Program Transfer Pathway

FROM Degree: Associates Science (A.S.)
Major: Biotechnology

TO Degree: Bachelor of Science (B.S.)
Major: Microbiology (CASNR)

Last Updated: October 23, 2026 **Catalog Year(s):** 2026-2027

This program transfer pathway outlines an 8-semester plan that fulfills all requirements for the program listed above at Southeast Community College alongside the program(s) listed above at the University of Nebraska-Lincoln. While this pathway assumes full-time enrollment (14-16 credits/semester), we recognize that each student has a unique path and is expected to consult with their academic advisor in determining the best path toward degree completion at both institutions. As a full-time student, this pathway allows students to complete both degrees at their respective institutions within a 4-year timeline.

Math and English Sequencing: Math and English readiness might impact the full semester-by-semester program transfer pathway. See your academic advisor for more information.

Course Selection and Pathway Considerations

- Courses that are marked with a * are part of a particular sequence of courses that must be taken in a particular order.
- Course(s) marked with *Italics* have multiple course options for that particular requirement. A list of courses may be selected from the Course Options list. While this list is not an exhaustive list of courses that fulfill each outcome at SCC, it provides a consolidated list of the most applicable courses that will benefit a student in transferring to UNL for this particular program of study. Selecting alternative courses other than what is recommended may impact remaining requirements at UNL. When a course is listed in multiple outcomes, it may be used to fill only one Core requirement.

Note- To Complete this pathway in a 8-semester window, 2 summer classes must be completed, which is built into the plan below.

Courses Taken at Southeast Community College			How Courses Transfer to University of Nebraska-Lincoln		
Semester 1			**Semester 1**		
Course	**Title/ Program Requirement**	**Cr Hrs**	**Course**	**Title/ Program Requirement**	**Cr Hrs**
ACFS 1015	Success@SCC	1	GNCR***	General Elective	1
ENGL 1010	English Composition I (WC #1)	3	ENGL 150	Writing and Inquiry (ACE 1)	3
MATH 2170	Applied Statistics (M #2)	3	STAT 218	Introduction to Statistics	3
BIOT 1400/L[A]	Introduction to Biotechnology I & Lab (Core)	4	AGRI 115 &	Biotechnology: Food, Health and Environment	3
			AGRI 1T*@	Agricultural Science Elective	1
CHEM 1090	General Chemistry I (Core)	4	CHEM 109A/L	General Chemistry I & Lab	3+1
Semester 2			**Semester 2**		
Course	**Title/ Program Requirement**	**Cr Hrs**	**Course**	**Title/ Program Requirement**	**Cr Hrs**
WC 2	Either ENGL 1020 or ENGL 2560	3	Elective	Elective	3
MATH 1600	*Calculus I And Analytic Geometry (M #1)*	*5*	MATH 106	Calculus I (ACE 3)	5
CHEM 1100	General Chemistry II (Core)	4	CHEM 110A/L	General Chemistry II & Lab	3+1
BIOS 1400	Biology I (Core)	4	LIFE 120/L	Fundamental of Biology I and Lab (ACE 4)	3+1
Summer			**Summer**		
H	*Any ACE 5 Approved H course*	*3*	*ACE 5*	ACE 5 Approved Course	3
SS	*Any ACE 6 Approved SS Course*	*3*	ACE 6	ACE 6 Approved Course	3
Semester 3			**Semester 3**		
Course	**Title/ Program Requirement**	**Cr Hrs**	**Course**	**Title/ Program Requirement**	**Cr Hrs**
CS	*COMM 2810 or COMM 1110 (SC)*	*3*	ACE 2	ACE 2 Approved Course	3
BIOT 2441	Quality Assurance for Biosciences (Core)	3	BIOS1T*@	Elective	3
BIOS 1410 [A]	Biology II (STEM 1)	4	LIFE 121/L	Fundamentals of Biology II and Lab (CDR Science w/ Lab)	3+1
CHEM 2510 [A]	Organic Chemistry I (STEM 2)	4	CHEM 251	Organic Chemistry I	3
			CHEM 253	Organic Chemistry I Lab	1
Semester 4			**Semester 4**		
Course	**Title/ Program Requirement**	**Cr Hrs**	**Course**	**Title/ Program Requirement**	**Cr Hrs**
BIOT 2400/L	Advanced Biotechnology and Biomanufacturing and Lab (Core)	4	BIOS1T*@	Elective	4
CHEM 2520 [B]	Organic Chemistry II (STEM 3)	4	CHEM 252	Organic Chemistry II	3
			CHEM 254	Organic Chemistry II Lab	1
Elective	*Elective from Approved Elective List*	*3*		Verify Transferability with Academic Advisor	3
C&GS	*Any ACE 9 approved C&GS Course*	*3*	ACE 9	ACE 9 Approved Course	3
Total Credits Required for A.S.:		**65**		Total Transfer credits toward B.S.	60
				Total remaining credits required	60

[A] While the catalog denotes other choices students can complete for the STEM course requirements, this pathway requires this specific course.
[B] While CHEM 2520 is recommended by UNL, it is not required to be taken at SCC or UNL. It does fulfill a requirement for Sequence 2 of the Biochemistry and Organic Chemistry sequence at UNL. If a student does stop at CHEM 2510, students can pursue Sequence 1 for this requirement instead, although possible career pathways requiring postgraduate degrees may be limited.

SCC Reviewers: T. Lazarowicz 10/23/2026 UNL University Reviewers: D. Golick 10/15/2026

Remaining University of Nebraska-Lincoln Coursework

University of Nebraska-Lincoln – Semester 1			University of Nebraska-Lincoln – Semester 2		
Course	**Title/ Program Requirement**	**Cr Hrs**	**Course**	**Title/ Program Requirement**	**Cr Hrs**
MBIO 101	Introduction to the Microbiology Major	1	PHYS 141	Physics for Life Sciences I	5
BIOS 312	Microbiology	3	MBIO	Advanced Microbiology Lab Course	3-5
BIOS 314	Microbiology Lab	1	MBIO	Microbiology (Microbial Diversity & Ecology Sub-area course)	3
BIOS 201	General Genetics	4	BIOC 431	Biochemistry I: Structure and Metabolism	3
MBIO	Microbiology (Organismal Microbiology Sub-area course)	3			
XXXX	Elective, Minor, or pre-health course	3			
University of Nebraska-Lincoln – Semester 3			**University of Nebraska-Lincoln – Semester 4**		
Course	**Title/ Program Requirement**	**Cr Hrs**	**Course**	**Title/ Program Requirement**	**Cr Hrs**
PHYS 142	Physics for Life Sciences II	5	MBIO 420 or MBIO 418	Molecular Genetics (ACE 10) Microbial Genetics and Genomics (ACE 10)	3
MBIO	Microbiology (Microbe Host Interactions Sub-area course)	3	MBIO	Microbiology (extra Sub-area course of choice)	3
MBIO 440	Microbial Physiology	3	MBIO Major	Computational Approaches Course	3-4
XXXX	Elective, Minor, or pre-health course	3	XXXX	Elective, Minor, or pre-health course	3-4
			Total credits required to earn both Associates and Bachelor's degrees		*123-125*

Notes:

* All equivalent courses must be completed with a grade of "C " or better to transfer for major requirements. No more than 10 semester hours of below C grades are transferrable from colleges outside of the NU system. Grades below C can only be applied to free electives.
* Remedial/developmental coursework will not be included in transfer
* SCIL 101: Science Literacy (ACE 8) is waived for students who transfer in with 53+ credits
* Students who are considering pre-medicine should take PSYC 1810 or SOCI 1010 for their SS ACE 6 Approved Course
*Math readiness impacts the full semester-by-semester program transfer pathway.

Questions about UNL requirements?

Contact Betsy Anderson, Coordinator of Advising and Academic Programs at betsyanderson@unl.edu, 402-472-3364.

Southeast COMMUNITY COLLEGE

Associate of Science - Alternative Course Options (ACE in Parentheses)
Catalog year(s): 2026-2027
Bolded course is primary course on program transfer pathway

Course	Title	Cr	Course	Title	Cr
Mathematics (M) (take 2 classes)					
MATH 1150	College Algebra	3	**MATH 1600**	**Calculus I and Analytic Geometry (3)**	**5**
MATH 1200	Trigonometry	3	MATH 1700	Calculus & Analytic Geometry II (3)	4
MATH 1300	Pre-calculus	3	**MATH 2170/ BSAD 2170**	**Applied Statistics (3)**	**3**
Natural Science / Biotechnology STEM Courses (STEM) (select 3 courses)					
BIOS 1410	**Biology II (4)**	**4**	MATH 1600	Calculus I and Analytic Geometry (3)	5
BIOS 2410	General Genetics	4	MATH 1700	Calculus & Analytic Geometry II (3)	5
BIOS 2460	Microbiology	4	MATH 2170/ BSAD 2170	Applied Statistics (3)	3
BIOT 2445	Molecular Biology Techniques	4	PHYS 1410	Elementary General Physics I (4)	5
BIOT 2500	Applied Biosciences: Practicum	3	PHYS 1420	Elementary General Physics II (4)	5
CHEM 2510	**Organic Chemistry I**	**4**	PHYS 2110	General Physics I (4)	5
CHEM 2520	Organic Chemistry II	4	PHYS 2120	General Physics II (4)	5
MATH 1300	Pre-calculus	5			
Humanities (H) (select 1 course)					
Group 1- Literature/Journalism/Communication					
COMM 2100	Communicating in Groups and Teams (2)	3	ENGL 2200	Science Fiction Literature (5)	3
COMM 2750/ POLS 2750	Political Communication	3	ENGL 2220	British Literature Post-1800 (5)	3
ENGL 2050	Modern Fiction (5)	3	ENGL 2440	African American Literature (5,9)	3
ENGL 2100	Introduction to Literature (5)	3	ENGL 2450	Native American Literature (5,9)	3
ENGL 2140	Introduction to Shakespeare (5)	3	ENGL 2460	Latinx Literature (5,9)	3
ENGL 2150	Introduction to Women's Literature (5,9)	3	ENGL 2470	Asian American Literature (5,9)	3
ENGL 2160	Children's Literature (5)	3	JOUR 1810	Introduction to Mass Media	3
ENGL 2170	American Literature from 1865 (5)	3	JOUR 1820	Media Writing	3
Group 2- History/Philosophy					
HIST 1000	Western Tradition to 1500 (5)	3	PHIL 1060	Applied Ethics (8,9)	3
HIST 1010	Western Tradition since 1500 (5)	3	PHIL 1100	Introduction to Logic and Critical Thinking (3)	3
HIST 2010	American History I (5)	3	PHIL 2110	Introduction to Modern Logic (3)	3
HIST 2020	American History II (5)	3	PHIL 2130	Bioethics (5,8)	3
HIST 2100	World History to 1500 CE (9)	3	PHIL 2250	Environmental Ethics (8,9)	3
HIST 2110	World History since 1500 CE (9)	3	PHIL 2610/ RELS 2610	Comparative Religions (9)	3
HIST 2960	Survey of African American History	3	PHIL 2650	Philosophy of Religion (5,9)	3
PHIL 1010	Introduction to Philosophy (5,8)	3			
Group 3- Creative/Fine/Performing Arts					
ARTS 1010	Introduction to the Visual Arts	3	HUMS 1100	Introduction to Humanities	3
ARTS 1050	Introduction to Art History & Criticism I (7)	3	HUMS 1200	Contemporary Arts & Ideas (7)	3
ARTS 1060	Introduction to Art History & Criticism II (7)	3	MUSC 1010	Introduction to Music (Music Appreciation) (7)	3
ARTS 1110	Beginning Drawing I	3	MUSC 1610	Music Theory I	4
ARTS 1330	Beginning Ceramics I	3	MUSC 2750	Introduction to American Music	3
ARTS 2650	Introduction to Native American Art	3	MUSC 2800	Introduction to World Music (7,9)	3
ARTS 2750	Women in Art	3	MUSC 2870	History of Rock Music (7)	3
ARTS 2850	History of Photography	3	PHOT 1750	Beginning Photography	3
COMM 2050	Oral Performance of Literature	3	THEA 1010	Introduction to Theatre	3
ENGL 1510	Introduction to Creative Writing (7)	3	THEA 1140	Basic Acting	3
ENGL 2520	Fiction Writing (7)	3	THEA 2130	Film Appreciation (7)	3
ENGL 2530	Poetry Writing (7)	3			
Social Science (SS) (select 1 course)					
Group 1- Anthropology/Psychology/Sociology					
ANTH 1020	Introduction to Cultural Anthropology (6)	3	PSYC 2880	Social Psychology (6)	3
ANTH 1120	General Anthropology (6,9)	3	SOCI 1010	Introduction to Sociology (6)	3
BIOS 2210	Animal Behavior	3	SOCI 1020	Diversity in Society	3
PSYC 1250	Interpersonal Relations (2)	3	SOCI 2000	Gender in Contemporary Society (6,9)	3
PSYC 1810	Introduction to Psychology (6)	3	SOCI 2010	Social Problems (6,9)	3
PSYC 2200	Human Development	3	SOCI 2150	Issues of Unity and Diversity (6,9)	3
PSYC 2210	Animal Behavior	3	SOCI 2250	Marriage and the Family (6,9)	3
Group 2- Economics/ Political Science					
ECON 1200	Personal Finance (6)	3	POLS 1040	Comparative Politics	3
ECON 2110	Principles of Macroeconomics (6)	3	POLS 1080	Introduction to Political Science	3
ECON 2120	Principles of Microeconomics (6)	3	POLS 1600	International Relations (9)	3
POLS 1000	American Government (6,8)	3	POLS 2750/ COMM 2750	Political Communication	3
Group 3- Geography/Education/Physical Education					
EDUC 1110	Introduction to Professional Education	3	GEOG 1020	World Regional Geography (9)	3
EDUC 2000	Educational Psychology	3	GEOG 1400	Human Geography (9)	3
EDUC 2300	Introduction to Special Education	3	GEOG 2810	Introduction to Water Science	3
EDUC 2590	Instructional Technology (2)	3	PHED 1000	Lifetime Wellness	3
EDUC 2800	Professional Practicum	2			

Culture and Gender Studies (C &GS)					
ANTH 1020	Introduction to Cultural Anthropology (6)	3	GLST 1000	Introduction to Global Studies	3
ANTH 1120	General Anthropology (6,9)	3	GLST 2980/2981	Global Studies Experience	3
ARTS 2650	Introduction to Native American Art	3	HIST 2100	World History to 1500 CE (9)	3
ARTS 2750	Women in Art	3	HIST 2110	World History since 1500 CE (9)	3
COMM 2110	Intercultural Communication	3	HIST 2960	Survey of African American History	3
EDUC 2300	Introduction to Special Education	3	HMRS 1320	Multicultural Competency (9)	3
ENGL 2150	Introduction to Women's Literature (5,9)	3	MUSC 2800	Introduction to World Music (7,9)	3
ENGL 2440	African American Literature (5,9)	3	PHIL 2610/ RELS 2610	Comparative Religions (9)	3
ENGL 2450	Native American Literature (5,9)	3	POLS 1600	International Relations (9)	3
ENGL 2460	Latinx Literature (5,9)	3	SOCI 1020	Diversity in Society	3
ENGL 2470	Asian American Literature (5,9)	3	SOCI 2000	Gender in Contemporary Society (6,9)	3
GEOG 1020	World Regional Geography (9)	3	SOCI 2010	Social Problems (6,9)	3
GEOG 1400	Human Geography (9)	3	SOCI 2150	Issues of Unity and Diversity (6,9)	3

Electives (select 1 course)

See full list of elective courses by going to https://catalog.southeast.edu/preview_program.php?catoid=22&poid=3670&returnto=2750. Consult your faculty advisor for the recommendation that best matches your education and career goals.