

Associate to Bachelors (A2B) Articulation Agreement

Prescribed Curriculum: Gillette College

Associate of Science – Biology (*Biochemical & Molecular Biology – Track I*)

General Education Courses			27 CREDIT HOURS
	Credit Hours	Community College Course No.	Course Title or Category
Science	4	BIOL 1010	General Biology I
Mathematics	4	MATH 2200	Calculus I
Cultural Studies	3	Select 1 course from	Cultural Studies “Global Diversity” or “Foreign Language” categories
	3	Select 1 course from	Cultural Studies “Social and Behavioral Sciences” category
US & WY Constitutions	3	Select 1 course from	HIST 1211 US to 1865, HIST 1221 US from 1865, HIST 1251 Wyoming History, or POLS 1000 American and Wyoming Government
Communication	3	ENGL 1010	English Composition I
	3	COMM 2010	Public Speaking
Gen Ed Course of Choice	4	CHEM 1020	General Chemistry I

Required Courses			14 CREDIT HOURS
	Credit Hours	Course No.	Course Title
Biology & Chemistry	1	BIOL 1001	Biology Orientation
	4	BIOL 2020	General Biology II
	3	BIOL 2400	General Ecology
	2	BIOL 2410	Intro to Field Ecology
	4	CHEM 1030	General Chemistry II

Program Elective Courses			19 ¹ -20 ² CREDIT HOURS
	Credit Hours	Course No.	Course Title
General Elective	4	MATH 1400 ¹ , or PHYS 1320 ²	College Algebra, or College Physics II
Program Elective	3 ¹ - 4 ²	MATH 1405 ¹ CHEM 2410 ²	Trigonometry, or Organic Chemistry I
	4	MOLB 2210	General Microbiology
	4	PHYS 1310	College Physics I
	4	MATH 2205	Calculus II

¹College Algebra-ready Students

²Calculus-ready Students

Associate of Science-Biology, Biochem/Molecular Total (College Algebra-ready Students): 60¹ CREDIT HOURS

Associate of Science-Biology, Biochem/Molecular Total (Calculus-ready Students): 61² CREDIT HOURS

¹56 credits count toward the BS degree requirements for College Algebra-ready Students (MATH 1400 does not apply)

²60 credits count toward the BS degree requirements for Calculus-ready Students

Post-Associate Degree Prescribed Curriculum: South Dakota Mines

Bachelor of Science – Biology, Molecular Biology Specialization

General Education Courses			6 CREDIT HOURS
	Credit Hours	Community College Course No.	Course Title or Category
Written Communication	3	ENGL 289	Explorations in STEM Communications
Arts & Humanities	3	Select 1 course from	General Education Arts and Humanities (Goal 4)

Major Required Courses			26-31 CREDIT HOURS
	Credit Hours	Course No.	Course Title
Biology & Chemistry	4	BIOL 371/371L	Genetics w/Lab
	3	BIOL 375	Current Bioethical Issues
	3	BIOL 446	Molecular Cell Biology
	3	BIOL 480	Bioinformatics
	1	BIOL 490	Seminar
	5 ¹	CHEM 326/326L	Organic Chemistry I w/Lab
	5	CHEM 328/328L	Organic Chemistry II w/Lab
	4	CHEM 464/464L	Biochemistry I w/ Lab
3	CHEM 465	Biochemistry II	

¹Gillette College Calculus-ready students will complete all courses listed except CHEM 326/326L (26 total credits of Major Required); College Algebra-ready students will complete all courses listed (31 total credits of Major Required)

Other Required Courses			3-6 CREDIT HOURS
	Credit Hours	Course No.	Course Title
Mathematics & Physics	3 ²	PHYS 209	Fundamentals of Physics II
	3	Select 1 course from	MATH 321 Diff Equations or MATH 381 Probability & Stats

²Gillette College Calculus-ready students will complete 3 credits of MATH 321 or MATH 381 only (3 total credits of Other Required); College Algebra-ready students will complete 3 credits of MATH 321 or MATH 381 and 3 credits of PHYS 209 (6 total credits of Other Required)

Elective Courses			17-25 CREDIT HOURS
	Credit Hours	Course No.	Course Title
Free Electives	9-13 ³	Select with Advisor	Free Electives
Specialization Elec	12	Select from List	Molecular Biology Specialization Approved Electives

³Gillette College Calculus-ready students will complete 13 credits of Free Electives (25 total credits of Electives); College Algebra-ready students will complete 9 credits of Free Electives (21 total credits of Electives)

Post-Associate Degree Total: 60-64⁴ CREDIT HOURS

⁴Gillette College Calculus-ready students will complete 60 total credits; College Algebra-ready students will complete 64 total credits (MATH 1400 does not apply)

Bachelor of Science – Biology Total: 120 CREDIT HOURS

A2B Articulation Agreement Guarantees & Limitations

GUARANTEES

Students who:

1. complete the Associate of Science – Biology, Biochemical & Molecular Biology track degree prescribed curriculum at Gillette College exactly as it is identified in this articulation agreement, **and**
2. have the degree conferred on their education record at Gillette College (post high school graduation), **and**
3. earn a minimum cumulative grade point average (GPA) of 2.75 at the Gillette College, **and**
4. pass all 60-61 credits for the associate degree, earning a grade C- or higher in each course

are **guaranteed** the following at the South Dakota School of Mines and Technology (South Dakota Mines):

1. junior standing at South Dakota Mines with no more than 60-64 remaining credits to meet the graduation requirements for the Bachelor of Science degree in Biology, Molecular Biology specialization.
2. admission to South Dakota Mines
3. admission to the Bachelor of Science degree in Biology, Molecular Biology specialization.

LIMITATIONS

1. This agreement is between the Associate of Science – Biology, Biochemical & Molecular Biology track degree at Gillette College and the Bachelor of Science degree in Biology, Molecular Biology specialization at South Dakota Mines only.
2. Students must meet all admission and application requirements at South Dakota Mines, including the submission of all required documentation by stated deadlines. Students are advised to contact the Office of Admissions at the South Dakota Mines early in their transfer planning.
3. Student must have a cumulative grade point average (GPA) at the Gillette College of 2.75 or higher **and** only courses with grades of C- or higher are guaranteed to be accepted in transfer by South Dakota Mines.
4. The credit and course transfer guarantees described in this agreement apply to the Associate of Science – Biology, Biochemical & Molecular Biology track degree at Gillette College and the Bachelor of Science degree in Biology, Molecular Biology specialization at South Dakota Mines. If the student changes majors at Gillette College or at South Dakota Mines, the student is no longer covered by this Articulation Agreement and none of the Guarantees of the Agreement apply.
5. Students utilizing any form of transfer credit, including but not limited to credit awarded from other higher education institutions, standardized exam (CLEP, AP, DSST, etc.), prior learning assessment (military, certifications, ACE recommended credit, portfolio, challenge exam, work experience equivalent credit, etc.) to satisfy any Associate degree requirements will have those credits evaluated by South Dakota Mines. Should South Dakota Mines not accept the transfer credits accepted by Gillette College, the student will be required to make up the credit deficiency at South Dakota Mines.
6. No course substitutions are allowed for the courses listed in the Prescribed Curriculum for the associate degree at Gillette College.

A2B CONTACT INFORMATION

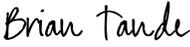
South Dakota Mines
Office of the Provost
605.394.2256
Provost@sdsmt.edu

Gillette College
Academic & Student Affairs
307.681.6000
admissions@gillettecollege.org

RENEWAL, REVISION, and TERMINATION

1. This Associate to Bachelor Articulation Agreement (A2B) shall be in effect July 1 – June 30 each year and will automatically renew annually unless action is taken by South Dakota Mines or Gillette College to terminate or modify it.
2. The South Dakota Mines Office of the Provost and the Gillette College Academic and Student Affairs department will collaborate to coordinate a review of the content of the associate and bachelor degrees on a three-year cycle to ensure this A2B is still appropriate.
3. South Dakota Mines and the Gillette College each reserve the right to seek revision of this agreement at any time.
4. Revision of any content of the agreement (except Appendices content) will be approved by each institution and result in a new agreement being signed, with copies retained by each institution.
 - a. Revision to any Appendices will be communicated to each institution, but do not need to be approved by each institution and will not result in a new agreement being signed by each institution.
5. South Dakota Mines and the Gillette College each reserve the right to seek termination of this agreement at any time.
6. Should the agreement be terminated, each institution agrees to collaborate and engage in appropriate plans to notify and work with impacted students, providing a minimum one-year advance notice of termination.

APPROVALS

Signed by:

5201507DBC434E5
Brian Tande, Ph.D.
President
South Dakota Mines
Brian.Tande@sdsmt.edu

4/9/2025
Date

Signed by:

FF69AB9DF58D4CF
Janell Oberlander, Ed.D.
President
Gillette College
JOberlander@gillettecollege.org

4/9/2025
Date

DocuSigned by:

F8AC6B3DDDD0E4A5
Lance Roberts, Ph.D.
Provost and Vice President for Academic Affairs
South Dakota Mines
Lance.Roberts@sdsmt.edu

4/9/2025
Date

Signed by:

C3F6C78830B445
Barry Spriggs, Ph.D.
Vice President for Academic and Student Affairs
Gillette College
BSpriggs@gillettecollege.org

4/8/2025
Date

Signed by:

17AA1971BEBB4A5
Zhengtao Zhu, Ph.D.
Department Head
South Dakota Mines
Zhengtao.Zhu@sdsmt.edu

4/9/2025
Date

Signed by:

1FB80B279FD84FE
Martin Fashbaugh
Dean of Arts and Sciences
Gillette College
MFashbaugh@gillettecollege.org

4/3/2025
Date

Appendix A: Course Sequence

Biology – Biochemistry & Molecular Biology Track (A.S.) – College Algebra-ready Students

Semester	Course No.	Course Title	Credit Hours	Completed
Freshman Year First Semester	MATH 1400	College Algebra	4*	
	CHEM 1020	General Chemistry I	4	
	ENGL 1010	English Composition I	3	
	BIOL 1001	Biology Orientation	1	
	BIOL 1010	General Biology	4	
Total Credits			16	

Semester	Course No.	Course Title	Credit Hours	Completed
Freshman Year Second Semester	MATH 1405	Trigonometry	3	
	CHEM 1030	General Chemistry II	4	
	BIOL 2020	General Biology II	4	
	COMM 2010	Public Speaking (Advanced Writing)	3	
Total Credits			14	

Semester	Course No.	Course Title	Credit Hours	Completed
Sophomore Year First Semester	BIOL 2400	General Ecology	3	
	BIOL 2410	Intro to Field Ecology	2	
	Select 1 course from:	Cultural Studies: Foreign Language or Global Diversity areas	3	
	MATH 2200	Calculus I	4	
	Select 1 course from:	Cultural Studies: Social & Behavioral Science area	3	
Total Credits			15	

Semester	Course No.	Course Title	Credit Hours	Completed
Sophomore Year Second Semester	MOLB 2210	General Microbiology	4	
	Select 1 course from:	HIST 1211, HIST 1221, HIST 1251, POLS 1000 (US/WY Const)	3	
	MATH 2205	Calculus II	4	
	PHYS 1310	College Physics I	4	
Total Credits			15	

General Education Coursework Total:		27 credit hours
Major and Elective Coursework Total:		33 credit hours
Gillette College Coursework Total:		60* CREDIT HOURS (56 Credits Apply)

Course Sequence: South Dakota Mines – Fall Semester Start



Biology, Molecular Biology Specialization (B.S.) – College Algebra-ready Students

Semester	Course No.	Course Title	Credit Hours	Completed
Junior Year First Semester - FALL	CHEM 326/326L	Organic Chemistry I w/Lab	5	
	ENGL 289	STEM Communication for Technical & Public Audiences	3*	
	PHYS 209	Fundamentals of Physics II	3	
		General Education – Arts/Humanities (Goal 4)	3*	
Total Credits			14	

Semester	Course No.	Course Title	Credit Hours	Completed
Junior Year Second Semester - SPRING	CHEM 328/328L	Organic Chemistry II w/Lab	5	
	BIOL 371/371L	Genetics w/Lab	4	
	BIOL 375	Current Bioethical Issues	3	
	Select 1 from	MATH 321 Diff Equations or MATH 381 Prob & Stats	3	
Total Credits			15	

Semester	Course No.	Course Title	Credit Hours	Completed
Senior Year First Semester - FALL	CHEM 464/464L	Biochemistry I w/Lab	4	
	BIOL 446	Molecular Cell Biology	3	
		Free Electives	5	
		Specialization Electives	4	
Total Credits			16	

Semester	Course No.	Course Title	Credit Hours	Completed
Senior Year Second Semester - SPRING	CHEM 465	Biochemistry II	3	
	BIOL 480	Bioinformatics	3	
	BIOL 490	Seminar	1	
		Free Electives	4	
		Specialization Electives	8	
Total Credits			15	

*General Education Coursework Total:	6 credit hours
Major and Elective Coursework Total:	58 credit hours
South Dakota Mines Coursework Total:	64 CREDIT HOURS

Biology – Biochemistry & Molecular Biology Track (A.S.) – Calculus-ready Students

Semester	Course No.	Course Title	Credit Hours	Completed
Freshman Year First Semester	MATH 2200	Calculus I	4	
	CHEM 1020	General Chemistry I	4	
	ENGL 1010	English Composition I	3	
	BIOL 1001	Biology Orientation	1	
	BIOL 1010	General Biology	4	
Total Credits			16	

Semester	Course No.	Course Title	Credit Hours	Completed
Freshman Year Second Semester	MATH 2205	Calculus II	4	
	CHEM 1030	General Chemistry II	4	
	BIOL 2020	General Biology II	4	
	PHYS 1310	College Physics I	4	
Total Credits			16	

Semester	Course No.	Course Title	Credit Hours	Completed
Sophomore Year First Semester	CHEM 2410	Organic Chemistry I	4	
	BIOL 2400	General Ecology	3	
	BIOL 2410	Intro to Field Ecology	2	
	COMM 2010	Public Speaking (Advanced Writing)	3	
	PHYS 1320	College Physics II	4*	
Total Credits			16	

Semester	Course No.	Course Title	Credit Hours	Completed
Sophomore Year Second Semester	MOLB 2210	General Microbiology	4	
	Select 1 course from:	HIST 1211, HIST 1221, HIST 1251, POLS 1000 (US/WY Const)	3	
	Select 1 course from:	Cultural Studies: Foreign Language or Global Diversity areas	3	
	Select 1 course from:	Cultural Studies: Social & Behavioral Science area	3	
Total Credits			13	

General Education Coursework Total:		27 credit hours
Major and Elective Coursework Total:		34 credit hours
Gillette College Coursework Total:		61* CREDIT HOURS (60 Credits Apply)

Course Sequence: South Dakota Mines – Fall Semester Start

Biology, Molecular Biology Specialization (B.S.) – Calculus-ready Students

Semester	Course No.	Course Title	Credit Hours	Completed
Junior Year First Semester - FALL	ENGL 289	STEM Communication for Technical & Public Audiences	3*	
	Select 1 from	MATH 321 Diff Equations or MATH 381 Prob & Stats	3	
		General Education – Arts/Humanities (Goal 4)	3*	
		Specialization Electives	4	
		Free Electives	1	
<i>Total Credits</i>			14	

Semester	Course No.	Course Title	Credit Hours	Completed
Junior Year Second Semester - SPRING	CHEM 328/328L	Organic Chemistry II w/Lab	5	
	BIOL 375	Current Bioethical Issues	3	
	BIOL 371/371L	Genetics w/ Lab	4	
		Free Electives	3	
<i>Total Credits</i>			15	

Semester	Course No.	Course Title	Credit Hours	Completed
Senior Year First Semester - FALL	CHEM 464/464L	Biochemistry I w/Lab	4	
	BIOL 446	Molecular Cell Biology	3	
		Free Electives	6	
		Specialization Electives	3	
<i>Total Credits</i>			16	

Semester	Course No.	Course Title	Credit Hours	Completed
Senior Year Second Semester - SPRING	CHEM 465	Biochemistry II	3	
	BIOL 480	Bioinformatics	3	
	BIOL 490	Seminar	1	
		Free Electives	3	
		Specialization Electives	5	
<i>Total Credits</i>			15	

*General Education Coursework Total:	6 credit hours
Major and Elective Coursework Total:	54 credit hours
South Dakota Mines Coursework Total:	60 CREDIT HOURS