



**Suggested Transfer Pathway**  
**Montgomery College A.S. in Science, Chemistry &**  
**Biochemistry to Shepherd University B.S. in Chemistry**  
**w/ Traditional Concentration**



Total Credits: 60, Catalog Year: 2018-2019

**0 – 29 Credits – Montgomery College**

(Courses may be taken in any order, pending prerequisites)

	<b>Cr</b>
ENGL101 (if needed for ENGL102/103)	3
CHEM131 Principles of Chemistry I	4
MATH181 Calculus I	4
Humanities Distribution	3
<b>Total Credits</b>	<b>14</b>

	<b>Cr</b>
ENGL102 Critical Reading, Writing and Research	3
BIOL150 Principles of Biology	4
CHEM132 Principles of Chemistry II	4
MATH182 Calculus II	4
<b>Total Credits</b>	<b>15</b>

**30 – 60 Credits – Montgomery College**

	<b>Cr</b>
CHEM203 Organic Chemistry I	5
MATH280 Multivariable Calculus	4
Behavioral and Social Science Distribution	3
PHYS161 General Physics I: Mechanics & Heat	3
<b>Total Credits</b>	<b>15</b>

	<b>Cr</b>
CHEM204 Organic Chemistry II	5
PHYS262 Physics II: Electricity & Magnetism	4
ENES206 MATHLAB for Engineers or BIOL/CHEM/PHYS/MATH Elective	1
ARTT127, MUSC110, or THET100 (Arts Distribution)	3
Behavioral and Social Science Distribution	3
<b>Total Credits</b>	<b>16</b>

**Apply to graduate from Montgomery College with an [Associate of Science in Chemistry and Biochemistry](#)**

\* BSSD courses must come from different disciplines

**Year Three – Shepherd University**

<b>Fall Semester</b>	<b>Cr</b>
CHEM321 Analytical Chemistry	3
CHEM 321L Analytical Chemistry Lab	1
Humanities – Core Curriculum	3
PHYS 221L General Physics I Lab	1
Social Science – Core Curriculum	3
Minor	3
GSPE 201 – Fitness for Life	3
<b>Total Credits</b>	<b>17</b>

<b>Spring Semester</b>	<b>Cr</b>
CHEM322 Instrumental Analysis	3
CHEM 322L Instrumental Analysis Lab	1
CHEM340 Physical Chemistry I	3
CHEM340L Physical Chemistry I Lab	1
CHEM 325 – Computers in Science	3
CHEM450 Research in Chemistry	1
Minor	3
<b>Total Credits</b>	<b>15</b>

**Year Four – Shepherd University**

<b>Fall Semester</b>	<b>Cr</b>
CHEM450 Research in Chemistry	2
CHEM440 Physical Chemistry II	3
CHEM440L Physical Chemistry II Lab	1
CHEM301 Inorganic Chemistry	3
Minor	3
Minor	3
<b>Total Credits</b>	<b>15</b>

<b>Spring Semester</b>	<b>Cr</b>
CHEM450 Research in Chemistry	1
Science Elective	4
Humanities – Core Curriculum	3
Elective	2
Minor	3
<b>Total Credits</b>	<b>13</b>

## MC [A.S. in Science, Chemistry and Biochemistry](#) to [Shepherd B.S. in Chemistry](#)

Total Credits: 60, Catalog Year 2018-2019

Name:	Date:	ID#	
<b>Foundation Courses</b>	<b>COURSE</b>	<b>HRS</b>	<b>GRADE</b>
English Foundation (ENGL102, Critical Reading, Writing and Research)	ENGL102	3	
Math Foundation (Calculus I)	MATH181	4	
<b>Distribution Courses</b>	<b>COURSE</b>	<b>HRS</b>	<b>GRADE</b>
Principles of Chemistry I	CHEM131	4	
Principles of Chemistry II	CHEM132	4	
Arts Distribution (ARTT127, MUSC110, or THET100)		3	
Behavioral and Social Sciences Distribution *		3	
Behavioral and Social Sciences Distribution *		3	
Humanities Distribution		3	
<b>General Education Elective</b>	<b>COURSE</b>	<b>HRS</b>	<b>GRADE</b>
Principles of Biology I	BIOL150	4	
<b>Area of Concentration Requirements</b>	<b>COURSE</b>	<b>HRS</b>	<b>GRADE</b>
Organic Chemistry I	CHEM203	5	
Organic Chemistry II	CHEM204	5	
ENGL101 (if needed for ENGL102, elective if not)		3	
Calculus II	MATH182	4	
Multivariable Calculus	MATH280	4	
General Physics I: Mechanics and Heat	PHYS161	3	
General Physics II: Electricity and Magnetism	PHYS262	4	

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\* Behavioral and Social Science Distribution (BSSD) courses must come from different disciplines

† Choose one distribution course that also fulfills the Global and Cultural Perspectives requirement.

[www.shepherd.edu/chemistry](http://www.shepherd.edu/chemistry)

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