

**HAGERSTOWN COMMUNITY COLLEGE (HCC) & SHIPPENSBURG UNIVERSITY (SU)  
TRANSFER GUIDE FOR BIOLOGY ARTS AND SCIENCES A.S. AT HCC  
TO BIOLOGY HEALTH PROFESSIONS B.S.**

HCC COURSE	CRS.	SHIPPENSBURG UNIV. EQUIV. COURSE /AREA SATISFIED	CRS.
<b>General Education Requirements (33 credits)</b>			
Arts/Humanities, choose ART, DNC, HUM, MUS, or THR	3	Gen Ed: Arts <sup>A</sup>	3
Arts/Humanities, PHL or Foreign Lang	3	Gen Ed: Foreign Lang <sup>F</sup> , Critical <sup>R</sup> or Ethical <sup>E</sup> Reason	3
Behavioral/Soc Sci, HIS 101	3	HIS 105 His Foundations Global Culture <sup>H</sup>	3
Behavioral/Soc Sci, PSY 101	3	PSY 101 General Psychology <sup>D</sup>	3
BIO 113 Principles of Biology I	4	BIO 161 Princ of Bio: Cell Struc & Func <sup>N</sup> /Req	4
BIO 114 Principles of Biology II	4	BIO 162 Princ of Bio: Organismal Diversity <sup>N</sup>	4
Diversity, ANT 201, GEO 105, HUM 214, or IST 123	3	Gen Ed: Global Perspectives <sup>G</sup>	3
ENG 101 English Composition	3	ENG 114 Academic Writing <sup>W</sup>	3
ENG 102 Advanced English Composition	3	Gen Ed Trans Crtvty&Exprs-Lit <sup>L</sup>	3
MAT 161 Precalculus II	4	MAT 175 Precalculus	3
<b>Program Requirements (20 credits)</b>			
BIO 205 Microbiology	4	BIO 220 Microbiology/Required	4
CHM 103 General Chemistry I	4	CHM 121 Chem Bonding & CHM 125 <sup>N</sup> /Req	4
CHM 104 General Chemistry II	4	CHM 122 Chem Dynamics & CHM 126/Req	4
CHM 203 Organic Chemistry I	4	CHM 221 Organic Chem I & CHM 225/Req	4
CHM 204 Organic Chemistry II	4	CHM 222 Organic Chem II & CHM 226/Req	4
<b>Recommended Electives (7 credits)</b>			
SPD/COM 103 or SPD/COM 108	3	HCS 100 Intro to Human Communication <sup>O</sup>	3
MAT 203 Calculus	4	MAT 211 Calculus I	4
<b>Total Credits</b>			
	<b>60</b>	<b>Total Credits</b>	<b>60</b>

**Overview of Shippensburg University's General Education Program**

The General Education Program at Shippensburg University comprises 45 of the credit hours required for graduation. It consists of 5 themes with 2-3 required course goals in each theme

-Foundations: 15 credits (3 credit first-year seminar not currently required for transfer students)

- Writing<sup>W</sup>, Oral Communication<sup>O</sup>, History<sup>H</sup>, Quantitative<sup>Q</sup>

-Interconnections: 9 credits required from 3 goals with at least 3 credits required in Diversity and 3 credits in Global Perspectives

- Diversity<sup>D</sup>, Global Perspectives<sup>G</sup>, Foreign Language<sup>F</sup>

-Citizenship & Responsibility: 6 credits required with no more than 1 course from the same goal category

- Citizenship<sup>S</sup>, Ethical Reasoning<sup>E</sup>, Critical Reasoning<sup>R</sup>

-Natural World & Technology: 9 credits required with at least 6 credits completed in the Natural World category

- Natural World<sup>N</sup>, Technology<sup>T</sup>

-Creativity & Expression: 6 credits required with at least 3 credits required in the Literature category

- Literature<sup>L</sup>, Arts<sup>A</sup>, Creative<sup>C</sup>

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<b>COURSES TO BE COMPLETED AT SHIPPENSBURG UNIVERSITY</b>
<b>General Education Requirements:</b> Per BOG Transfer Policy 1999-01-A, completion of an A.A. or A.S. degree from HCC will result in the waiver of the remainder of the general education requirements at SU. This will result in the availability of additional free elective credits that must be completed to graduate with the minimum 120 credits required for the B.S.B.A. degree.
<b>Major Requirements: Biology Core Requirements – (5 credits)</b>
BIO 260 Genetics – 4 credits
BIO 499 Capstone Seminar in Biology – 1 credit
<b>Upper Division Electives (22-23 credits)</b>
BIO 350 Human Physiology <b>OR</b> BIO 351 Animal Physiology – 4 credits
BIO 370 Comparative Vertebrate Anatomy <b>OR</b> BIO 371 Human Anatomy <b>OR</b> BIO 375 Histology – 3 or 4 credits
BIO 385 Cell Biology <b>OR</b> BIO 418 Molecular Biology – 3 credits
Breadth Elective: Choose one course from Breadth Elective list – 3 credits
Additional Biology Electives (9 credits, should be selected with advisement)
<b>Allied Fields (14-15 credits)</b>
Choose One (1): MAT 117B – Applied Statistics B or MAT 217 Statistics I – 3-4 credits
PHY 121 Introductory Physics I and PHY 123 Physics Ia Laboratory – 4 credits
PHY 122 Introductory Physics II and PHY 125 Physics IIa Laboratory – 4 credits
CHM 301 Biochemistry I – 3 credits
<b>Additional Biology Electives/Free Electives (17-19 credits)</b>
Students should consult with their SU Academic Advisor to discuss the possibility of completing additional courses in Biology, allied disciplines, or toward a minor. Requirements for professional/graduate programs should be taken into consideration when selecting elective coursework.

**NOTES (IMPORTANT, PLEASE READ)**

1. Courses for Shippensburg University have been selected by joint agreement of HCC and SU. However, curricula are subject to change. This guide should be used with the assistance of a HCC Counselor/Advisor. Please speak with your advisor and/or the SU transfer advisor if you have any questions.
2. Students should start at the highest level possible based on math placement since Calculus I is required for Biology majors at SU. Additional 100-level math courses that are required at HCC to reach the MAT 203 (MAT 211 Calculus I at SU) level will count as electives at SU. If students have not completed MAT 203 at HCC, they can achieve eligibility to take MAT 211 at SU by completing MAT 161 Precalculus.
3. Student must meet the following pre-requisites for admission into the major:
  - 2.8 GPA and must earn a grade of C or better in BIO 161 or BIO 162 and one of the following: CHM 121 or MAT 175

**FOR FURTHER INFORMATION CONTACT**

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