



Associate to Bachelors (A2B) Articulation Agreement

Prescribed Curriculum: Gillette College

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

General Education C	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		
	3	Select 1 course from	Cultural Studies "Global Diversity" or "Foreign Language" categories		
Cultural Studies	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
	1	BIOL 1001	Biology Orientation
	4	BIOL 2020	General Biology II
Biology & Chemistry	3	BIOL 2400	General Ecology
	2	BIOL 2410	Intro to Field Ecology
	4	CHEM 1030	General Chemistry II

Program Elective Courses			19¹-20 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
	3 ¹ - 4 ²	MATH 1405 ¹ CHEM 2410 ²	Trigonometry, or Organic Chemistry I
Program Elective	4	MOLB 2210	General Microbiology
	4	PHYS 1310	College Physics I
	4	MATH 2205	Calculus II

¹College Algebra-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

²Calculus-ready Students

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 Co	6 CREDIT HOURS			
Credit Community College Hours Course No.			Course T	itle or Category
Written Communication	3	ENGL 289	Explorations in STEM Commu	nications
Arts & Humanities	3	Select 1 course from	General Education Arts and H	umanities (Goal 4)

Major Required Courses			26-31 CREDIT HOURS
Credit Hours		Course No.	Course Title
	4	BIOL 371/371L	Genetics w/Lab
	3	BIOL 375	Current Bioethical Issues
	3	BIOL 446	Molecular Cell Biology
	3	BIOL 480	Bioinformatics
Biology & Chemistry	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 &	3 ²	PHYS 209	Fundamentals of Physics II
Physics 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

Bachelor of Science – Biology Total: 120 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)

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

- 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.

Date

Date

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

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Appendix A: Course Sequence

Course Sequence: Gillette College

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

Semester	Course No.	Course Title	Credit Hours	Completed
Freshman	MATH 1400	College Algebra	4*	
Year	CHEM 1020	General Chemistry I	4	
First Semester	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	MATH 1405	Trigonometry		3	
Year	CHEM 1030	General Chemistry II		4	
Second Semester	BIOL 2020	General Biology II		4	
Semester	COMM 2010	Public Speaking (Advanced Writing)		3	
	•		Total Credits	14	

Semester				Completed
Sophomore	BIOL 2400	General Ecology	3	
Year First Semester	BIOL 2410	Intro to Field Ecology	2	
riist semester	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	MOLB 2210	General Microbiology	4	
Year	Select 1 course from:	HIST 1211, HIST 1221, HIST 1251, POLS 1000 (US/WY Const)	3	
Second Semester	MATH 2205	Calculus II	4	
Semester	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)



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

Semester	Course No.	Course Title	Credit Hours	Completed
Junior Year	CHEM 326/326L	Organic Chemistry I w/Lab	5	
First Semester - FALL	ENGL 289	STEM Communication for Technical & Public Audiences	3*	
- FALL	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	CHEM 328/328L	Organic Chemistry II w/Lab	5	
Second	BIOL 371/371L	Genetics w/Lab	4	
Semester - SPRING	BIOL 375	Current Bioethical Issues	3	
SF KING	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	CHEM 464/464L	Biochemistry I w/Lab	4	
First Semester	BIOL 446	Molecular Cell Biology	3	
- FALL		Free Electives	5	
		Specialization Electives	4	
		Total Credits	16	

Semester	Course No.	Course Title	Credit Hours	Completed
Senior Year	CHEM 465	Biochemistry II	3	
Second	BIOL 480	Bioinformatics	3	
Semester - SPRING	BIOL 490	Seminar	1	
SFRING		Free Electives	4	
		Specialization Electives	8	
		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	MATH 2200	Calculus I	4	
Year First Semester	CHEM 1020	General Chemistry I	4	
riist semester	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	MATH 2205	Calculus II		4	
Year	CHEM 1030	General Chemistry II		4	
Second Semester	BIOL 2020	General Biology II		4	
Semester	PHYS 1310	College Physics I		4	
			Total Credits	16	

Semester				Completed
Sophomore	CHEM 2410	Organic Chemistry I	4	
Year	BIOL 2400	General Ecology	3	
First Semester	BIOL 2410	Intro to Field Ecology	2	
	COMM 2010	Public Speaking (Advanced Writing)	3	
	PHYS 1320	College Physics II	4*	
		Total Credit	s 16	

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



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*	
FALL	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	
		Total Credits	14	

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

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

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

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