PROPOSED PATHWAY CSCU Pathway Transfer A.A. Degree: Biology Studies

1	FRAMEWORK30		
2	Section A: Common Designated		
	Competencies		
3	Written Communication I	ENG 101 Composition	3 credits
4	Written Communication II	General Education Elective	3 credits
5	Scientific Reasoning	BIO 121 General Biology I (C- or	4 credits
		above)	
6	Scientific Knowledge & Understanding	CHE 121 General Chemistry	4 credits
7	Quantitative Reasoning	MAT 185 Trigonometry (NVCC)	4 credits
		MAT 186 Precalculus	
8	Historical Knowledge & Understanding	General Education Elective	3 credits
9	Social Phenomena	General Education Elective	3 credits
10	Aesthetic Dimensions	General Education Elective	3 credits
11	Section B: Campus Designated		
	Competencies		
12	Competency 1	General Education Elective	3 credits
13	Competency 2	General Education Elective	3 credits
14	Framework30 Total		33 credits
			1
15	PATHWAY30		
16	BIO 122	General Biology II (C- or above)	4 credits
17	BIO 235	Ecology	4 credits
	OR		
	200-level BIO Lab Science		
18	BIO 270	Microbiology	4 credits
	OR		
	200-level BIO Lab Science		
19	CHE 122	General Chemistry II	4 credits
20	PHY 121	General Physics I	4 credits
	OR		
24	CHE 211		a 111
21	PHY 122	General Physics II	4 credits
		Organia Chamistry II	
22			2. 4 ana dita
22			3-4 credits
	Conoral Education Elective		
22			0 credits
23	Dathway20 Total		27.29 crodite
54	raliwdysu i Uldi		21-20 creats

25	Biology Studies Pathway Total	60-61
		credits*

*Students who are required to complete developmental coursework or who place below the required entry level of math for their program may not be able to complete their pathway degree in 60-61 credits/contact hours.

Template 1

Central Connecticut State University

General Biology B.S.

All biology courses must be completed with a C- or above.

1	Community Colleges*:			CCSU	
2			Credits		Credits
3		Fra	meworl	(30**	
4		General Edu	ucation	Requirements	
5	Competency:				
6	Section A				
7	Written I	ENG*101 English	3	ENG 110	3
		Composition			
8	Written II	Gen Ed Elective	3	Skill Area I Communication Skills	3
9	Scientific Reasoning	BIO*121 General	4	Study Area IV Natural Sciences:	4
		Biology I		BIO 121 General Biology I	
10	Scientific Knowledge	CHE*121 General	4	Study Area IV Natural Sciences:	4
		Chemistry I		CHEM 161 General Chemistry and	
				CHEM 162 General Chemistry Lab	
				1	
11	Quantitative	MAT* 185	4	Skill Area II Mathematics: MATH	4
		Trigonometry (NVCC)		119 Pre-Calculus with	
		MAT*186 Precalculus		Trigonometry	
12	Historical Knowledge	Gen Ed Elective	3	Study Area II History Requirement	3
13	Social Phenomena	Gen Ed Elective	3	Study Area II Social Sciences	3
14	Aesthetic Dimensions	Gen Ed Elective	3	Study Area I Arts & Humanities	3
15	Section B				
16	Competency:	Gen Ed Elective	3	Skill Area IV University	3
				Requirement	
17	Competency:	Gen Ed Elective	3	Study Area III Behavioral Sciences	3
18	Framework30 C	redits (30-31):			33
19		I	Pathway	/30	
20		Additional Ge	neral Ed	lucation Courses	
21				Study Area I – Literature	3
22	Additional Gen E	d Elective or MAT 254	(3)	Study Area I – Arts and	3
	Calculus I – if an	additional general		Humanities – if an additional	
	education election	ve is chosen. See line 25		general education elective is	
	if MAT 254 is ch	osen		chosen.	
23				Study Area II – Social Sciences	3
24				Study Area III – Behavioral	3
				Sciences	

25	Additional Gen Ed Elective or MAT 254	(4)	Skill Area II – Math/Stat/ Comp Sci	4
	Calculus I – if MAT 254 is chosen. See	. ,	– MATH 152 Calculus I if MAT 254	
	line 22 if an additional general education		is taken for this choice	
	elective is chosen.			
26	Lines 22 and 25 will result in 3 or 4	3-4		
	credits, depending upon which option is			
	chosen.			
27			Skill Area III – Foreign Language	6
			Proficiency. Can be met through	
			the following:	
			1. Three sequential years of	
			one foreign language at	
			the high-school level.	
			2. Elementary proficiency as	
			demonstrated by	
			successfully completing a	
			second-semester level	
			CCSU foreign-language	
			course (112 or 118).	
			Students with no previous	
			background in a language	
			must take the first and	
			second semesters (111	
			and 112, or 118);	
			students who place out of	
			111 due to previous	
			background in the	
			language may satisfy the	
			requirement by taking	
			112 only.	
			3. Passing the CLEP, a	
			standardized examination	
			which demonstrates	
			knowledge of a foreign	
			language equivalent to	
			completion of a second-	
			higher	
			A Successful completion of	
			a foreign-language course	
	•		at a level higher than the	
			second- semester level	
			5. Demonstration of native	
			proficiency in a language	
			other than English	
			(requires evaluation of	
			skill level by an	
			appropriate faculty	

			member and/or official		
			documentation, and		
			approval by the Chair of		
			the Department of		
			Modern Languages		
			(Credits will adjust accordingly.)		
28	General Education Credits:	36-37		51-52	
29	Major Program Courses				
30	BIO*122 General Biology II	4	BIO 122 General Biology II	4	
31	CHE* 122 General Chemistry II	4	CHEM200/201 Fdns of Analytical	4	
			Chem/ Lab or CHEM 260/201		
			Fdns of Inorganic Chem/ Lab		
32	PHY* 121 General Physics I or CHE*211	4	PHY 121 General Physics I or	4	
	Organic Chemistry I		CHEM 210/211 Edns of Organic		
			Chem/Lab		
33	BIO*235 Microbiology or 200's level	4	BMS 316 Microbiology or BIO	4	
	BIO* lab science		200-level or higher lab science		
			elective		
34	BIO*270 Ecology or 200's level BIO* lab	4	BIO 200-level or higher lab	4	
	science		science elective		
35	PHY* 122 General Physics II or CHE*212	4	PHY 122 General Physics II or	4	
	Organic Chemistry II		CHEM 212/213 Organic		
	If CHE 212 is taken, it will be received at		Synthesis/Lab		
	CCSU as an unrestricted elective - see				
	line 50.				
36			PHY 121 General Physics I or Fdns	4	
			of Organic Chemistry/Lab (CHEM		
			210/211); whichever was not		
			taken at CC		
37			PHY 122 General Physics II (if not	(4)	
			taken at CC)		
38			BIO 200 Integrative Biology	4	
39			BIO 290 Biology Research	2	
			Experience I		
40			If Calculus was not taken at the	0-6	
			community college, take one of		
			the following:		
			MATH 124 Applied Calculus with		
			Trigonometry (4)		
	•		OR		
			MATH 115 Trigonometry (3)		
			AND		
			MATH 125 Applied Calculus (3)		
			OR		
			MATH 152 Calculus I (4)		
41			BIO elective	4	

42			BIO 390 Biology Research	1
			Experience II	
			or 391 Internship in Biology	
43			BIO elective	3
44			BIO elective	3
45				
46				
47	Program Course Credits:	24		49-59
48	Minor Course Credits:		A minor is not required for this	
			major.	
49	O	oen Elec	tives	
50	If CHE 212 Organic Chemistry II was	(4)	CHEM 212/213 Organic	(4)
	taken at the community college		Synthesis/Lab	
	Students who have fulfilled foreign			
	language requirements in high school			
	or who use open elective credits at the			
	community college to fulfill foreign			
	language and/or minor requirements			
	will end up with more open elective			
	credits at the CCSU.			
51	Open Elective credits:	0		6-20
52	Total Credits at the Community College	60-61	Total Credits for the 4-Year	120
			Degree	

Template 1

Central Connecticut State University

Biology – Ecology, Biodiversity, and Evolutionary Biology B.S.

All biology courses must be completed with a C- or above.

1	Community Colleges*:			CCSU		
2			Credits		Credits	
3		Fra	meworl	<30**		
4	General Education Requirements					
5	Competency:					
6	Section A					
7	Written I	ENG*101 English Composition	3	ENG 110	3	
8	Written II	Gen Ed Elective	3	Skill Area I Communication Skills	3	
9	Scientific Reasoning	BIO*121 General Biology I	4	Study Area IV Natural Sciences: BIO 121 General Biology I	4	
10	Scientific Knowledge	CHE*121 General Chemistry I	4	Study Area IV Natural Sciences: CHEM 161 General Chemistry and CHEM 162 General Chemistry Lab 1	4	
11	Quantitative	MAT* 185 Trigonometry (NVCC) MAT*186 Precalculus	4	Skill Area II Mathematics: MATH 119 Pre-Calculus with Trigonometry	4	
12	Historical Knowledge	Gen Ed Elective	3	Study Area II History Requirement	3	
13	Social Phenomena	Gen Ed Elective	3	Study Area II Social Sciences	3	
14	Aesthetic Dimensions	Gen Ed Elective	3	Study Area I Arts & Humanities	3	
15	Section B					
16	Competency:	Gen Ed Elective	3	Skill Area IV University Requirement	3	
17	Competency:	Gen Ed Elective	3	Study Area III Behavioral Sciences	3	
18	Framework30 C	redits (30-31):				
19			Pathway	/30		
20		Additional Ge	neral Ed	lucation Courses		
21				Study Area I – Literature	3	
22	Additional Gen E	d Elective or MAT 254	(3)	Study Area I – Arts and	3	
	Calculus I – if an	additional general		Humanities		
	education election	ve is chosen. See line 25				
	if MAT 254 is ch	osen				
23				Study Area II – Social Sciences	3	
24				Study Area III – Behavioral Sciences	3	
25	Additional Gen E Calculus I – if MA	d Elective or MAT 254 AT 254 is chosen. See	(4)	Skill Area II – Math/Stat/ Comp Sci	3	

	line 22 if an additional general education			
	elective is chosen.			
26	Lines 22 and 25 will result in 3 or 4	3-4		
	credits, depending upon which option is			
	chosen.			
27			Skill Area III – Foreign Language	6
			Proficiency. Can be met through	
			the following:	
			1. Three sequential years of	
			one foreign language at	
			the high-school level.	
			2. Elementary proficiency as	
			demonstrated by	
			successfully completing a	
			second-semester level	
			CCSU foreign-language	
			course (112 or 118).	
			Students with no previous	
			background in a language	
			second semesters (111	
			and 112 or 118).	
			students who place out of	
			111 due to previous	
			background in the	
			language may satisfy the	
			requirement by taking	
			112 only.	
			3. Passing the CLEP, a	
			standardized examination	
			which demonstrates	
			knowledge of a foreign	
			language equivalent to	
			completion of a second-	
			semester course or	
			higher.	
			4. Successful completion of	
			a foreign-language course	
			at a level nigher than the	
	•		5 Demonstration of nativo	
			nroficiency in a language	
			other than English	
			(requires evaluation of	
			skill level by an	
			appropriate faculty	
			member and/or official	
			documentation, and	

			approval by the Chair of	
			the Department of	
			Modern Languages	
			(Credits will adjust accordingly.)	
28	General Education Credits:	36-37		51-52
29	Major	Progran	n Courses	I
30	BIO*122 General Biology II	4	BIO 122 General Biology II	4
31	CHE* 122 General Chemistry II	4	CHEM200/201 Fdns of Analytical	4
			Chem/ Lab or CHEM 260/201	
			Fdns of Inorganic Chem/ Lab	
32	PHY* 121 General Physics I or CHE*211	4	PHY 121 General Physics I or	4
	Organic Chemistry I		CHEM 210/211 Fdns of Organic	
			Chem/Lab	
33	BIO*235 Microbiology or 200's level	4	BMS 316 Microbiology or BIO	4
	BIO* lab science		200-level or higher lab science	
			elective	
34	BIO*270 Ecology or 200's level BIO* lab	4	BIO 200-level or higher lab	4
	science		science elective	
35	PHY* 122 General Physics II or CHE*212	4	PHY 122 General Physics II or	4
	Organic Chemistry II		upper level Chem (200, 260, or	
	If CHE 212 is taken, it will be received at		354)	
	CCSU as an unrestricted elective – see			
	line 50.			
36			PHY 121 General Physics I or	4
			CHEM 210/211 Fdns of Organic	
			Chemistry/Lab; whichever was	
			not taken at CC	
37			PHY 122 General Physics II (if not	(4)
			taken at CCC)	
38			BIO 200 Integrative Biology	4
39			BIO 290 Biology Research	2
			Experience I	
			Biodiversity Elective – Choose	3-4
			from:	
			BIO 315 Microbial Ecology	
			BIO 322 Vertebrate Zoology	
			BIO 326 Mushrooms, Mosses, &	
			More	
			BIO 327 Vascular Plants	
			BIO 420 Ornithology	
			BIO 421 Marine Invertebrate	
			Biology	
			BIO 425 Biology of Marine and	
			Freshwater Algae	
			BIO 444 Plant Taxonomy	
			BIO 468	

40			Ecology/Evolution Elective –	3-4			
			Choose from:				
			BIO 402 Population Genetics				
			BIO 405 Ecology				
			BIO 434 Ecology of Inland Waters				
			BIO 440 Evolution				
			BIO 480 Animal Behavior				
41			EBE Specialization Elective –	2-4			
			Choose from:				
			BIO 230 Natural History				
			BIO 402 Population Genetics				
			BIO 315 Microbial Ecology				
			BIO 322 Vertebrate Zoology				
			BIO 326 Mushrooms, Mosses &				
			More				
			BIO 327 Vascular Plants				
			BIO 405 Ecology				
			BIO 410 Ecological Physiology				
			BIO 420 Ornithology				
			BIO 421 Marine Invertebrate				
			Biology				
			BIO 425 Biology of Marine &				
			Freshwater Algae				
			BIO 434 Ecology of Inland Waters				
			BIO 438 Aquatic Pollution				
			BIO 440 Evolution				
			BIO 444 Plant Taxonomy				
			BIO 470 Field Studies in Biology				
			BIO 480 Animal Behavior				
			BIO 489 Vertebrate Dissection				
			*BIO 490 TOPICS IN BIOlogy				
			*BIO 491 Advanced Problems In				
			BIOIOgy				
			*BIO 499 Undergraduate Thesis in				
			BIOIOBY				
			*To be considered in the E/B/E				
			group, these courses must have a				
			topic approved by the E/B/E				
42			Tacuity advisor.				
42			BIO 390 BIOlogy Research	L			
			Experience II				
ΔΛ			or 391 Internship in Biology				
45	Program Course Credits:	24		43-51			
46	Minor Course Credits:	1	A minor is not required for this				
_			major.				
47	01	oen Flec	tives				
	Ŭ			Open Electives			

48	CHEM 212 Organic Chemistry II – if taken at the community college	(4)	CHEM 200/201 Fundamentals of Analytical Chemistry w/Lab Or CHEM 260/201 Fundamentals of Inorganic Chemistry w/Lab Or CHEM 354 Foundations in	(4)
49	Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language and/or minor requirements will end up with more open elective credits at the CCSU.		biochemistry	
50	Open Elective credits:	0		13-26
51	Total Credits at the Community College	60-61	Total Credits for the 4-Year Degree	120

Template 1

Central Connecticut State University

Biology – Environmental Science B.S.

All biology courses must be completed with a C- or above.

1	Community Colleges*:			CCSU	
2			Credits		Credits
3		Fra	meworl	<30**	
4		General Edu	ucation	Requirements	
5	Competency:				
6	Section A				
7	Written I	ENG*101 English	3	ENG 110	3
0	Written II	Composition Con Ed Elective	2	Skill Area I Communication Skills	2
0	Scientific Reasoning	BIO*121 Conorol	3	Skill Area IV Natural Sciences	3
9	Scientific Reasoning	BIO 121 General	4	PIO 121 Conoral Biology I	4
10	Scientific Knowledge	DIUIUgy I	1	Study Area IV Natural Sciences	4
10	Scientine knowledge	Cher 121 General	4	Sludy Area IV Natural Sciences:	4
		Chemistry		CHEM 162 Caparal Chemistry and	
				1	
11	Quantitative	MAT* 185	4	Skill Area II Mathematics: MATH	4
		Trigonometry (NVCC)		119 Pre-Calculus with	
		MAT*186 Precalculus		Trigonometry	
12	Historical Knowledge	Gen Ed Elective	3	Study Area II History Requirement	3
13	Social Phenomena	Gen Ed Elective	3	Study Area II Social Sciences	3
14	Aesthetic Dimensions	Gen Ed Elective	3	Study Area I Arts & Humanities	3
15	Section B				
16	Competency:	Gen Ed Elective	3	Skill Area IV University	3
				Requirement	
17	Competency:	Gen Ed Elective	3	Study Area III Behavioral Sciences	3
18	Framework30 C	redits (30-31):			
19			Pathway	/30	
20		Additional Ge	neral Ed	lucation Courses	
21				Study Area I – Literature	3
22	Additional Gen E	d Elective or MAT 254	(3)	Study Area I – Arts and	3
	Calculus I – if an	additional general		Humanities	
	education elective	ve is chosen. See line 25			
	if MAT 254 is ch	osen			
23				Study Area II – Social Sciences	3
24				Study Area III – Behavioral	3
				Sciences	
25	Additional Gen E	d Elective or MAT 254	(4)	Skill Area II – Math/Stat/ Comp Sci	3
	Calculus I – if MA	AT 254 is chosen. See			

Revised 5/3/2016

	line 22 if an additional general education				
	elective is chosen.				
26	Lines 22 and 25 will result in 3 or 4	3-4			
	credits, depending upon which option is				
	chosen.				
27			Skill Ar	ea III – Foreign Language	6
			Proficie	ency. Can be met through	
			the fol	owing:	
			1.	Three sequential years of	
				one foreign language at	
				the high-school level.	
			2.	Elementary proficiency as	
				demonstrated by	
				successfully completing a	
				second-semester level	
				CCSU foreign-language	
				course (112 or 118).	
				Students with no previous	
				background in a language	
				must take the first and	
				second semesters (111	
				and 112, or 118);	
				students who place out of	
				111 due to previous	
				background in the	
				ranguage may satisfy the	
				112 only	
			3	Passing the CLEP a	
			5.	standardized examination	
				which demonstrates	
				knowledge of a foreign	
				language equivalent to	
				completion of a second-	
				semester course or	
				higher.	
			4.	Successful completion of	
				a foreign-language course	
				at a level higher than the	
				second- semester level.	
			5.	Demonstration of native	
				proficiency in a language	
				other than English	
				(requires evaluation of	
				skill level by an	
				appropriate faculty	
				member and/or official	
				documentation, and	

			approval by the Chair of	
			the Department of	
			Modern Languages	
			(Credits will adjust accordingly.)	
28	General Education Credits:	36-37		51-52
29	Major	Program	n Courses	
30	BIO*122 General Biology II	4	BIO 122 General Biology II	4
31	CHE* 122 General Chemistry II	4	CHEM200/201 Fdns of Analytical	4
			Chem/ Lab or CHEM 260/201	
			Fdns of Inorganic Chem/ Lab	
32	PHY* 121 General Physics I or CHE*211	4	PHY 121 General Physics I or	4
	Organic Chemistry I		CHEM 210/211 Fdns of Organic	
	,		Chem/Lab	
33	BIO*235 Microbiology or 200's level	4	BMS 316 Microbiology or BIO	4
	BIO* lab science		200-level or higher lab science	
			elective	
34	BIO*270 Ecology or 200's level BIO* lab	4	BIO 200-level or higher lab	4
•	science		science elective	
35	PHY* 122 General Physics II or CHE*212	4	PHY 122 General Physics II or	4
	Organic Chemistry II		CHEM 212 Organic Synthesis and	
			CHEM 213 Organic Synthesis	
			Laboratory	
36			PHY 121 General Physics I if PHY	(4)
			121 General Physics I was not	
			taken at the community college	
37			CHEM 210 Foundations of Organic	(4)
			Chemistry and	
			CHEM 211 Foundations of Organic	
			Chemistry Laboratory if CHE 211	
			Organic Chemistry I was not taken	
			at the community college	
38			PHY 122 General Physics II if PHY	(4)
			122 General Physics II was not	
			taken at the community college	
39			IF CHE 212 Organic Chemistry is	(3-4)
			not taken at the community	
			college:	
			CHEM 212 Organic Synthesis and	
			CHEM 213 Organic Synthesis	
	•		Laboratory	
			OR	
			CHEM 354 Foundations of	
			Biochemistry	
40			Lines 36-40 will add up to 7-8	7-8
			credits	
41			BIO 200 Integrative Biology	4

42			BIO 290 Biology Research	2
			Experience I	
43			BIO 436 Environmental Resources	3-4
			and Management (3)	
			OR	
			BIO 438 Aquatic Pollution (4)	
44			Choose one:	3-4
			BIO 315 Microbial Ecology	
			BIO 322 Vertebrate Zoology	
			BIO 326 Mushrooms, Mosses, &	
			More	
			BIO 327 Vascular Plants	
			BIO 420 Ornithology	
			BIO 421 Marine Invertebrate	
			Biology	
			BIO 425 Biology of Marine and	
			Freshwater Algae	
			BIO 444 Plant Taxonomy	
45			Choose one:	4
			BIO 405 Ecology	
			BIO 434 Ecology of Inland Waters	
46			BIO 390 Biology Research	1
			Experience II	
			or 391 Internship in Biology	
47			CHEM 456 Toxicology	4
48			Choose one:	3
			ESCI 121 Physical Geology (GSCI	
			121 The Dynamic Earth?)	
			ESCI 450 Environmental Geology	
			(GSCI?)	
49	Program Course Credits:	24		55-58
50	Minor Course Credits:		A minor is not required for this	
			major.	
51	Or	pen Elec	tives	[
52	Students who have fulfilled foreign			
	language requirements in high school			
	or who use open elective credits at the			
	community college to fulfill foreign			
	language and/or minor requirements			
	will end up with more open elective			
	credits at the CCSU.			
53	Open Elective credits:	0		10-14
54	Total Credits at the Community College	60-61	Total Credits for the 4-Year	120
1			Degree	

Template 1

Eastern Connecticut State University

Complete four-year degree with articulation of community college degree to four-year degree

Biology B.A.

Both BIO 120 and BIO 130 must be successfully completed with a grade of C- or better prior to starting BIO 220 or BIO 230. Both BIO 220 and BIO 230 must be successfully completed with a grade of C- or better before starting on the required upper-level courses.

				Focu	
1	C	ommunity Colleges*:	Cradita	ECSU	Cradita
2			Credits	22 **	Credits
3		Frai	mework	30**	
4		General Edu	cation F	Requirements	
5	Competency:				
6	Section A				
7	Written I	ENG*101 English	3	T1: College Writing	3
		Composition			
8	Written II	Gen Education Elective	3	T1: Lit & Thought	3
9	Scientific Reasoning	BIO*121 General	4	T1: Natural Sciences – BIO 120	4
		Biology I		Organismal Biology w/Lab	
10	Scientific Knowledge	CHE*121 General	4	T2: Natural Sciences – CHE	4
		Chemistry I		210/212 General Chemistry I	
				w/Lab	
11	Quantitative	MAT* 185	4	T1: Math – MAT 130 Precalculus	4
		Trigonometry (NVCC)			
		MAT*186 Precalculus			
12	Historical Knowledge	Gen Ed Elective	3	T1: Historical Perspectives	3
13	Social Phenomena	Gen Ed Elective	3	T1SS: Social Sciences	3
14	Aesthetic Dimensions	Gen Ed Elective	3	T1A: Arts in Context	3
15	Section B				
16	Competency:	Gen Ed Elective	3	FYI 100	3
17	Competency:	Gen Ed Elective	3	Health and Wellness	3
18	Framework30 C	redits (30-31):			33
19		Р	athway	30	
20		Additional Ger	neral Edu	ucation Courses	
21				T2 Cultural Perspectives	3
22				T2 Individuals and Societies	3
23				T2 Creative Expressions	3
24				T2 Applied Information	3
				Technologies – Must be MAT 216	
				Statistical Data Analysis (if	
				Calculus is not taken at the	
				community college)	

25			Tier 3 Capstone – BIO 466 Senior	3
			Seminar	
26			Foreign Language Proficiency	6
			(Can be met by completing at	
			least two years of a single	
			foreign language in high school	
			or two semesters of a single	
			foreign language at the college	
			level. Credits will adjust	
			accordingly.)	
27	General Education Credits:			54
28	Major F	Program	Courses	
29	BIO*122 General Biology II	4	BIO 130 Ecology with Lab	4
30	CHE* 122 General Chemistry II	4	CHEM 211 General Chemistry II	4
			(3) and CHEM 213 General	
			Chemistry II Lab(1)	
31	PHY* 121 General Physics Lor CHE*211	4	PHY 204 General Physics I with	4
	Organic Chemistry I		Lab: If CHF 211 is taken at the	•
			community college, see line 46	
			for how CHE 216 will be counted	
			at ECSU: see also line 35	
32	BIO*235 Microbiology or 200's level BIO*	4	BIO 334 General Microbiology	4
52	lah science		w/lab or 200's level BIO* lab	•
			science elective	
33	Additional Gen Ed Elective or Calculus I	3-4	Gen Ed Elective or Calculus	3-4
55	Additional Gen Ed Elective of Calculus I	5	(course # depends on Cal course	51
			taken): Calculus will count at	
			ECSU as the MAT 216 Statistical	
		•	Data Analysis – see lines 24 and	
			39	
34	BIO*270 or 200's level BIO* lab science	4	200's level BIO lab science	4
-			elective – Some courses chosen	-
			will fulfill a specific major	
			requirement: some will fulfill an	
			unrestricted elective THIS LIST	
			SHOULD BE PROVIDED?	
35			PHY 204 General Physics I with	(4)
			lab	(•)
			(if PHY I was not taken at CC)	
36			BIO 220 Cell Biology	4
37			BIO 230 Genetics	4
38			FFS 104 Dynamic Farth	4
39			MAT 216 Statistical Data Analysis	(3)
			- if Calculus was not taken at the	(3)
			community college	
40			300's or 400's level Cell and	Δ
			Molecular Biology elective from	-7
1	1	1	THE COMMENDING STORES TO THE STORE STORES	

		the following (if DIO*225 was not	
		the following (if BIO 235 was not	
		taken at CC) or any 300's or	
		400's level Biology Elective:	
		BIO 330 Cell Biology w/Lab	
		BIO 420 Electron Microscopy	
		w/Lab	
		BIO 422 Research Methods	
		Molecular Bio w/Lab	
		BIO 424 Cell Physiology	
		BIO 426 Biology of Cancer	
		BIO 428 Virology w/Lab	
		BIO 430 Endocrinology w/Lab	
		BIO 432 Histology w/Lab	
		BIO 432 Histology W/Lab	
		BIO 454 Developmental Biology	
		BIO 436 Molecular Genetics	
		w/Lab	
		BIO 438 Plant Physiology w/Lab	
		BIO 450 Biotechnology w/Lab	
		BIO 458 Stem Cells and	
		Regenerative Medicine	
41		300's or 400's level Population	4
		Biology and Ecology elective	
		from the following:	
		BIO 320/360 Tropical Biology and	
		Tropical Ecosystems	
		BIO 319/320 Oceanic Island	
		Ecology and Tropical Biology	
		BIO 440 Aquatic Biology w/Lab	
		BIO 442 Plant Ecology w/Lab	
		BIO 444 Population/Community	
		Ecology w/Lab	
		BIO 446 Terrestrial Ecology	
		w/lab	
		BIO 452 Conservation Biology	
		w/lab	
		BIO 454 Piological Invasions	
		W/Lau DIO 456 Marina Faalamuu (Lab	
42			4
42		SUUS OF 400 S level Urganismal	4
		Biology elective from the	
		TOIIOWING:	
		BIO 324 Entomology w/Lab	
		BIO 332 Biology of Plants w/Lab	
		BIO 334 General Microbiology	
		w/Lab	
		BIO 336 Invertebrate Biology	
		w/Lab	

			BIO 338 Vertebrate Biology	
			w/Lab	
			BIO 340 Parasitology w/Lab 4	
			BIO 346 Animal Behavior w/Lab	
			BIO 348 Functional Human	
			Anatomy w/Lab	
			BIO 350 Human Physiology	
			w/Lab	
			BIO 448 Physiological Ecology	
			w/Lab	
43			300's or 400's level Biology	8
			Elective	
44	Program Course Credits:			63-64
45	Op	en Elect	ives	
46	CHE 211 Organic Chemistry I – if taken at	(4)	CHE 216 Organic Chemistry I	(4)
	the community college	()	with Lab – if taken at the	()
			community college	
47	PHY* 122 General Physics II or CHE*212	4	PHY 205 General Physics II With	4
	Organic Chemistry II		Lab Or	
	, , , , , , , , , , , , , , , , , , ,		CHE 217 Organic Chemistry II	
			with Lab	
			Neither is required in the	
			program	
48	Students who have fulfilled foreign			
	language requirements in high school or			
	who use open elective credits at the			
	community college to fulfill foreign			
	language requirements will end up with			
	more open elective credits at the ECSU			
49	Open Elective credits:			2-3
50	Total Credits at the Community College	60-61	Total Credits for the 4-Year	120
			Degree	
L			. ~	I

Template 1

Eastern Connecticut State University

Complete four-year degree with articulation of community college degree to four-year degree **Biology B.S.**

Both BIO 120 and BIO 130 must be successfully completed with a grade of C- or better prior to starting BIO 220 or BIO 230. Both BIO 220 and BIO 230 must be successfully completed with a grade of C- or better before starting on the required upper-level courses.

1	C	ommunity Colleges*:		ECSU	
2			Credits		Credits
3		Fra	mework	(30**	
4		General Edu	ucation	Requirements	
5	Competency:				
6	Section A				
7	Written I	ENG*101 English	3	T1: College Writing	3
		Composition			
8	Written II	Gen Education Elective	3	T1: Lit & Thought	3
9	Scientific Reasoning	BIO*121 General	4	T1: Natural Sciences – BIO 120	4
		Biology I		Organismal Biology w/Lab	
10	Scientific Knowledge	CHE*121 General	4	T2: Natural Sciences – CHE	4
		Chemistry I		210/212 General Chemistry I	
				w/Lab	
11	Quantitative	MAT* 185	4	T1: Math – MAT 130 Precalculus	4
		Trigonometry (NVCC)			
		MAT*186 Precalculus			
12	Historical Knowledge	Gen Ed Elective	3	T1: Historical Perspectives	3
13	Social Phenomena	Gen Ed Elective	3	T1SS: Social Sciences	3
14	Aesthetic Dimensions	Gen Ed Elective	3	T1A: Arts in Context	3
15	Section B				
16	Competency:	Gen Ed Elective	3	FYI 100	3
17	Competency:	Gen Ed Elective	3	Health and Wellness	3
18	Framework30 C	redits (30-31):			33
19		l I	Pathway	/30	
20		Additional Ge	neral Ed	ucation Courses	
21				T2 Cultural Perspectives	3
22				T2 Individuals and Societies	3
23				T2 Creative Expressions	3
24				T2 Applied Information	3
				Technologies – If taken for line	
				40, MAT 216 Statistical Data	
				Analysis	

25			Tier 3 Capstone – BIO 466 Senior	3
			Seminar	
26			Foreign Language Proficiency	6
			(Can be met by completing at	
			least two years of a single	
			foreign language in high school	
			or two semesters of a single	
			foreign language at the college	
			level. Credits will adjust	
			accordingly.)	
27	General Education Credits:			54
28	Major	Program	n Courses	
29	BIO*122 General Biology II	4	BIO 130 Ecology with Lab	4
30	CHE* 122 General Chemistry II	4	CHEM 211 General Chemistry II	4
			(3) and CHEM 213 General	
			Chemistry II Lab(1)	
31	PHY* 121 General Physics Lor CHE*211	4	PHY 204 General Physics I with	4
	Organic Chemistry I		Lab Or CHE 216 Organic	
			Chemistry I with Lab	
32	BIO*235 Microbiology or 200's level	4	BIO 334 General Microbiology	4
52	BIO* lab science		w/lab or 200's level BIO* lab	•
			science elective	
33	Additional Gen Ed Elective or Calculus I	3-4	Gen Ed Elective or Calculus	3-4
55	Additional Seried Elective of Calculus I	J T	(course # depends on Cal course	5 4
			taken)	
34	BIO*270 or 200's level BIO* lab science	4	200's level BIO lab science	4
5.			elective – Some courses chosen	•
			will fulfill a specific major	
		•	requirement: some will fulfill an	
			uprestricted elective THIS LIST	
35			CHE 216 Organic Chemistry I	(4)
55			w/l = h (if not taken at the CC)	(4)
26			BHY 204 General Physics I with	(4)
50			Lab	(4)
			(if PHV was not taken at CC)	
27			Lines 26-28 will add up to 4	Λ
57			credits	4
20			BIO 220 Cell Biology	Λ
20			BIO 220 Cell Biology	4
39			MAT 242 Calculus	4
40			w/Technology (if not taken at	0-4
			the CC	
11			One of the following:	0.2 - 1
41			MAT 244 Calculus !!	0, 3 0r 4
			w/rechnology	
1			IVIAT 216 Statistical Data	

			Analysis – counts as T2	
			Applied Information	
			Technologies – see line 24	
			BIO 378 Biology Research and	
12			Data Analysis	
42				
44			300's or 400's level Cell and	4
			Molecular Biology elective from	
			the following (if BIO*235 was	
			not taken at CC) or any 300's or	
			400's level Biology Elective:	
			BIO 330 Cell Biology w/Lab	
			BIO 420 Electron Microscopy	
			w/Lab	1
			BIO 422 Research Methods	
			Molecular Bio w/Lab	
			BIO 424 Cell Physiology	
			BIO 426 Biology of Cancer	
			BIO 428 Virology w/Lab	
			BIO 430 Endocrinology w/Lab	
			BIO 432 Histology w/Lab	
			BIO 434 Developmental Biology	
			w/Lab	
			BIO 436 Molecular Genetics	
			w/Lab	
			BIO 438 Plant Physiology w/Lab	
			BIO 450 Biotechnology w/Lab	
		-	BIO 458 Stem Cells and	
			Regenerative Medicine	
45			300's or 400's level Population	4
			Biology and Ecology elective	
			from the following:	
			BIO 320/360 Tropical Biology	
			diu Tropical Ecosystems	
			BIO 319/220 Oceanic Island	
			Ecology and Tropical Biology	
			BIO 110 Aquatic Biology w/Lab	
			BIO 442 Plant Ecology w/Lab	
	-		BIO 444 Population/Community	
			Fcology w/Lab	
			BIO 446 Terrestrial Fcology	
			w/Lab	
			BIO 452 Conservation Biology	
			w/Lab	
			BIO 454 Biological Invasions	
			w/Lab	

			BIO 456 Marine Ecology w/Lab	
46			300's or 400's level Organismal	4
			Biology elective from the	
			following:	
			BIO 324 Entomology w/Lab	
			BIO 332 Biology of Plants w/Lab	
			BIO 334 General Microbiology	
			w/Lab	
			BIO 336 Invertebrate Biology	
			w/Lab	
			BIO 338 Vertebrate Biology	
			w/Lab	
			BIO 340 Parasitology w/Lab 4	
			BIO 346 Animal Behavior w/Lab	
			BIO 348 Functional Human	
			Anatomy w/Lab	
			BIO 350 Human Physiology	
			w/Lab	
			BIO 448 Physiological Ecology	
			w/Lab	
47			300's or 400's level Biology	8
			Elective	
48	Program Course Credits:			55-64
49	Op	oen Elect	tives	
50	PHY* 122 General Physics II or CHE*212	4	PHY 205 General Physics II with	4
	Organic Chemistry II		Lab Or	
			CHE 217 Organic Chemistry II	
			with Lab	
51	Students who have fulfilled foreign			
	language requirements in high school or			
	who use open elective credits at the			
	community college to fulfill foreign			
	language requirements will end up with			
<u> </u>	more open elective credits at the ECSU.			
52	Open Elective credits:			0-7
53	Total Credits at the Community College	60-61	Total Credits for the 4-Year	120-122
			Degree	

Template 1

Southern Connecticut State University

Biology B.A.

1	C	ommunity Colleges*:		SCSU		
2			Credits		Credits	
3		Fran	nework	30**		
4		General Education Requirements				
5	Competency:					
6	Section A					
7	Written I	English 101	3	FYE	3	
8	Written II	Gen Ed	3	Written Communication	3	
9	Scientific Reasoning	BIO*121 General Biology	4	Natural World 1 – Physical Realm – BIO 100 General Zoology (3) and BIO 0100 BIO Transfer Elective (1)	4	
10	Scientific Knowledge	CHE*121 General Chemistry I	4	Natural World II – Life and Environment – CHE 120 General Chemistry I	4	
11	Quantitative	MAT* 185 Trigonometry (NVCC) MAT*186 Precalculus	4	Quantitative Reasoning – MAT 122 Precalculus	4	
12	Historical Knowledge	Gen Ed*	3	Time and Place	3	
13	Social Phenomena	Gen Ed	3	Social structure, Conflict, Consensus	3	
14	Aesthetic Dimensions	Gen Ed	3	Cultural Expressions	3	
15	Section B					
16	Competency:	Gen Ed	3	Critical Thinking	3	
17	Competency:	Gen Ed	3	Tech Fluency	3	
18	Framework30 C	redits (30-31):			33	
19		Pa	athway	30		
20		Additional Gen	eral Edu	ucation Courses		
21	One additional g of Calculus I. See	eneral education requireme e line 47 in Unrestricted Elec	ent may b ctives.	e fulfilled at the community college i	n place	
22				American Experience	3	
23				Creative Drive	3	
24				Global Awareness	3	
25				Mind and Body	3	
26				Multilingual Communication –	9	
				level 3 (Can be met by		
				completing the third level of a		

			foreign language	
			or demonstrating knowledge via	
			a STAMP test (Standards-based	
			Measurement of Proficiency) or	
			an equivalent. Credits will adjust	
			accordingly.)	
27			Must be taken at SCSU:	
28			Tier 3 Connections Capstone	0
29	General Education Credits:			54
30	Major P	rogram	Courses	
31	BIO*122 General Biology II	4	BIO 102 - Zoology	4
32			BIO 103 – Botany	4
33			BIO 220 Genetics An equivalent	4
			course can be taken at the CC's.	
			See lines 36, 38)	
34			Select one Entry Level	4
			Anatomy/Physiology	
			BIO 230 – Plant Anatomy and	
			Morphology or	
			BIO 231 – Comparative	
			Vertebrate Anatomy or	
			BIO 235 - Histology	
35			Select one Upper Level	4
			Anatomy/Physiology	
			BIO 301 – Physiology or	
			BIO 401 – Animal Physiology or	
			BIO 420 – Plant Physiology or	
			BIO 454 – Brain Anatomy and	
			Transmission	
36	BIO*235 Microbiology or 200's level BIO*	4	Select one Entry Level	(3-4)
	lab science		Cell/Molecular Biology	
	The 200-level BIO lab science may meet		(if not completed at the CC)	
	an entry-level requirement or will transfer		BIO 205 – Forensic Biology or	
	as an unrestricted elective. See line		BIO 233 – General Microbiology	
	BIO ### Genetics will transfer as BIO 220		or	
	Genetics. See line 33		BIO 240 – Human Heredity (3 cr)	
	These courses should be specified			
37			Select one Upper Level	4
			Cell/Molecular Biology	
			BIO 335 – Pathogenic	
			Microbiology or	
			BIO 360- Plant Growth and	
			Development or	
			BIO 435 – Developmental	
			Biology or	
			BIO 436 – Molecular Biology or	
			BIO 451 – Tissue Culture or	

			DIO 466 Advanced Melecular	
			BIO 466 – Advanced Molecular	
			and Cell Biology or	
			BIO 467 – Laboratory Course In	
20			Biotechnology	
38	BIO*270 Ecology or 200's level BIO* lab	4	Select one Entry Level	3-4
	science		Biodiversity/ Ecology/	
	The 200-level BIO lab science may meet		<u>Organismal</u>	
	an entry-level requirement or will transfer		(if not completed at the CC)	
	as an unrestricted elective. See line		BIO 202 – Ecology or	
	BIO ### Genetics will transfer as BIO 220		BIO 210 – Environmental	
	Genetics. See line 38		Biology and Conservation (3 cr)	
	These courses should be specified		or	
			BIO 228- Vertebrate Zoology or	
			BIO229 – Invertebrate Zoology	
			or	
			BIO 250 – Plant Taxonomy and	
			Systematics	
39			Select one Upper Level	3-4
			Biodiversity/ Ecology/	
			<u>Organismal</u>	
			BIO 334 – Microbial Ecology or	
			BIO 337 – Medically Important	
			Arthropods (3 cr) or	
			BIO 427 – Entomology or	
			BIO 429 – Limnology or	
			BIO 430 – Marine Ecology or	
			BIO 432 – Mycology or	
			BIO 438 – Aquatic Entomology or	
			BIO 440 – Parasitic Infections (3	
			cr) or	
			BIO 460 – Paleontology	
40			One other upper level BIO course	4
			from upper level lists above	
41	CHE* 122 General Chemistry II	4	CHE 122 General Chemistry II	4
42				
43	Program Course Credits:			38-44
44	Unrest	ricted E	lectives	
45	PHY* 121 General Physics I or CHE*211	4	PHY 201 General Physics I Or CHE	4
	Organic Chemistry I		260 Organic Chemistry I	
46	PHY* 122 General Physics II or CHE*212	4	PHY 201 General Physics II Or	4
-	Organic Chemistry II		CHE 261 Organic Chemistry II	-
	- 0 ,			
47	Additional Gen Ed Elective or Calculus I	3-4	Gen Ed elective or MAT 150	(3-4)
	MAT 254 will transfer as an unrestricted		Calculus I.	()
	elective			

48	BIO*235 Microbiology or 200's level BIO*	4	BIO 200 transfer elective if not	(4)
	lab science		transferred as a specific entry-	
	The 200-level BIO lab science may meet		level requirement	
	an entry-level requirement or will transfer			
	as an unrestricted elective. See line 36			
49	BIO*270 Ecology or 200's level BIO* lab	4	BIO 200 transfer elective if not	(4)
	science		transferred as a specific entry-	
	The 200-level BIO lab science may meet		level requirement	
	an entry-level requirement or will transfer			
	as an unrestricted elective. See line 38			
50				
51	Students who have fulfilled foreign			
	language requirements through			
	assessment (STAMP or equivalent), who			
	place beyond first semester, or who use			
	open elective credits at the community			
	college to fulfill foreign language			
	requirements will end up with more			
	open elective credits at SCSU.			
52	Open Elective credits:			2-20
53	Total Credits at the Community College	60-61	Total Credits for the 4-Year	120
			Degree	

Template 1

Southern Connecticut State University

Biology B.S.

1	Community Colleges*:			SCSU		
2			Credits		Credits	
3		Fran	nework	30**		
4	General Education Requirements					
5	Competency:					
6	Section A					
7	Written I	English 101	3	FYE	3	
8	Written II	Gen Ed	3	Written Communication	3	
9	Scientific Reasoning	BIO*121 General Biology	4	Natural World 1 – Physical Realm – BIO 100 General Zoology (3) and BIO 0100 BIO Transfer Elective (1)	4	
10	Scientific Knowledge	CHE*121 General Chemistry I	4	Natural World II – Life and Environment – CHE 120 General Chemistry I	4	
11	Quantitative	MAT* 185 Trigonometry (NVCC) MAT*186 Precalculus	4	Quantitative Reasoning – MAT 122 Precalculus	4	
12	Historical Knowledge	Gen Ed*	3	Time and Place	3	
13	Social Phenomena	Gen Ed	3	Social structure, Conflict, Consensus	3	
14	Aesthetic Dimensions	Gen Ed	3	Cultural Expressions	3	
15	Section B					
16	Competency:	Gen Ed	3	Critical Thinking	3	
17	Competency:	Gen Ed	3	Tech Fluency	3	
18	Framework30 C	redits (30-31):			33	
19		Pa	athway	30		
20	Additional General Education Courses					
21	One additional g of Calculus I. See	eneral education requireme e line 53 in Unrestricted Elec	ent may b ctives.	e fulfilled at the community college i	in place	
22				American Experience	3	
23				Creative Drive	3	
24				Global Awareness	3	
25				Mind and Body	3	
26				Multilingual Communication –	9	
				level 3 (Can be met by		
				completing the third level of a		

			6 : 1	
			toreign language	
			or demonstrating knowledge via	
			a STAMP test (Standards-based	
			Measurement of Proficiency) or	
			an equivalent. Credits will adjust	
			accordingly.)	
27			Must be taken at SCSU:	
28			Tier 3 Connections Capstone	0
29	General Education Credits:			54
30	Major P	rogram	Courses	
31	BIO*122 General Biology II	4	BIO 102 - Zoology	4
32	CHE* 122 General Chemistry II	4	CHE 122 General Chemistry II	4
33	PHY* 121 General Physics or CHF*211	4	PHY 200 General Physics I Or CHE	4
	Organic Chemistry I		260 Organic Chemistry I	•
34	PHY* 122 General Physics II or CHE*212	4	PHY 201 General Physics II Or	4
5.	Organic Chemistry II		CHE 261 Organic Chemistry II	•
	CHE 212 will transfer as an unrestricted		one zor organic chemistry in	
	elective See line 54			
35			PHY 200 General Physics Lif not	(4)
55			taken at the community college	(')
36			PHY 201 General Physics II if not	(4)
50			taken at the community college	(-)
37			CHEM 260 Organic Chemistry Lif	(4)
57			not was not taken at the	(4)
			community college	
20			Lines 35-37 will add up to 4-8	1_8
50			credits	4-0
30			BIO 103 – Botany	1
10			BIO 220 Genetics An equivalent	1
-0			course can be taken at the	-
			community college See lines 11	
			and A3	
/11			Select one Entry Level	1
71			Anatomy/Physiology	-
			$\frac{A Ratomy Rystology}{B R 230 - Plant Anatomy and R$	
			Morphology or	
			BIO 231 – Comparative	
			Vertebrate Anatomy or	
			BIO 235 - Histology	
12			Select one Unner Level	1
+2			Anatomy/Physiology	4
			BIO 301 - Physiology or	
			BIO 401 - Animal Development	
			BIO 401 - Alima Flysiology Of BIO 420 - Plant Physiology or	
			BIO 420 - Flant Physiology Of	
			DIO 454 - DI dill Alldlully dilu	
			Transmission	

40				2.4
43	BIO*235 Microbiology or 200's level BIO*	4	Select one Entry Level	3-4
	lab science		<u>Cell/Molecular Biology</u>	
	The 200-level BIO lab science may meet		BIO 205 – Forensic Biology or	
	an entry-level requirement or will transfer		BIO 233 – General Microbiology	
	as an unrestricted elective. See line		or BIO 240 – Human Heredity (3	
	BIO ### Genetics will transfer as BIO 220		cr)	
	Genetics See line 33			
	These courses should be specified			
11			Salact and Upper Lovel	1
44			<u>Select one Opper Lever</u>	4
			Cell/Molecular Biology	
			BIO 335 – Pathogenic	
			Microbiology or	
			BIO 360- Plant Growth and	
			Development or	
			BIO 435 – Developmental	
			Biology or	
			BIQ 436 – Molecular Biology or	
			BIO 451 – Tissue Culture or	
			BIO 466 - Advanced Molecular	
			and Cell Biology or	
			BIO 467 - Laboratory Course in	
			Biotachinalary	
45			Biotechnology	
45	BIO*270 Ecology or 200's level BIO* lab	4	Select one Entry Level	3-4
	science		Biodiversity/ Ecology/	
	The 200-level BIO lab science may meet		Organismal	
	an entry-level requirement or will transfer		BIO 202 – Ecology or	
	as an unrestricted elective. See line		BIO 210 – Environmental	
	BIO ### Genetics will transfer as BIO 220		Biology and Conservation (3 cr)	
	Genetics. See line 38		or	
	These courses should be specified		BIO 228- Vertebrate Zoology or	
			BIO229 – Invertebrate Zoology	
			or	
			BIO 250 – Plant Taxonomy and	
			Systematics	
46			Select one Unner Level	3-1
70			Biodiversity/Ecology/	54
			Organismal	
			Organismal	
			BIO 334 – Microbial Ecology or	
			BIO 337 – Medically Important	
			Arthropods (3 cr) or	
			BIO 427 – Entomology or	
			BIO 429 – Limnology or	
			BIO 430 – Marine Ecology or	
			BIO 432 – Mycology or	
			BIO 438 – Aquatic Entomology or	
			BIO 440 – Parasitic Infections (3	
			cr) or	
			BIO 460 – Paleontology	
1		1	DIG TOO T AICOILLOIDEY	

		1		r			
47			One other upper level BIO course	4			
			from upper level lists above				
48			MAT 221 – Intermediate Applied	4			
			Statistics				
49							
50	Program Course Credits:	(16)-		57-64			
		24					
51	1 Open Electives						
52							
53	Additional Gen Ed Elective or Calculus I	3-4	Gen Ed elective or MAT 150	(4)			
	MAT 254 will transfer as an unrestricted		Calculus I.				
	elective						
54	PHY* 122 General Physics II or CHE*212	4	CHE 261 Organic Chemistry II	(4)			
	Organic Chemistry II						
	CHE 212 will transfer as an unrestricted						
	elective. See line 34						
56	Up to two 200-level BIO lab courses. See	(8)	BIO 200-level elective(s)	(8)			
	lines 43 and 45.						
55	Students who have fulfilled foreign						
	language requirements through						
	assessment (STAMP or equivalent), who						
	place beyond first semester, or who use						
	open elective credits at the community						
	college to fulfill foreign language						
	requirements will end up with more						
	open elective credits at SCSU.						
56	Open Elective credits:	0		2-9			
57	Total Credits at the Community College	60-61	Total Credits for the 4-Year	120			
			Degree				



Template 1

Western Connecticut State University Biology – Professional Option B.A.

1	C	ommunity Colleges*:		WCSU	
2			Credits		Credits
3		Fran	nework	30**	
4		General Educ	cation F	Requirements	
5	Competency:				
6	Section A				
7	Written I	ENG*101 English	3	Written Communication	3
8	Written II	Gen Ed Elective	3	Written Communication	3
9	Scientific Reasoning	BIO*121 General Biology	4	BIO 103 General Biology I	4
10	Scientific Knowledge	CHE*121 General Chemistry I	4	CHE 110 General Chemistry I	4
11	Quantitative	MAT* 185 Trigonometry (NVCC) MAT*186 Precalculus	4	MAT 133 Precalculus	4
12	Historical Knowledge	Gen Ed Elective	3	Gen Ed Elective/2 nd exposure	3
13	Social Phenomena	Gen Ed Elective	3	Critical Thinking	3
14	Aesthetic Dimensions	Gen Ed Elective	3	Creative Process	
15	Section B				
16	Competency:	Gen Ed Elective	3	Oral Communication	3
17	Competency:	Gen Ed Elective		Information Literacy	3
18	Framework30 C	redits (30-31):			33
19		Pa	athway	30	
20		Additional Gen	eral Ed	ucation Courses	
21	An additional ge requirement wil community colle Calculus or with elective.	neral education I be met at the ege, either with MAT 254 a general education	3-4	General Education Elective	3-4
22	CHE* 122 Gener	al Chemistry II	4	General Education Elective – CHE 111 General Chemistry II	4
23				Intercultural Competence	3
24				Health and Wellness	3
25				Students must complete a	3
				foreign language requirement.	
				This may be done by completing	
				a language at the elementary II	

26 27 28 29 30 G 31			 have completed three years of language in high school with at least a C average have satisfied this requirement. Three credits of foreign language may count as fulfilling the Intercultural Competency requirement. Must be taken at WCSU: First Year Navigation Written Communication III— embedded in a major course 	0
26 27 28 29 30 31			language in high school with at least a C average have satisfied this requirement. Three credits of foreign language may count as fulfilling the Intercultural Competency requirement.Must be taken at WCSU: First Year Navigation Written Communication III— embedded in a major course	0
26 27 28 29 30 G 31			least a C average have satisfied this requirement. Three credits of foreign language may count as fulfilling the Intercultural Competency requirement. Must be taken at WCSU: First Year Navigation Written Communication III- embedded in a major course	0
26 27 28 29 30 G 31			this requirement. Three credits of foreign language may count as fulfilling the Intercultural Competency requirement. Must be taken at WCSU: First Year Navigation Written Communication III- embedded in a major course	0
26 27 28 29 30 G 31			of foreign language may count as fulfilling the Intercultural Competency requirement. Must be taken at WCSU: First Year Navigation Written Communication III- embedded in a major course	0
26 27 28 29 30 31			fulfilling the Intercultural Competency requirement. Must be taken at WCSU: First Year Navigation Written Communication III— embedded in a major course	0
26 27 28 29 30 G 31			Competency requirement. Must be taken at WCSU: First Year Navigation Written Communication III- embedded in a major course	0
26 27 28 29 30 31			Must be taken at WCSU: First Year Navigation Written Communication III— embedded in a major course	0
27 28 29 30 G 31			First Year Navigation Written Communication III- embedded in a major course	0
28 29 30 G 31			Written Communication III- embedded in a major course	0
29 29 30 G 31			embedded in a major course	0
29 30 G 31				-
30 G 31			Culminating Gen Ed Experience -	0
30 G 31			may be satisfied by a major	0
30 G 31			capstone	
30 G	Conoral Education Creditor	40.41	capstone	40 E0
21		40-41		49-50
	Najor P	rogram	Courses	1
32 B	3IO*122 General Biology II	4	BIO 104 General Biology II	4
33			BIO 205 Animal Physiology	4
34 B	BIO*270 Ecology or 200's level BIO* lab	4	BIO 200 Ecology	4
S	science. If Ecology is not taken, these			
C	credits will count on line 35 and the			
S	student will have to complete Ecology at			
V	WCSU.			
35 B	3IO*235 Microbiology or 200's level BIO*	4	Biology Electives	8
la	ab science		Lines 34-35 must add up to 12	
			credits. BIO 200 Ecology is	
			required among those 12 credits.	
			Students will complete 8 of these	
			12 credits at the community	
			college.	
35			BIO 300 Cell Biology	4
37			BIO 312 Genetics	4
38			BIO 325 Evolutionary Biology	3
39			BIO 360 Scientific	2
			Communication	
			BIO 480 Group Senior	3
40			Research or BIO 490 Senior	
40			,	1
40			Research	
40 41 P	PHY* 121 General Physics I or CHE*211	(4)	Research CHE 210 Organic I	4
40 41 P C	PHY* 121 General Physics I or CHE*211 Drganic Chemistry I	(4)	Research CHE 210 Organic I	4
40 41 P C P	PHY* 121 General Physics I or CHE*211 Organic Chemistry I PHY 121 will transfer as a Science Elective.	(4)	Research CHE 210 Organic I	4
40 41 P C P S	PHY* 121 General Physics I or CHE*211 Organic Chemistry I PHY 121 will transfer as a Science Elective. See line 43.	(4)	Research CHE 210 Organic I	4
40 41 P C P S 42 P	PHY* 121 General Physics I or CHE*211 Organic Chemistry I PHY 121 will transfer as a Science Elective. See line 43. PHY* 122 General Physics II or CHE*212	(4)	Research CHE 210 Organic I CHE 211 Organic II	4
40 41 P C P S 42 P	PHY* 121 General Physics I or CHE*211 Organic Chemistry I PHY 121 will transfer as a Science Elective. See line 43. PHY* 122 General Physics II or CHE*212 Organic Chemistry II	(4)	Research CHE 210 Organic I CHE 211 Organic II	4
40 41 P C P S 42 P C C P	PHY* 121 General Physics I or CHE*211 Organic Chemistry I PHY 121 will transfer as a Science Elective. See line 43. PHY* 122 General Physics II or CHE*212 Organic Chemistry II PHY 122 will transfer as a Science Elective.	(4)	Research CHE 210 Organic I CHE 211 Organic II	4
35 37 38 39			12 credits at the community college.BIO 300 Cell BiologyBIO 312 GeneticsBIO 325 Evolutionary BiologyBIO 360 Scientific CommunicationBIO 480 Group Senior Research or BIO 490 Senior	4 4 3 2 3

43	 PHY* 121 General Physics I or CHE*211 Organic Chemistry I. If PHY 121 is taken at the community college, it will count as 4 Science Elective credits. PHY* 122 General Physics II or CHE*212 Organic Chemistry II. If PHY 122 is taken at the community college, it will count as 4 Science Elective credits. 	(3-11)	Science/Math Approved Electives, chosen with department approval.	14
44	Students will complete 11 credits of the	8	Lines 41-43 will add up to 22	
	required 22 credits of lines 41-43 at the		credits.	
	community college, 8 credits with either			
	the ORG CHE or the PHY sequence and 3			
	with Precalculus which will also meet a			
	general education requirement.			
45	Program Course Credits:	20		62
46	Оре	en Elect	ives	
47	Students who have fulfilled foreign			
	language requirements in high school or			
	who use open elective credits at the			
	community college to fulfill foreign			
	language requirements will end up with			
	more open elective credits at WCSU.			
48	Open Elective credits:			8-9
49	Total Credits at the Community College	60-61	Total Credits for the 4-Year	120
			Degree	

Template 1

Western Connecticut State University

Biology – Ecological Option, B.A.

1	Community Colleges*:			WCSU	
2			Credits		Credits
3		Fran	nework	30**	
4		General Educ	cation R	Requirements	
5	Competency:				
6	Section A				
7	Written I	ENG*101 English	3	Written Communication	3
	Muitten II	Composition			
8	written II	Gen Ed Elective	3	Written Communication	3
9	Scientific Reasoning	BIO*121 General Biology	4	BIO 103 General Biology I	4
10	Scientific Knowledge	CHE*121 General Chemistry I	4	CHE 110 General Chemistry I	4
11	Quantitative	MAT* 185 Trigonometry (NVCC) MAT*186 Precalculus	4	MAT 133 Precalculus	4
12	Historical Knowledge	Gen Ed Elective	3	Gen Ed Elective/2 nd exposure	3
13	Social Phenomena	Gen Ed Elective	3	Critical Thinking	3
14	Aesthetic Dimensions	Gen Ed Elective	3	Creative Process	
15	Section B				
16	Competency:	Gen Ed Elective	3	Oral Communication	3
17	Competency:	Gen Ed Elective	3	Information Literacy	3
18	Framework30 C	redits (30- 31):			33
19		Pa	athway	30	
20		Additional Gen	eral Edu	ucation Courses	
21	An additional ge requirement wil community colle Calculus or with elective.	neral education I be met at the ege, either with MAT 254 a general education	(3-4)	General Education Elective	3-4
22	CHE* 122 Gener	al Chemistry II	4	General Education Elective – CHE 111 General Chemistry II	4
23				Intercultural Competence	3
24				Health and Wellness	3
25				Students must complete a	3
				foreign language requirement.	
				This may be done by completing	
				a language at the elementary II	

				level or above. Students who	
				have completed three years of	
				language in high school with at	
				least a C average have satisfied	
				this requirement. Three credits	
				of foreign language may count as	
				fulfilling the Intercultural	
				Competency requirement	
26				Must be taken at WCCN:	
20				First Veer Nevigation	0
27				Hirst Year Navigation	0
28				written Communication III-	0
-				embedded in a major course	
29				Culminating Gen Ed Experience –	0
				may be satisfied by a major	
				capstone	
30	General Education Credits:	4	0-41		49
31	Major P	rog	gram	Courses	
32	BIO*122 General Biology II		4	BIO 104 General Biology II	4
33				BIO 205 Animal Physiology	4
34	BIO*235 Microbiology or 200's level BIO*		4	BIO 216 Microbiology	4
	lab science. If a 200-level BIO lab science,				
	then counted on line 36.				
35	BIO*270 Ecology or 200's level BIO* Jab		4	BIO 200 Ecology	4
	science. If a 200-level BIO lab science.			5,	
	then counted on line 36.				
36	Lines 34 and 35 will fulfill 8 credits of the			11-12 credits of Biology Maior	11-12
	19-20 credits of WCSU major			Electives, 200-level or above.	
	requirements in lines 34-36.				
37		1		Lines 34-36 will add up to 19-20	
				credits.	
38				BIO 312 Genetics	4
39				BIO 325 Evolutionary Biology	3
40				BIO 360 Scientific	2
40				Communication	2
11				BIO 220 Conservation Ecology or	2_/
41				BIO 450 Population	5-4
				Ecology or BIO 475 Climate	
				Ecology of BIO 475 Climate	
12				BIO 480 Group Serier	2
42				Bio 480 Group Senior	5
				Research BIO 450 Seriiol	
10	DUV* 121 Conoral Develoc Los CUE*211		0	Chaosa 12 gradite of Dhysical	10
43	PHY 121 General Physics For CHE 211		ð	Choose 12 credits of Physical	12
	DUV* 122 Constal Devices II or CUE*242	1		science/iviatifi Electives. 8	
	PHY ⁺⁺ 122 General Physics II or CHE*212			creaits will be fulfilled by either	
	Organic Chemistry II	1		242 Grant Hand 122 OF CHE 211 and	
		1		212 from the community college	
		1		as tollows:	



			CS 140 Introduction to	
			Programming	
			CS 143 Visual BASIC (3)	
44			MAT 115 Biostatistics	3
			OR	
			MAT 120 Elementary Statistics	
45	Program Course Credits:	20		57-59
46	Ope	en Elect	ives	
47	Students who have fulfilled foreign language requirements in high school or who use open elective credits at the community college to fulfill foreign language requirements will end up with more open elective credits at WCSU.			
48	Open Elective credits:	0		11-14
49	Total Credits at the Community College	60-61	Total Credits for the 4-Year Degree	120

Template 1

Charter Oak State College

Complete four-year degree with articulation of community college degree to four-year degree **General Studies – Biology Concentration, B.S.**

1	C	ommunity Colleges*:		СО	
2			Credits		Credits
3		Frai	mework	30**	
4		General Edu	cation F	Requirements	
5	Competency:				
6	Section A				
7	Written I	ENG*101 English	3	Composition 101	3
		Composition			
8	Written II	Gen Ed Elective	3	Composition 102	3
9	Scientific Reasoning	BIO*121 General	4	Natural Sciences	4
		Biology I			
10	Scientific Knowledge	CHE*121 General	4	Natural Sciences	4
		Chemistry I			
11	Quantitative	MAT* 185	4	Quantitative Reasoning	4
		Trigonometry (NVCC)			
		MAT*186 Precalculus			
12	Historical Knowledge	Gen Ed Elective	3	U.S History/Gov or Non-U.S Hist	3
13	Social Phenomena	Gen Ed Elective	3	Social/Behavioral Science	3
14	Aesthetic Dimensions	Gen Ed Elective	3	Literature and Fine Arts	3
15	Section B				
16	Competency:	Gen Ed Elective	3	Oral Communication	3
17	Competency:	Gen Ed Elective	3	Ethical Decision Making	3
18	Framework30 C	redits (30-31):			
19		Р	athway	30	
20		Additional Ger	neral Ed	ucation Courses	
21				U.S. History/Gov or Non-U.S Hist	3
				(Must meet both requirements)	
22				Global Understanding	3
23	An additional ge	neral education	3-4	General Education elective	3-4
	requirement wil	l be met at the			
	community colle	ege, either with MAT 254			
	Calculus or with	a general education			
	elective.				
24	General Educati	on Credits:	36-37		39-40
25		Major F	Program	Courses	
26	BIO*122 Genera	Il Biology II	4	Introductory Biology II	4

27	CHE* 122 General Chemistry II	4	General Chemistry – required as	4
	,		a prerequisite for Organic	
			Chemistry I	
28	PHY* 121 General Physics I or CHE*211	(4)	Organic Chemistry I	4
	Organic Chemistry I – PHY 121, if chosen	. ,	<i>c ,</i>	
	will count as an open elective. See line			
29	BIO*235 Microbiology or 200's level BIO*	4	Additional Biology electives	15-21
	lab science		beyond the introductory level, in	
30	BIO*270 Ecology or 200's level BIO* lab	4	any one or combination of	
	science		subject areas, such as Botany,	
			Embryology, Comparative	
			Anatomy, Evolution, Ecology or	
			Microbiology	
31			One course in Genetics is	4
			required.	
			This requirement may have been	
			fulfilled by one of the courses in	
			lines 32 and 33.	
32			One course in Biochemistry,	4
			Physiology or Cell Biology is	
			required.	
			This requirement may have been	
			fulfilled by one of the courses in	
			lines 32 and 33.	
33			Biology Capstone	3
34	If MAT 254 was taken at the community		Calculus I or Statistics if MAT 254	(3-4)
	college, it will meet a general education		was not taken at the community	
	requirement. See line 23.		college.	
35		•		
36	Program Course Credits:	16-20		38-42
37	Ор	en Elect	ives	
38	PHY* 122 General Physics II or CHE*212	4	General Physics II or Organic	4
	Organic Chemistry II		Chemistry II—Organic Chemistry	
			Il is recommended, but not	
			required.	
39			Calculus II is recommended for	
			students who plan to go to	
			graduate school.	
40	Open Elective credits:	0-3		34-39
41	Total Credits at the Community College	60-61	Total Credits for the 4-Year	120
			Degree	

Template 2

Central Connecticut State University

General Biology B.S.

All biology courses must be completed with a C- or above.

1	Central Connecticut State University		
2	Remaining General Education Courses		
3	Course	Credits	
4	An additional 3 credits of general education may have been completed at the		
	community college.		
5	Study Area I – Literature	3	
6	Study Area I – Arts and Humanities – If not met at the community college	(3)	
7	Study Area II – Social Sciences	3	
8	Study Area III – Behavioral Sciences	3	
9	Skill Area II – Math/Stat/ Comp Sci – MATH 152 Calculus I, if MAT 254 Calculus I was not	(4)	
	taken at the community college		
10	Lines 6 and 8 will result in 3-4 credits remaining, since one of the two requirements will	3-4	
	have been met at the community college.		
11	Skill Area III – Skill Area III – Foreign Language Proficiency. Can be met through the	6	
	following:		
	1. Three sequential years of one foreign language at the high-school level.		
	2. Elementary proficiency as demonstrated by successfully completing a second-		
	semester level CCSU foreign-language course (112 or 118). Students with no		
	previous background in a language must take the first and second semesters		
	(111 and 112, or 118); students who place out of 111 due to previous		
	background in the language may satisfy the requirement by taking 112 only.		
	3. Passing the CLEP, a standardized examination which demonstrates knowledge		
	of a foreign language equivalent to completion of a second-semester course or higher.		
	 Successful completion of a foreign-language course at a level higher than the second- semester level. 		
	5. Demonstration of native proficiency in a language other than English (requires		
	evaluation of skill level by an appropriate faculty member and/or official		
	documentation, and approval by the Chair of the Department of Modern		
	Languages		
	(Credits will adjust accordingly.)		
12	General Education Credits	18-19	
13	Remaining Major Program Requirements		
14	Course	Credits	
15	PHY 121 General Physics I or Fdns of Organic Chemistry/Lab (CHEM 210/211);	4	
	whichever was not taken at CC		
16	PHY 122 General Physics II (if not taken at CC)	(4)	
17	BIO 200 Integrative Biology	4	
18	BIO 290 Biology Research Experience I	2	
19	BIO elective	4	

20	BIO 390 Biology Research Experience II	1
	or 391 Internship in Biology	
21	BIO elective	3
22	BIO elective	3
23		
24	Program Course Credits	21-25
25	Minor – A minor is not required for this major.	
26	Remaining Open Electives	
27	Courses	Credits
28	Open Elective credits	16-21
28	Students who have fulfilled the foreign language requirement in high school or who	
	use open elective credits at the community college to fulfill foreign language and/or	
	minor requirements will end up with more open elective credits at the CCSU.	
29	Total Credits Remaining for the 4-Year Degree	60

Template 2

Central Connecticut State University

Biology – Ecology, Biodiversity, and Evolutionary Biology B.S.

All biology courses must be completed with a C- or above.

1	Central Connecticut State University		
2	Remaining General Education Courses		
3	Course	Credits	
4	An additional 3 credits of general education may have been completed at the		
	community college.		
5	Study Area I – Literature	3	
6	Study Area I – Arts and Humanities – If not met at the community college	(3)	
7	Study Area II – Social Sciences	3	
8	Study Area III – Behavioral Sciences	3	
9	Skill Area II – Math/Stat/ Comp Sci – MATH 152 Calculus I, if MAT 254 Calculus I was not	(4)	
	taken at the community college		
10	Lines 6 and 8 will result in 3-4 credits remaining, since one of the two requirements will	3-4	
	have been met at the community college.		
11	Skill Area III – Skill Area III – Foreign Language Proficiency. Can be met through the	6	
	following:		
	1. Three sequential years of one foreign language at the high-school level.		
	2. Elementary proficiency as demonstrated by successfully completing a second-		
	semester level CCSU foreign-language course (112 or 118). Students with no		
	previous background in a language must take the first and second semesters		
	(111 and 112, or 118); students who place out of 111 due to previous		
	background in the language may satisfy the requirement by taking 112 only.		
	3. Passing the CLEP, a standardized examination which demonstrates knowledge		
	of a foreign language equivalent to completion of a second-semester course or higher.		
	 Successful completion of a foreign-language course at a level higher than the second- semester level. 		
	5. Demonstration of native proficiency in a language other than English (requires		
	evaluation of skill level by an appropriate faculty member and/or official		
	documentation, and approval by the Chair of the Department of Modern		
	Languages		
	(Credits will adjust accordingly.)		
12	General Education Credits	18-19	
13	Remaining Major Program Requirements		
14	Course	Credits	
15	PHY 121 General Physics I or CHEM 210/211 Fdns of Organic Chemistry/Lab; whichever	4	
	was not taken at CC		
16	PHY 122 General Physics II (if not taken at CCC)	(4)	
17	BIO 200 Integrative Biology	4	
18	BIO 290 Biology Research Experience I	2	
19	Biodiversity Elective – Choose from:	3-4	

Revised 5/3/2016

ſ		BIO 315 Microbial Ecology	
		BIO 322 Vertebrate Zoology	
		BIO 326 Mushrooms Mosses &	
		More	
		BIO 327 Vascular Plants	
		BIO 420 Ornithology	
		BIO 420 Official Invertebrate	
		PIO 425 Piology of Marino and	
		Freshwater Algae	
		PIO 444 Plant Tayanamy	
	20	BIU 408	2.4
	20	Ecology/Evolution Elective – Choose from:	3-4
		BIO 402 Population Genetics	
		BIO 405 Ecology	
		BIO 434 Ecology of Inland Waters	
		BIO 440 Evolution	
		BIO 480 Animal Behavior	
	21	EBE Specialization Elective – Choose from:	2-4
		BIO 230 Natural History	
		BIO 402 Population Genetics	
		BIO 315 Microbial Ecology	
		BIO 322 Vertebrate Zoology	
		BIO 326 Mushrooms, Mosses &	
		More	
		BIO 327 Vascular Plants	
		BIO 405 Ecology	
		BIO 410 Ecological Physiology	
		BIO 420 Ornithology	
		BIO 421 Marine Invertebrate	
		Biology	
		BIO 425 Biology of Marine &	
		Freshwater Algae	
		BIO 434 Ecology of Inland Waters	
		BIO 438 Aquatic Pollution	
		BIO 440 Evolution	
		BIO 444 Plant Taxonomy	
		BIO 470 Field Studies in Biology	
		BIO 480 Animal Behavior	
		BIO 489 Vertebrate Dissection	
		*BIO 490 Topics in Biology	
		*BIO 491 Advanced Problems in	
		Biology	
		*BIO 499 Undergraduate Thesis in	
		Biology	
		*To be considered in the E/B/E group, these courses must have a tonic approved by the	
		E/B/E faculty advisor.	
ŀ	22	BIO 390 Biology Research Experience II	1
L	~~	bio 556 biology nescuren experience in	-

	or 391 Internship in Biology	
23		
24	Program Course Credits	19-27
25	Minor – A minor is not required for this major.	
26	Remaining Open Electives	
27	Courses	Credits
28	Open Elective credits	14-23
29	Students who have fulfilled the foreign language requirement in high school or who	
	use open elective credits at the community college to fulfill foreign language and/or	
	minor requirements will end up with more open elective credits at the CCSU.	
30	Total Credits Remaining for the 4-Year Degree	60

Template 2

Central Connecticut State University

Biology – Environmental Science B.S.

All biology courses must be completed with a C- or above.

1	Central Connecticut State University		
2	Remaining General Education Courses		
3	Course	Credits	
4	An additional 3 credits of general education may have been completed at the		
	community college.		
5	Study Area I – Literature	3	
6	Study Area I – Arts and Humanities – If not met at the community college	(3)	
7	Study Area II – Social Sciences	3	
8	Study Area III – Behavioral Sciences	3	
9	Skill Area II – Math/Stat/ Comp Sci – MATH 152 Calculus I, if MAT 254 Calculus I was not	(4)	
	taken at the community college		
10	Lines 6 and 8 will result in 3-4 credits remaining, since one of the two requirements will	3-4	
11	nave been met at the community college.	6	
11	Skill Area III – Skill Area III – Foreign Language Proficiency. Can be met through the	6	
	1. Three convential years of one foreign language at the high school lovel		
	Interesting a second by successfully completing a second		
	2. Elementary producency as demonstrated by successfully completing a second- semester level CCSH foreign-language course (112 or 118). Students with no		
	previous background in a language must take the first and second semesters		
	(111 and 112, or 118): students who place out of 111 due to previous		
	hackground in the language may satisfy the requirement by taking 112 only		
	3. Passing the CLEP, a standardized examination which demonstrates knowledge		
	of a foreign language equivalent to completion of a second-semester course or		
	higher.		
	4. Successful completion of a foreign-language course at a level higher than the		
	second- semester level.		
	5. Demonstration of native proficiency in a language other than English (requires		
	evaluation of skill level by an appropriate faculty member and/or official		
	documentation, and approval by the Chair of the Department of Modern		
	Languages		
	(Credits will adjust accordingly.)		
12	General Education Credits	18-19	
13	Remaining Major Program Requirements		
14	Course	Credits	
15	PHY 121 General Physics I if PHY 121 General Physics I was not taken at the community	(4)	
	college		
16	CHEM 210 Foundations of Organic Chemistry and	(4)	
	CHEM 211 Foundations of Organic Chemistry Laboratory if CHE 211 Organic Chemistry I		
	was not taken at the community college		

16	PHY 122 General Physics II if PHY 122 General Physics II was not taken at the	(4)
	community college	
17	IF CHE 212 Organic Chemistry is not taken at the community college:	(3-4)
	CHEM 212 Organic Synthesis and	
	CHEM 213 Organic Synthesis Laboratory	
	OR	
	CHEM 354 Foundations of Biochemistry	
18	Lines 14-16 will add up to 7-8 credits	7-8
19	BIO 200 Integrative Biology	4
20	BIO 290 Biology Research Experience I	2
21	BIO 436 Environmental Resources and Management (3)	3-4
	OR	
	BIO 438 Aquatic Pollution (4)	
22	Choose one:	3-4
	BIO 315 Microbial Ecology	
	BIO 322 Vertebrate Zoology	
	BIO 326 Mushrooms, Mosses, &	
	More	
	BIO 327 Vascular Plants	
	BIO 420 Ornithology	
	BIO 421 Marine Invertebrate	
	Biology	
	BIO 425 Biology of Marine and	
	Freshwater Algae	
	BIO 444 Plant Taxonomy	
23	Choose one:	4
	BIO 405 Ecology	
	BIO 434 Ecology of Inland Waters	
24	BIO 390 Biology Research Experience II	1
	or 391 Internship in Biology	
25	CHEM 456 Toxicology	4
26	Choose one:	3
	ESCI 121 Physical Geology (GSCI 121 The Dynamic Earth?)	
	ESCI 450 Environmental Geology (GSCI?)	
27		
28		
29	Program Course Credits	31-34
30	Minor – A minor is not required for this major.	
31	Remaining Open Electives	
32	Courses	Credits
33	Open Elective credits	7-11
34	Students who have fulfilled the foreign language requirement in high school or who	
	use open elective credits at the community college to fulfill foreign language and/or	
	minor requirements will end up with more open elective credits at the CCSU.	
35	Total Credits Remaining for the 4-Year Degree	60-61

Template 2

Credits remaining in the four-year degree

Biology B.A.

Both BIO 220 and BIO 230 must be successfully completed with a grade of C- or better before starting on the required upper-level courses.

1	Eastern Connecticut State University	
2	Remaining General Education Courses	
3	Course	Credits
4	Two of the first four below must be completed at ECSU. One of the T2 requirements	
_	may have been completed at the community college.	2
5	12 Cultural Perspectives	3
6	12 Individuals and Societies	3
/	12 Creative Expressions	3
8	12 Applied Information Technologies – must be MAT 216 Statistical Data Analysis if	3
	Calculus I was not taken at the community college	
9	13 Capstone – BIO 466 Senior Seminar	3
10	Foreign Language Proficiency (Can be met with three years of the same foreign	6
	language in high school or the completion of a second semester at the college level.	
	Credits will adjust accordingly.)	
11	General Education Credits	18-21
12	Remaining Major Program Requirements	ſ
13	Course	Credits
14	PHY 204 General Physics I with Lab	(4)
	(if PHY was not taken at CC)	
15	BIO 220 Cell Biology	4
16	BIO 230 Genetics	4
17	EES 104 Dynamic Earth	4
18	300's or 400's level Cell and Molecular Biology elective from the following (if	4
	BIO*235 was not taken at CC) or any 300's or 400's level Biology Elective:	
	BIO 330 Cell Biology w/Lab	
	BIO 420 Electron Microscopy	
	w/Lab	
	BIO 422 Research Methods	
	Molecular Bio w/Lab	
	BIO 424 Cell Physiology	
	BIO 426 Biology of Cancer	
	BIO 428 Virology w/Lab	
	BIO 430 Endocrinology w/Lab	
	BIO 432 Histology w/Lab	
	BIO 434 Developmental Biology	
	w/Lab	
	BIO 436 Molecular Genetics	
	w/Lab	

	BIO 438 Plant Physiology w/Lab	
	BIO 450 Biotechnology w/Lab	
	BIO 458 Stem Cells and	
	Regenerative Medicine	
19	300's or 400's level Population Biology and Ecology elective from the following:	4
	BIO 320/360 Tropical Biology and	
	Tropical Ecosystems	
	BIO 319/320 Oceanic Island	
	Ecology and Tronical Biology	
	BIO 440 Aquatic Biology w/Lab	
	BIO 442 Plant Ecology w/Lab	
	BIO 444 Population/Community	
	Ecology w/Lab	
	BIO 446 Terrestrial Ecology	
	w/lab	
	BIO 452 Conservation Biology	
	w/lab	
	BIO 454 Biological Invasions	
	w/lab	
	BIO 456 Marine Ecology w/Lab	
20	300's or 400's level Organismal Biology elective from the following:	1
20	BIO 324 Entomology w/lab	4
	BIO 332 Biology of Plants w/Lab	
	BIO 334 General Microbiology	
	w/lab	
	BIO 336 Invertebrate Biology	
	w/Lab	
	BIO 338 Vertebrate Biology	
	w/Lab	
	BIO 340 Parasitology w/Lab 4	
	BIO 346 Animal Behavior w/Lab	
	BIO 348 Functional Human	
	Anatomy w/Lab	
	BIO 350 Human Physiology	
	w/Lab	
	BIO 448 Physiological Ecology	
	w/Lab	
21	300's or 400's level Biology Elective	8
22	Program Course Credits	32-36
23	Remaining Open Electives	
24	Courses	Credits
25	Open Elective credits	3-10
26	Students who have fulfilled foreign language requirements in high school or who	
	use open elective credits at the community college to fulfill foreign language	
	requirements will end up with more open elective credits at ECSU.	
27	Total Credits Remaining for the 4-Year Degree	60

Template 2

Credits remaining in the four-year degree

Biology B.S.

Both BIO 220 and BIO 230 must be successfully completed with a grade of C- or better before starting on the required upper-level courses.

1	Eastern Connecticut State University	
2	Remaining General Education Courses	
3	Course	Credits
4	Two of the first four below must be completed at ECSU. One of the T2 requirements	
	may have been completed at the community college.	
5	T2 Cultural Perspectives	3
6	T2 Individuals and Societies	3
7	T2 Creative Expressions	3
8	T2 Applied Information Technologies – MAT 216 Statistical Data Analysis if taken for	3
	line 20	
9	T3 Capstone – BIO 466 Senior Seminar	3
10	Foreign Language Proficiency (Can be met with three years of the same foreign	6
	language in high school or the completion of a second semester at the college level.	
	Credits will adjust accordingly.)	
11	General Education Credits	18-21
12	Remaining Major Program Requirements	
13	Course	Credits
14	CHE 216 Organic Chemistry I w/Lab (if not taken at the CC)	(4)
15	PHY 204 General Physics I with Lab	(4)
	OR	
	PHY 208 Physics I with Calculus w/Lab	
	(if PHY was not taken at CC)	
16	Lines 14 and 15 will add up to 4-8 credits.	4
17	BIO 220 Cell Biology	4
18	BIO 230 Genetics	4
19	MAT 243 Calculus I	0-4
	w/Technology (if not taken at	
	the CC)	
20	One of the following:	0, 3 or
	MAT 244 Calculus II	4
	w/Technology	
	MAT 216 Statistical Data	
	Analysis – if chosen, counts as T2	
	Applied Information	
	Technologies – see line 8	
	BIO 378 Biology Research and Data Analysis	
21		

22	300's or 400's level Cell and Molecular Biology elective from the following (if BIO*235	4
	was not taken at CC) or any 300's or 400's level Biology Elective:	
	BIO 330 Cell Biology w/Lab	
	BIO 420 Electron Microscopy	
	w/Lab	
	BIO 422 Research Methods	
	Molecular Bio w/Lab	
	BIO 424 Cell Physiology	
	BIO 426 Biology of Cancer	
	BIO 428 Virology w/Lab	
	BIO 430 Endocrinology w/Lab	
	BIO 432 Histology w/Lab	
	BIO 434 Developmental Biology	
	w/Lab	
	BIO 436 Molecular Genetics	
	w/Lab	
	BIO 438 Plant Physiology w/Lab	
	BIO 450 Biotechnology w/Lab	
	BIO 458 Stem Cells and	
	Regenerative Medicine	
23	300's or 400's level Population Biology and Ecology elective from the following:	4
	BIO 320/360 Tropical Biology and	
	Tropical Ecosystems	
	BIO 319/320 Oceanic Island	
	Ecology and Tropical Biology	
	BIO 440 Aquatic Biology w/Lab	
	BIO 442 Plant Ecology w/Lab	
	BIO 444 Population/Community	
	Ecology w/Lab	
	BIO 446 Terrestrial Ecology	
	w/Lab	
	BIO 452 Conservation Biology	
	w/Lab	
	BIO 454 Biological Invasions	
	w/Lab	
	BIO 456 Marine Ecology w/Lab	
24	300's or 400's level Organismal Biology elective from the following:	4
	BIO 324 Entomology w/Lab	
	BIO 332 Biology of Plants w/Lab	
	BIO 334 General Microbiology	
	w/Lab	
	BIO 336 Invertebrate Biology	
	w/Lab	
	BIO 338 Vertebrate Biology	
	w/Lab	
	BIO 340 Parasitology w/Lab 4	
	BIO 346 Animal Behavior w/Lab	
	BIO 348 Functional Human	

	Anatomy w/Lab	
	BIO 350 Human Physiology	
	w/Lab	
	BIO 448 Physiological Ecology	
	w/Lab	
25	300's or 400's level Biology Elective	8
26	Program Course Credits	32-40
27	Remaining Open Electives	
28	Courses	Credits
29	Open Elective credits	0-10
30	Students who have fulfilled foreign language requirements in high school or who use	
	open elective credits at the community college to fulfill foreign language	
	requirements will end up with more open elective credits at ECSU.	
31	Total Credits Remaining for the 4-Year Degree	60-61

Template 2

Southern Connecticut State University

Biology B.A.

Students must complete 2 "W" courses at SCSU.

1	Southern Connecticut State University	
2	Remaining General Education Courses	
3	Course	Credits
4	One additional general education requirement may be fulfilled at the community	
	college.	
5	American Experience	3
6	Creative Drive	3
7	Global Awareness	3
8	Mind and Body	3
9	Multilingual Communication – Level 3 (Can be met by completing the third level of a	9
	foreign language or demonstrating knowledge via a STAMP test (Standards-based	
	Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.)	
10	Tier 3 Connections Capstone	0
11	General Education Credits	18-21
12	Remaining Major Program Requirements	
13	Course	Credits
14	BIO 103 – Botany	4
15	BIO 220 Genetics An equivalent course may have been taken at the community	(4)
	college.	
16	Select one Entry Level Anatomy/Physiology	4
	BIO 230 – Plant Anatomy and Morphology or	
	BIO 231 – Comparative Vertebrate Anatomy or	
	BIO 235 - Histology	
17	Select one Upper Level Anatomy/Physiology	4
	BIO 301 – Physiology or	
	BIO 401 – Animal Physiology or	
	BIO 420 – Plant Physiology or	
	BIO 454 – Brain Anatomy and Transmission	(2, 1)
18	<u>Select one Entry Level Cell/Molecular Biology</u> – if BIO 235 Microbiology was not taken	(3-4)
	at the community college.	
	(If not completed at the CC)	
	BIO 205 – Forensic Biology or BIO 222 – Concret Microbiology or	
	BIO 233 – General Microbiology or BIO 240 – Human Horodity (2 cr)	
19	Select one Unner Level Cell/Molecular Biology	Δ
1	BIO 335 – Pathogenic Microbiology or	-
	BIO 360- Plant Growth and Development or	
	BIO 435 – Developmental Biology or	
	BIO 436 – Molecular Biology or	
	BIO 451 – Tissue Culture or	

Revised 5/3/2016

	BIO 466 – Advanced Molecular and Cell Biology or	
	BIO 467 – Laboratory Course in Biotechnology	
20	Select one Upper Level Cell/Molecular Biology	4
	BIO 335 – Pathogenic Microbiology or	
	BIO 360- Plant Growth and Development or	
	BIO 435 – Developmental Biology or	
	BIO 436 – Molecular Biology or	
	BIO 451 – Tissue Culture or	
	BIO 466 – Advanced Molecular and Cell Biology or	
	BIO 467 – Laboratory Course in Biotechnology	
21	Select one Entry Level Biodiversity/ Ecology/ Organismal – If BIO 270 Ecology was not	(3-4)
	taken at the community college	
	(if not completed at the CC)	
	BIO 202 – Ecology or	
	BIO 210 – Environmental Biology and Conservation (3 cr) or	
	BIO 228- Vertebrate Zoology or	
	BIO229 – Invertebrate Zoology or	
	BIO 250 – Plant Taxonomy and Systematics	
22	Select one Upper Level Biodiversity/ Ecology/ Organismal	3-4
	BIO 334 – Microbial Ecology or	
	BIO 337 – Medically Important Arthropods (3 cr) or	
	BIO 427 – Entomology or	
	BIO 429 – Limnology or	
	BIO 430 – Marine Ecology or	
	BIO 432 – Mycology or	
	BIO 438 – Aquatic Entomology or	
	BIO 440 – Parasitic Infections (3 cr) or	
	BIO 460 – Paleontology	
23	One other upper level BIO course from upper level lists above	4
24		
25	Program Course Credits	27-39
26	Remaining Open Electives	
27	Courses	Credits
28	Open Elective credits	0-15
29	Students who have fulfilled foreign language requirements through assessment	
	(STAMP or equivalent), who place beyond first semester, or who use open elective	
	credits at the community college to fulfill foreign language requirements will end up	
	with more open elective credits at SCSU.	
30	Total Credits Remaining for the 4-Year Degree	60

Template 2

Southern Connecticut State University

Biology B.S.

Students must complete 2 "W" courses at SCSU.

2 Remaining General Education Courses 3 Course Cre 4 One additional general education requirement may be fulfilled at the community college. Cre 5 American Experience State 6 Creative Drive State 7 Global Awareness State 8 Mind and Body State 9 Multilingual Communication – Level 3 (Can be met by completing the third level of a foreign language or demonstrating knowledge via a STAMP test (Standards-based Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.) Standards-based Measurement of Proficiency or an equivalent. Credits will adjust accordingly.) 10 Tier 3 Connections Capstone Cre	
3 Course Cre 4 One additional general education requirement may be fulfilled at the community college. Creative Drive 5 American Experience Creative Drive 6 Creative Drive Creative Drive 7 Global Awareness Creative Drive 9 Multilingual Communication – Level 3 (Can be met by completing the third level of a foreign language or demonstrating knowledge via a STAMP test (Standards-based Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.) Creative Drive 10 Tier 3 Connections Capstone Creative Drive	
4 One additional general education requirement may be fulfilled at the community college. 5 American Experience 6 Creative Drive 7 Global Awareness 8 Mind and Body 9 Multilingual Communication – Level 3 (Can be met by completing the third level of a foreign language or demonstrating knowledge via a STAMP test (Standards-based Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.) 10 Tier 3 Connections Capstone	edits
college. 5 American Experience 6 Creative Drive 7 Global Awareness 8 Mind and Body 9 Multilingual Communication – Level 3 (Can be met by completing the third level of a foreign language or demonstrating knowledge via a STAMP test (Standards-based Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.) 10 Tier 3 Connections Capstone	
5 American Experience Image: Constraint of Proficiency) or an equivalent. Credits will adjust accordingly.) 6 Creative Drive Image: Constraint of Proficiency 7 Global Awareness Image: Constraint of Proficiency 8 Mind and Body Image: Constraint of Proficiency 9 Multilingual Communication – Level 3 (Can be met by completing the third level of a foreign language or demonstrating knowledge via a STAMP test (Standards-based Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.) 10 Tier 3 Connections Capstone Image: Constraint of Proficiency	
6 Creative Drive 1 7 Global Awareness 1 8 Mind and Body 1 9 Multilingual Communication – Level 3 (Can be met by completing the third level of a foreign language or demonstrating knowledge via a STAMP test (Standards-based Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.) 10 10 Tier 3 Connections Capstone 0	3
7 Global Awareness 5 8 Mind and Body 5 9 Multilingual Communication – Level 3 (Can be met by completing the third level of a foreign language or demonstrating knowledge via a STAMP test (Standards-based Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.) 6 10 Tier 3 Connections Capstone 6	3
8 Mind and Body 3 9 Multilingual Communication – Level 3 (Can be met by completing the third level of a foreign language or demonstrating knowledge via a STAMP test (Standards-based Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.) 9 10 Tier 3 Connections Capstone 0	3
9 Multilingual Communication – Level 3 (Can be met by completing the third level of a foreign language or demonstrating knowledge via a STAMP test (Standards-based Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.) 9 10 Tier 3 Connections Capstone 0	3
foreign language or demonstrating knowledge via a STAMP test (Standards-based Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.)10Tier 3 Connections Capstone	9
Measurement of Proficiency) or an equivalent. Credits will adjust accordingly.) 10 Tier 3 Connections Capstone	
10 Tier 3 Connections Capstone	
	0
11 General Education Credits 18	3-21
12 Remaining Major Program Requirements	
13 Course Cre	edits
14 PHY 200 General Physics I if not taken at the community college (4)	(4)
15 PHY 201 General Physics II if not taken at the community college	(4)
16 CHEM 260 Organic Chemistry I if not was not taken at the community college	(4)
17Lines 13-15 will add up to 4-8 credits4	1-8
18 BIO 103 – Botany	4
19 BIO 220 Genetics An equivalent course may have been taken at the community (4	(4)
college.	
20 Select one Entry Level Anatomy/Physiology	4
BIO 230 – Plant Anatomy and Morphology or	
BIO 231 – Comparative Vertebrate Anatomy or	
BIO 235 - Histology	
21 <u>Select one Upper Level Anatomy/Physiology</u>	4
BIO 301 – Physiology or	
BIO 401 – Animal Physiology or	
BIO 420 – Plant Physiology or	
BIO 454 – Brain Anatomy and Transmission	- 4
22 <u>Select one Entry Level Cell/Molecular Biology</u> If BIO 235 Microbiology was not taken at (3-	3-4)
RIQ 205 – Ecronsis Biology or	
BIO 223 - Coneral Microbiology or	
BIO 240 = Human Horodity (2 cr)	
23 Select one Upper Level Cell/Molecular Biology	Λ
BIO 335 – Pathogenic Microhiology or	4

	BIO 360- Plant Growth and Development or	
	BIO 435 – Developmental Biology or	
	BIO 436 – Molecular Biology or	
	BIO 451 – Tissue Culture or	
	BIO 466 – Advanced Molecular and Cell Biology or	
	BIO 467 – Laboratory Course in Biotechnology	
24	Select one Entry Level Biodiversity/ Ecology/ Organismal- If BIO 270 Ecology was not	(3-4)
	taken at the community college	
	BIO 202 – Ecology or	
	BIO 210 – Environmental Biology and Conservation (3 cr) or	
	BIO 228- Vertebrate Zoology or	
	BIO229 – Invertebrate Zoology or	
	BIO 250 – Plant Taxonomy and Systematics	
25	Select one Upper Level Biodiversity/ Ecology/ Organismal	3-4
	BIO 334 – Microbial Ecology or	
	BIO 337 – Medically Important Arthropods (3 cr) or	
	BIO 427 – Entomology or	
	BIO 429 – Limnology or	
	BIO 430 – Marine Ecology or	
	BIO 432 – Mycology or	
	BIO 438 – Aquatic Entomology or	
	BIO 440 – Parasitic Infections (3 cr) or	
	BIO 460 – Paleontology	
26	One other upper level BIO course from upper level lists above	4
27	MAT 221 – Intermediate Applied Statistics	4
28		
29	Program Course Credits	31-48
30	Remaining Open Electives	
31	Courses	Credits
32	Open Elective credits	0-11
33	Students who have fulfilled foreign language requirements through assessment	
	(STAMP or equivalent), who place beyond first semester, or who use open elective	
	credits at the community college to fulfill foreign language requirements will end up	
	with more open elective credits at SCSU.	
34	Total Credits Remaining for the 4-Year Degree	60-69

Template 2

Western Connecticut State University Biology – Professional Option B.A.

1	Western Connecticut State University	
2	Remaining General Education Courses	
3	Course	Credits
4	Health and Wellness	3
5	Intercultural Competency	3
6	Students must complete a foreign language requirement for this program. This may be	3
	done by completing a language at the elementary II level or above. Students who have	
	completed three years of language in high school with at least a C average have	
	satisfied this requirement. Three credits of foreign language may count as fulfilling the	
	Intercultural Competency requirement.	
7	The following must be taken at WCSU:	
8	First Year Navigation	0
9	Written Comm III – embedded in a major course	0
10	Culminating Gen Ed Experience – may be satisfied by a major capstone	0
11	General Education Credits	9
12	Remaining Major Program Requirements	
13	Course	Credits
14	BIO 205 Animal Physiology	4
15	BIO 200 Ecology if not taken at the community college	(4)
16	Biology Elective – 200-level or above – if Ecology was taken at the community college	(4)
17	A total of 4 credits will be required from lines 17-18.	4
18	BIO 300 Cell Biology	4
19	BIO 312 Genetics	4
20	BIO 325 Evolutionary Biology	3
21	BIO 360 Scientific Communication	2
22	BIO 480 Group Senior Research or BIO 490 Senior Research	3
23	CHE 210 Organic L if not taken at the community college	(4)
24	CHE 211 Organic II if not taken at the community college	(4)
25	Science/Math Approved Electives, chosen with department approval.	(2-6)
26	Lines 25-27 will add up to 22 credits; 11 of these credits will have been completed at	11
	the community college, 8 with either the Organic Chemistry sequence or the Physics	
	sequence and 3 with Precalculus, which also fulfills a general education requirement.	
27		
28	Program Course Credits	35
35	Remaining Open Electives	
36	Courses	Credits
37	Open Elective credits	15

38	Students who have fulfilled foreign language requirements in high school or who use	
	open elective credits at the community college to fulfill foreign language	
	requirements will end up with more open elective credits at WCSU.	
39	Total Credits Remaining for the 4-Year Degree	60

Template 2

Western Connecticut State University

Biology – Ecological Option B.A.

1	Western Connecticut State University	
2	Remaining General Education Courses	
3	Course	Credits
4	Health and Wellness	3
5	Intercultural Competency	3
6	Students must complete a foreign language requirement for this program. This may be	3
	done by completing a language at the elementary II level or above. Students who have	
	completed three years of language in high school with at least a C average have	
	satisfied this requirement. Three credits of foreign language may count as fulfilling the	
	Intercultural Competency requirement.	
7	The following must be taken at WCSU:	
8	First Year Navigation	0
9	Written Comm III – embedded in a major course	0
10	Culminating Gen Ed Experience – may be satisfied by a major capstone	0
11	General Education Credits	9
12	Remaining Major Program Requirements	
13	Course	Credits
14	BIO 205 Animal Physiology	4
15	BIO 216 Microbiology if not taken at the community college	(4)
16	BIO 200 Ecology if not taken at the community college	(4)
17	11-12 credits of Biology Major Electives, 200-level or above. 4-8 of these credits may	(3-12)
	have been taken at the community college.	
18	Students will have 11-12 credits of lines 16-18 remaining. Courses will depend upon	11-12
	the choices made at the community college.	
19	BIO 312 Genetics	4
20	BIO 325 Evolutionary Biology	3
21	BIO 360 Scientific Communication	2
22	BIO 320 Conservation Ecology or BIO 450 Population	3-4
	Ecology or BIO 475 Climate Ecology	
23	BIO 480 Group Senior Research or BIO 490 Senior Research	3
24	3-4 credits in Physical Sciences/Math Courses, chosen from:	3-4
	All BIO courses 200 level or above	
	All CHE courses 200 level or above	
	MAT 170 Calculus of Polynomials (3)	
	MAT 1/1 Calculus I with Review	
	MAT 181 Calculus I – If not taken at the community college	
	MAT 182 Calculus II	
	PHY 110 General Physics I W/Calculus	
	PHY 111 General Physics I W/Calculus	
	Phy izo General Physics I	

	DUV 121 Concred Devrice II	
	PHY 121 General Physics II	
	AST 150 General Astronomy	
	MTR 150 Meteorology	
	ES 110 Physical Geography	
	CS 140 Introduction to Programming	
	CS 143 Visual BASIC (3)	
25	MAT 115 Biostatistics	3
	OR	
	MAT 120 Elementary Statistics	
26	Program Course Credits	36-39
27	Remaining Open Electives	
28	Courses	Credits
29	Open Elective credits	12-15
30	Students who have fulfilled foreign language requirements in high school or who use	
	open elective credits at the community college to fulfill foreign language	
	requirements will end up with more open elective credits at WCSU.	
31	Total Credits Remaining for the 4-Year Degree	60

Template 2

Charter Oak State College

Complete four-year degree with articulation of community college degree to four-year degree **General Studies – Biology Concentration, B.S.**

1	Charter Oak State College	
2	Remaining General Education Courses	
3	Course	Credits
4	U.S. History/Gov or Non-U.S Hist (Must meet both requirements)	3
5	Global Understanding	3
7	General Education Credits	6
8	Remaining Major Program Requirements	
9	Course	Credits
10	Additional Biology electives beyond the introductory level, in any one or combination	7-21
	of subject areas, such as Botany, Embryology, Comparative Anatomy, Evolution,	
	Ecology or Microbiology. If Genetics was completed at the community college, then	
11	Organic Chemistry I if not taken at the community college.	(4)
12	One course in Genetics is required. This requirement may have been met at the	(4)
	community college.	
13	One course in Biochemistry, Physiology or Cell Biology is required.	(4)
	This requirement may have been met at the community college.	
	Calculus I or Statistics if MAT 254 was not taken at the community college.	(3-4)
14	Biology Capstone	3
15		
16	Recommended:	
17	Organic Chemistry II	(4)*
18	Computer Literacy, including spreadsheets	(3)*
27	Calculus II for students planning to go to graduate school	(4)*
28	Program Course Credits	18-32
29	Remaining Open Electives	
30	Courses	Credits
31		
32	Open Elective credits	22-36
33	Total Credits Remaining for the 4-Year Degree	60
-		

*These courses are not counted in the possible remaining credits for the degree.