

This guide is intended for students completing the Biology A.S. Transfer Pathway. Students who do not intend to complete the 60-credit program should contact Grace at [grace-koehn@bethel.edu](mailto:grace-koehn@bethel.edu) for course selection advice. All courses must be completed with a C or better to transfer. If planning to apply to graduate school, courses should be graded a B or better. Although not required, completing the MnTC prior to transfer is an option for students.

The table below lists the courses that have approved equivalencies at Bethel or fulfill requirements for the Biology B.A. or B.S. major and general graduation requirements.

<b>Normandale College course</b>	<b>Credits</b>	<b>Bethel University course</b>
BIOL 1501 & 1502 Principles of Biology I & II	9	Meets BIO 124 & 128 Integrative Biology I & II
BIOL 2205 Genetics	4	Meets cell and molecular area choice (BIO332 & 333 Genetics and Genetics Lab)
Complete one of the following courses: BIOL 2206 Ecology BIOL 2207 Cell Biology BIOL 2208 Biology of Microorganisms	4	Meets: Environmental area choice (BIO330 & 331 Ecology and lab) Biology elective (BIO354 & 355 Cell Biology and lab) Biology elective (BIO234 & 235 Microbiology and lab)
BIOL 1061 & 1062 Principles of Chemistry I & II	10	CHE 113 & 214 General Chemistry I & II and labs
Goal area 1 - ENG 1101 College Writing <b>AND</b> COMM 1101 Public Speaking <b>OR</b> COMM 1111 Interpersonal Communication	7	Meets GES 160 Inquiry Seminar requirement
Goal area 2 – fulfilled with MnTC		
Goal area 3- fulfilled by previous sciences		
Goal area 4 – select two MATH 1100 College Algebra MATH 1150 Trigonometry MATH 1500 Pre-Calculus MATH 1510 Calculus 1 (recommended for Biology B.S.)	8-10	Meets Math (M) course requirement
Goal area 5 – one course	3	Meets Global Perspectives requirement
Goal area 6 – one course	3	Meets Personal Development requirement
Goal area 7-10 – one course	3-5	Meets general education if MnTC is complete
If additional course required to reach 60 credits, BIOL courses recommended		Meets Biology electives
Total credits for A.S. degree	60	

<b>Remaining major courses for Biology B.A. degree</b>	<b>Credits</b>
BIO 218 Biology in a Changing World	3
BIO 399 Introduction to Research	1
BIO 461 Internship in Biology <b>or</b> BIO 496/497 Biology Research	2-3
BIO 495 Biology Seminar	2
BIO 499 Biology Symposium	0
Biology organismic area course	4
Biology environmental area choice (fulfilled by BIO 2206)	4
Biology electives (depends on biology courses taken at Normandale)	12-16
Total major specific credits	28-33



Remaining major courses for Biology B.S. degree	Credits
BIO 218 Biology in a Changing World	3
BIO 399 Introduction to Research	1
BIO 461 Internship in Biology or BIO 496/497 Biology Research	2-3
BIO 495 Biology Seminar	2
BIO 499 Biology Symposium	0
Biology organismic area course	4
Biology environmental area choice (fulfilled by BIO 2206)	4
CHE 224 & 226 Organic Chemistry I&II with labs	8
Physics I&II elective	8
MAT 124M & 125 Calculus 1 & 2 (if not taken at Normandale)	4-8
Biology electives (depends on biology courses taken at Normandale)	12-16
Total major specific credits	44-53

Remaining graduation requirements for B.A. or B.S. degree	Credits
GES 130 Christianity Western Culture	4
Biblical Foundations course	3
Contemporary Christian Issue (P)	3
A or Q course (if MnTC is not completed)	1-4
G, U, or S course (if MnTC is not completed)	3-4
Electives to reach 122 credits	Varies
Total credits completed at Bethel University	62
Total credits for B.A. or B.S. degree	122

The table below lists the courses that have approved equivalencies at Bethel or fulfill requirements for the Biochemistry/Molecular Biology B.S. major and general graduation requirements.

Normandale College course	Credits	Bethel University course
BIOL 1501 & 1502 Principles of Biology I & II	9	Meets BIO 124 & 128 Integrative Biology I & II
BIOL 2205 Genetics	4	Meets BIO332 & 333 Genetics and Lab
Complete one of the following courses: BIOL 2206 Ecology BIOL 2207 Cell Biology (recommended for B/MB B.S.) BIOL 2208 Biology of Microorganisms	4	Meets: Biology elective BIO 354 & 355 Cell Biology & lab Biology elective
BIOL 1061 & 1062 Principles of Chemistry I & II	10	CHE 113 & 214 General Chemistry I & II and labs
Goal area 1 - ENGC 1101 College Writing <b>AND</b> COMM 1101 Public Speaking <b>OR</b> COMM 1111 Interpersonal Communication	7	Meets GES 160 Inquiry Seminar requirement
Goal area 2 – fulfilled with MnTC		
Goal area 3- fulfilled by previous sciences		
Goal area 4 – select two MATH 1100 College Algebra MATH 1150 Trigonometry MATH 1500 Pre-Calculus (recommended for B.S.) MATH 1510 Calculus 1 (recommended for B.S.) MATH 1520 Calculus 2 (recommended for B.S.)	8-10	Meets Math (M) course requirement  MAT123M Precalculus MAT124M Calculus 1 MAT125 Calculus 2
Goal area 5 – one course	3	Meets Global Perspectives requirement
Goal area 6 – one course	3	Meets Personal Development requirement
Goal area 7-10 – one course	3-5	Meets general education if MnTC is complete
If additional courses are required to reach 60 credits, Organic Chemistry or Physics courses recommended		Meets major requirements
Total credits for A.S. degree	60	



<b>Remaining major courses for Biochemistry/Cellular Biology B.S. degree</b>	<b>Credits</b>
BIO or CHE 388 & 389 Biochemistry I & Lab	4
BIO 354 & 355 Cell Biology & Lab (if not taken at Normandale)	4
BIO 396 & 397 Molecular Biology & Lab	4
CHE 200 Laboratory Safety and Chemical Hygiene	1
CHE 224, 225, 226, & 227 Organic Chemistry I&II	8
Physics Sequence	8
CHE 396 & 397 Biochemistry II & Lab	4
CHE 312 & 313 Quantitative Analysis & Lab	4
CHE 344 & 345 Thermodynamics, Kinetics, and Statistical Mechanics & Lab	4
MAT 123M Pre-Calculus (if not taken at Normandale)	3
MAT 124M Calculus I (if not taken at Normandale)	4
MAT 125 Calculus II (if not taken at Normandale)	4
Biology or Chemistry Capstone sequence	4-5
<b>Total major specific credits</b>	<b>41-57</b>

<b>Remaining graduation requirements for Biochemistry/Cellular Biology degree</b>	<b>Credits</b>
GES 130 Christianity Western Culture	4
Biblical Foundations course	3
Contemporary Christian Issue (P)	3
A or Q course (if MnTC is not completed)	1-4
G, U, or S course (if MnTC is not completed)	3-4
Electives to reach 122 credits	Varies
Total credits completed at Bethel University	62
Total credits for B.S. degree	122