

# SCIENCE FOR HEALTH PROFESSIONS, ASSOCIATE IN SCIENCE (HSCI)

Effective: Spring 2019

The Science for Health Professions Program is designed for students who plan to transfer and continue their education in an allied health or pre-medical field at another institution. It provides the basic sciences and mathematics needed for a variety of programs, including Physical Therapy, Occupational Therapy, Baccalaureate Nursing, Physician Assistant, Pharmacy, Medicine, Dentistry, Veterinary Medicine, Optometry and Podiatry. Since admission requirements to other institutions vary, students should obtain information on entrance requirements for the specific school and program in which they are interested. Students are strongly encouraged to consult with both the Transfer Office at DCCC and their advisor regarding the best course selections for their transfer.

## Program Outcomes

- Demonstrate an understanding of biological and chemical principles and concepts applicable to the health sciences.
- Perform selected tasks relative to laboratory experiments in the biological and chemical sciences.
- Use the scientific method to gather and interpret data and draw conclusions.
- Demonstrate an understanding of mathematical principles and concepts.

## Curriculum

The College Transfer Office (<https://www.dccc.edu/admissions-financial-aid/transfer/transfer-office/>) is set up to help Delaware County Community College students transfer to four-year colleges and universities. If you are planning to transfer, you are strongly encouraged to meet with a transfer advisor within your first two semesters (or before you reach 30 transferable college credits from all institutions attended).

First Semester	Hours	
ENG 100	English Composition I	3
BIO 110 or BIO 150	General Biology I or Human Anatomy and Physiology I	4
CHE 101 or CHE 110	Introduction to General Chemistry or General Chemistry I	4
Select one of the following:		3-4
MAT 121	Introduction to Probability and Statistics	
MAT 151	College Algebra	
MAT 152	Precalculus	
MAT 160	Calculus I	
<b>Hours</b>		<b>14-15</b>
Second Semester	Hours	
ENG 112	English Composition II: Writing About Literature	3
COMM 100 or COMM 111	Interpersonal Communication or Public Speaking	3
Mathematics Required Elective		3-4
Laboratory Science Required Electives		4
Any transferable Diversity and Social Justice and Global Understanding designated Social Science or Humanities course		3
<b>Hours</b>		<b>16-17</b>

Third Semester		
CS 100 or CS 101	Introduction to Information Technology or Introduction to Computer Science	3
Mathematics/Science Required Elective		3-5
Laboratory Science Required Elective		4-5
Social Science Elective		3
Humanities Elective		3
<b>Hours</b>		<b>16-19</b>
Fourth Semester		
Mathematics/Science Required Elective		3-5
Mathematics/Science Required Elective		3-5
Social Science Elective		3
Open Elective		3
Open Elective		3
<b>Hours</b>		<b>15-19</b>
<b>Total Hours</b>		<b>61-70</b>

## Notes

Diversity and Social Justice (DJ) and Global Understanding (GU) designated courses. ([https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/#Dual\\_DJ\\_GU\\_CourseList](https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/#Dual_DJ_GU_CourseList))

### Humanities Elective - Transfer Program

This list does not indicate College Academic Learning Goal designation (<https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/>). Refer to your program curriculum for more information.

For college transfer curricula<sup>1</sup>:

Code	Title	Hours
<b>Courses listed under subjects:</b>		
ART 100	Art and Child Development (or above)	3
COMM 100	Interpersonal Communication (or above)	3
ENG 112	English Composition II: Writing About Literature (or above)	3
HUM 100	Introduction to Visual Arts (or above)	3
MUS 101	Fundamentals of Music (or above)	3
PHI 100	Introduction to Philosophy (or above)	3
<b>Foreign Languages:</b>		
FRE 101	Elementary French I (or above)	3
GER 101	Elementary German I (or above)	3
ITA 101	Elementary Italian I (or above)	3
SPA 101	Elementary Spanish I (or above)	3

<sup>1</sup> The elective courses listed for transfer curricula are generally transferable to most institutions. However, depending on the program at the transfer institution, the courses may only be accepted as free electives. Be sure to meet with a transfer advisor when planning to transfer.

### Social Science Electives - Transfer Program

This list does not indicate College Academic Learning Goal designation (<https://catalog.dccc.edu/academic-programs/college-academic-learning-goals/>). Refer to your program curriculum for more information.

For college transfer curricula<sup>1</sup>:

Code	Title	Hours
ADJ 240	Criminology	3
ADJ 260	Corrections-Probation-Parole	3
ECO 210	Macroeconomic Principles	3
ECO 220	Microeconomic Principles	3
EDU 110	Introduction to Teaching (or above)	3
HIS 110	American History I (or above)	3
INT 100	Student Success	3
POL 110	Introduction to Political Science (or above)	3
PSY 130	Personal and Career Development (or above)	3
SOC 110	Introduction to Sociology (or above)	3
SWO 101	Introduction to Social Work and Human Services (or above)	3

<sup>1</sup> The elective courses listed for transfer curricula are generally transferable to most institutions. However, depending on the program at the transfer institution, the courses may only be accepted as free electives. Be sure to meet with a transfer advisor when planning to transfer.

### Mathematics (3-4 credits):

Code	Title	Hours
MAT 128	Algebra	4
MAT 121	Introduction to Probability and Statistics	3
MAT 151	College Algebra	4
MAT 152	Precalculus	4
MAT 160	Calculus I	4
MAT 161	Calculus II	4
MAT 200	Linear Algebra	3
MAT 210	Statistics	3
MAT 230	Foundations of Discrete Mathematics	3
MAT 260	Calculus III	4
MAT 261	Differential Equations	3

### Laboratory Science (8 credits):

Code	Title	Hours
BIO 110	General Biology I	4
BIO 111	General Biology II	4
BIO 150	Human Anatomy and Physiology I	4
BIO 151	Human Anatomy and Physiology II	4
BIO 200	General Zoology	4
BIO 210	General Botany	4
BIO 230	Introduction to Microbiology	4
BIO 240	General Microbiology	4
BIO 250	Genetics	4
CHE 101	Introduction to General Chemistry	4
CHE 102	Introduction to Organic and Biological Chemistry	4
CHE 110	General Chemistry I	4
CHE 111	General Chemistry II	4
CHE 200	Organic Chemistry I	5
CHE 201	Organic Chemistry II	5
PHY 110	College Physics I	4
PHY 111	College Physics II	4

PHY 131	University Physics I	4
PHY 132	University Physics II	4

### Mathematics/Science (9-14 credits):

Code	Title	Hours
MAT 128	Algebra	4
MAT 121	Introduction to Probability and Statistics	3
MAT 151	College Algebra	4
MAT 152	Precalculus	4
MAT 160	Calculus I	4
MAT 161	Calculus II	4
MAT 200	Linear Algebra	3
MAT 210	Statistics	3
MAT 230	Foundations of Discrete Mathematics	3
MAT 260	Calculus III	4
MAT 261	Differential Equations	3
BIO 110	General Biology I	4
BIO 111	General Biology II	4
BIO 150	Human Anatomy and Physiology I	4
BIO 151	Human Anatomy and Physiology II	4
BIO 200	General Zoology	4
BIO 210	General Botany	4
BIO 220	Nutrition and Well Being	3
BIO 230	Introduction to Microbiology	4
BIO 240	General Microbiology	4
BIO 250	Genetics	4
CHE 101	Introduction to General Chemistry	4
CHE 102	Introduction to Organic and Biological Chemistry	4
CHE 110	General Chemistry I	4
CHE 111	General Chemistry II	4
CHE 200	Organic Chemistry I	5
CHE 201	Organic Chemistry II	5
PHY 110	College Physics I	4
PHY 111	College Physics II	4
PHY 131	University Physics I	4
PHY 132	University Physics II	4

## Campus Locations

### HYBRID DEGREE (online\* and classroom)

70% online

The following courses may not be available online:

Code	Title	Hours
BIO 110	General Biology I	4
or BIO 150	Human Anatomy and Physiology I	
CHE 101	Introduction to General Chemistry	4
or CHE 110	General Chemistry I	
MAT 160	Calculus I	4
COMM 111	Public Speaking	3
	Laboratory Science Elective	4
	Mathematics/Science Elective	

\* Some online courses have *field requirements* or *in person/proctored testing*. Online courses with these requirements have additional information posted under the **COURSE DESCRIPTION** section when you are registering. Please make a note of it during registration.