Enter USciences with Junior (U3) Status in Biochemistry:</b>			
BIO102 General Biology II	4	BS133 Introductory Biology II BS135 Introductory Biology II Lab  [BS131 Introductory Biology II for students transferring prior to Fall 19]	3 1
<b>Total MCCC Credits</b>	<b>70</b>	<b>Total Credits Accepted</b>	<b>66</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 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 departmental review and approval.

PY100 - Physics Orientation (1 cr) will be waived for students transferring to USciences after earning the A.S. in Chemistry. 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:

- 3 credits in Social Sciences
- 6 credits in Humanities

Some or all of these 9 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 9 credits are taken at MCCC, they should be selected from the following lists:

<p><b>3 credits in Social Sciences: Select ONE</b></p> <p>ANT101 Anthropology          ECO103 Basic Economics          ECO111 Macroeconomics          ECO112 Microeconomics          GEO101 Geography          GEO102 Cultural Geography          POL101 The American Political System          POL102 State and Local Government          POL201 International Relations          PSY101 Introduction to Psychology          PSY206 Child Development          PSY207 Developmental Psychology          SOC101 Introduction to Sociology          SOC107 Social Problems</p> <p><b>6 credits in Humanities: Select TWO</b></p> <p>Humanities GenEd Elective</p>	<p><b>GenEd Discipline Requirements – Social Sciences</b></p> <p>AN103 Introduction to Antropology          ECX01 Economics Elective          EC101 Intro to Macroeconomics          EC101 Intro to Microeconomics          SSX01 Social Science Elective          SSX01 Social Science Elective          PO101 Intro to Pol Sci and Amer Gov          POX01 Political Science Elective          POX01 Political Science Elective          PS101 Intro to Psychology          PSX01 Psychology Elective          PS200 Psych of Human Development          SO101 Introduction to Sociology          SOX01 Sociology Elective</p> <p><b>GenEd Discipline Requirements – Humanities</b></p>
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Suggested checklist for 3<sup>rd</sup> and 4<sup>th</sup> year at USciences for **BS in Physics (Biophysics 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		
PY 213	Physics III	3
ST 320	Introduction to Probability	3
PY 301	Modern Physics I	3
PY 310	Mechanics	3
PY 370	Math Methods for the Phys Sci I	3
MA 316	Linear Algebra	3
MA 320	Differential Equations	3
PY 380	Electronics	3
PY 406	Advanced Lab	1
PY 410	Electricity and Magnetism	3
PY 371	Math Methods for the Phys Sci II	3

FOURTH YEAR AT USCIENCES		
PY 495	Undergraduate Research in Physics	2
PY 420	Optics and Wave Phenomena	3
PY 450	Quantum Mechanics	3
CH 341	Molecular Structure Biochemistry	3
PY 431	Statistical Mechanics	3
PY 496	Advanced Research in Physics	3
PY 340	Biophysics I	3
CS 201*	Computer Programming I	3
	GenEd Humanities Requirement	6
	GenEd Social Sciences Requirement	3

\* students transferring Fall 19 and beyond will have to take this additional course

Suggested checklist for 3<sup>rd</sup> and 4<sup>th</sup> year at USciences for **BS in Physics (Medical Physics 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		
PY 213	Physics III	3
ST 320	Introduction to Probability	3
PY 301	Modern Physics I	3
PY 310	Mechanics	3
PY 380	Electronics	3
MA 320	Differential Equations	3
CH 341	Molecular Structure Biochemistry	3
PY 406	Advanced Lab	1
PY 410	Electricity and Magnetism	3
PY 302	Modern Physics II	3
	Free Elective	3

FOURTH YEAR AT USCIENCES		
PY 495	Undergraduate Research in Physics	2
PY 420	Optics and Wave Phenomena	3
PY 412	Physics of Radiation Therapy	3
PY 411	Advanced Electromagnetism	3
	GenEd Humanities Requirement	6
	GenEd Social Sciences Requirement	3
PY 496	Advanced Research in Physics	3
PY 340	Biophysics I	3
PY 305	Physics Seminar	1

Suggested checklist for 3<sup>rd</sup> and 4<sup>th</sup> year at USciences for **BS in Physics (Pre-Med 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		
PY 213	Physics III	3
	Statistics Elective	3
PY 301	Modern Physics I	3
PY 310	Mechanics	3
MA 320	Differential Equations	3
CH 341	Biochemistry	3
PY 406	Advanced Lab	1
PY 410	Electricity and Magnetism	3
PY 302	Modern Physics II	3
BS 466	Genetics	4
	Free Elective	3

FOURTH YEAR AT USCIENCES		
PY 495	Undergraduate Research in Physics	2
PY 380	Electronics	3
PY 420	Optics and Wave Phenomena	3
PY 412	Physics of Radiation Therapy	3
	GenEd Humanities Requirement	6
	GenEd Social Sciences Requirement	3
PY 496	Advanced Research in Physics	3
PY 340	Biophysics I	3
PY 305	Physics Seminar	1

## 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>	CHE101 & CHE102
Mathematics <b>6 credits</b>	MAT146 & MAT151
Communication (written & oral) <b>9 credits</b>	ENG101 & ENG102 & CMN111 or CMN112
Social Sciences <b>6 credits</b>	<b>Choose One:</b> Social Science GenEd Elective  <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)
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> Humanities GenEd Elective  <b>Choose One:</b> GenEd Elective (either Soc Sc or Humanities)
Physical Education <b>1 credit</b>	HPE110 or HPE111 or CSW100

### 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	BIO102	
Oral Communication		PY305
Reasoning & Problem Solving	BIO101	
Technology	BIO101	
Written Communication	PSY101	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.