Assessment: Assessment Unit Four Column

Program - Sciences

Mission Statement: The Science Program at Seward County Community College

provides opportunities to improve and enhance each student?s understanding and comprehension of the natural world through a variety of courses and experiences to develop a scientifically

literate citizen.

Next Program Review Year: 09-10

Outcomes	Assessment Tools	Results	Actions
Oral Communication - Effectively use the language of science in a "real life" context through oral communication.	Direct - Presentations, Lab design, group activities	Action Status: Action Plan in Progress Result Type: Benchmark Not Met a 107 of 141 students or 76% met the oral communication	Action: A scaffold process will be used to reinforce communication skills throughout the semester.
Outcome Status: Active Outcome Type: Curricular	Benchmark: 80% of students will receive a C or better	outcome. (05/18/2022)	(05/18/2022)
Start Date: 08/15/2010	Schedule: Each semsester	Action Status: Action Plan in Progress Result Type: Benchmark Not Met 160 or 224 students or 71% demonstrated effective oral communication skills through direct assessment (05/26/2020)	
		Action Status: Action Plan in Progress Result Type: Benchmark Met Anatomy & physiology: 11 of 15 met Biology for majors: 3 of 4 met Chemistry in Society: 18 of 22 met College chemistry: 50 of 63 met Engineering Physics: 16 of 16 met Human Anatomy: 7 of 10 met Human Physiology: 21 of 23 met Introduction to Chemistry: 3 of 4 met Physical Science: 23 of 27 met	
		Overall 152 of 184 (83%) met the oral communication objective. (05/15/2019)	
		Action Status: Action Plan in Progress	

Result Type: Benchmark Met

Engineering Physics- 5 of 5 met expectations Physical Science- 9 of 10 met expectations General Physics- 2 of 2 met expectations Anatomy- 8 of 13 met expectations Physiology- 12 of 19 met expectations

Anatomy and Physiology- 8 of 9 met expectations

Microbiology- 24 of 30 met expectations
Nutrition- 22 of 25 met expectations
Biology for majors- 5 of 5 met expectations
College Chemistry 14 of 20 met expectations
Intro to Chemistry 6 of 6 met expectations
Organic Chemistry- 3 of 4 met expectations

The Science program overall had 118 out of 146 (81%) of students assessed meet expectations.

(05/15/2018)

Action Status: Action Complete **Result Type:** Benchmark Met 149 of 173, 86.1% (05/16/2017)

Action Status: No Action Required Result Type: Benchmark Met

128 out of 143 met the requirement. 89.5% (05/23/2016)

Action Status: Action Plan in Progress

Result Type: Benchmark Met Physiology 35 meet 9 did not Chem 1 23 meet 4 did not Chem 2 9 meet 2 did not Chem in Society 35 meet 2 did not Organic 6 meet 0 did not Physical Science 16 meet 3 did not Nutrition 9 meet 0 did not A&P 7 meet 0 did not 18 meet 3 did not Micro Principles of Biology 17 meet 16 did not Totals 175 meet 39 did not

82% meet (05/20/2015)

Action Status: Action Complete Result Type: Benchmark Met

Principles of Biology 65/69 94%

Outcomes	Assessment Tools	Results			Actions
		Zoology Physiology Organic Chem Chem 1 Chem 2 Physical Sci Totals (05/20/2013)	6/6 42/46 3/4 34/42 12/12 22/22 184/201	100% 91% 75% 81% 100% 100% 92%	
		Action Status: Act Result Type: Bend Principles of Biolo Organic Chemistry Chemistry 2 9/13 Physical Science 1 Physiology 41/42 Total 116/135 86% Met Standard	hmark Met gy 44/54 v 3/3 9/23	gress	
		Action Status: Act Result Type: Bend 76 % students me 24/40 students m College Chemistry	ion Plan in Prophant Not Meit expectations et expectations, Physical Scien et expectations	t - Organic Chemistry,	Action: Ongoing, clearly define expectations (05/23/2011)
			hmark Met 6 (15/17) of the	gress students made A?s on 7) did not participate and	Action: There were no needs for modification in Micro, however, in Nutrition, I will now assign specific dates for the students to participate instead of it being on a
	Indirect - Class/Lab Grade Benchmark: 80% of students will receive a C or better in the class or lab	vitamin presentat were given zeros. (12/31/2010) Action Status: Op Result Type: Bend	en hmark Met 58 students or	10/10 or higher on their did not participate and 86% showed acceptable 8/2022)	voluntary basis. (01/01/2011)
	Schedule: End of the semester	Action Status: Act Result Type: Bend	,	gress	

121 of 148 students or 82% showed effective oral communications skills through indirect assessments (05/26/2020)

Action Status: Action Plan in Progress

Result Type: Benchmark Met

Introduction to Chemistry: 3 of 4 meet College Chemistry: 50 of 63 meet Human Physiology: 21 of 23 meet Human Anatomy: 7 of 10 meet Anatomy & Physiology: 11 of 15 meet Engineering Physics: 16 of 16 meet Physical Science: 23 of 27 meet Biology for majors: 3 of 4 meet

Overall program 134 of 162 students received a "C" or higher on the oral communication assessment. This results in 83% of the students demonstrating oral communication skills which exceeds the benchmark of 80% set by program.

(05/15/2019)

Action Status: Action Plan in Progress

Result Type: Benchmark Met

Engineering Physics - 5 of 5 met expectations Physical Science- 9 of 10 met expectations General Physics- 2 of 2 met expectations Biology for Majors- 5 of 5 met expectations College Chemistry- 44 of 60 met expectations Organic Chemistry- 4 of 4 met expectations

The science program overall had 69 out of 86 (80%) meet expectations (05/15/2018)

Action Status: Action Complete Result Type: Benchmark Met 7 of 8, 87.5% (05/16/2017)

Action Status: No Action Required Result Type: Benchmark Met

90% received a C or better (05/23/2016)

Action Status: Action Plan in Progress

Result Type: Benchmark Met Nutrition 9 meet 0 did not

Outcomes	Assessment Tools	Results	Actions
		A&P 7 meet 0 did not Micro 18 meet 3 did not Physiology 35 meet 9 did not Totals 60 meet 12 did not 83% meet (05/20/2015)	
Written communication - Effectively use the language of science in a "real life" context through written communication. Outcome Status: Active	Direct - Final exams (essay portion), papers, article reviews Benchmark: 80% of students will receive a C or better	Action Status: Action Plan in Progress Result Type: Benchmark Met A total of 151 of 166 students or 91% demonstrated effective written communication skills (05/18/2022)	
Outcome Status: Active Outcome Type: Curricular Start Date: 08/15/2010	Schedule: 8/15/2010	Action Status: Action Plan in Progress Result Type: Benchmark Not Met 231 of 318 students or 66% effectively demonstrated god written communication skills. (05/26/2020)	od
		Action Status: Action Plan in Progress Result Type: Benchmark Not Met Anatomy & Physiology: 27 of 33 met Biology for majors: 4 of 4 met Principles of Biology: 17 of 22 met Chemistry in Society: 11 of 22 met College chemistry: 47 of 57 met Engineering physics: 14 of 16 met Human anatomy: 9 of 10 met Human physiology: 18 of 23 met Introduction to chemistry: 4 of 4 met For the program, 151 of 191 (79%) met the written	
		communication outcome. This is just slightly below the benchmark. (05/15/2019) Action Status: Action Plan in Progress	
		Result Type: Benchmark Met Engineering Physics- 5 of 5 met expectations Physical Science- 9 of 10 met expectations General Physics- 2 of 2 met expectations Intro to Engineering Careers- 7 of 7 met expectations Anatomy- 10 of 13 met expectations Physiology- 18 of 19 met expectations Anatomy and Physiology- 20 of 24 met expectations Microbiology- 23 of 30 met expectations Nutrition- 14 of 25 met expectations	

Principles of Biology- 46 of 54 met expectations Biology for majors- 5 of 5 met expectations College Chemistry- 47 of 60 met expectations Intro to Chemistry- 4 of 5 met expectations Organic Chemistry- 3 of 4 met expectations

The science program as a whole had 213 of 263 (81%) meet expectations. This meets the benchmark for this outcome. (05/15/2018)

Action Status: Action Plan in Progress Result Type: Benchmark Not Met 148 of 228, 64.9% (05/16/2017)

Action Status: Action Plan in Progress Result Type: Benchmark Not Met 124 of 187 met the requirement.

review rubric used for assessing writing assignments

Utilize Turn-It-In (05/23/2016)

Action Status: Action Plan in Progress

Result Type: Benchmark Met

Principles of Biology	66 meet	26 below
Nutrition	14 meet	6 below
A&P	7 meet	0 below
Micro	12 meet	9 below
Chem 1	23 meet	10 below
Chem 2	11 meet	0 below
Organic	4 meet	2 below
Chem in Society	31 meet	6 below
Physical Science	15 meet	2 below
Totals	282 meet	61 below

82% meet (05/19/2015)

Action Status: Action Plan in Progress
Result Type: Benchmark Not Met
Chem 2 article review 7 meet 4 below
Chem 1 research paper 7 meet 2 below
Chem in Society Brochure 19 meet 8 below
Chem in Society Essay 18 meet 5 below
Organic Chem Lab report 2 meet 1 below
Priciples of Biology Essay 81 meet 41 below
Nutrition Essay 10 meet 2 below

Zoology Essay 2 meet 0 below

Outcomes	Assessment Tools	Results	Actions
		Anatomy CV Essay 18 meet 9 below Overall 164 meet 72 below 69% (05/20/2014)	
		Action Status: Action Complete Result Type: Benchmark Met Physiology 42/46 91% Principles of Biology 65/69 94% Zoology 6/6 100% Chem 1 27/35 77% Chem 2 14/14 100% Organic Chem 3/4 75% Physical Science 16/21 76% Chemistry in Society 10/13 77%	
		Totals 183/208 88% (05/20/2013)	
		Action Status: Action Plan in Progress Result Type: Benchmark Met Principles of Biology 39/53 Intro to Chem 12/21 Organic Chem 3/3 Chem 1 26/30 Chem 2 10/13 Microbiology 34/41 Nutrition 30/33 Anatomy and Physiology 9/10 Physiology 41/42 Totals 204/246 83% Success (05/17/2012)	
		Action Status: Action Plan in Progress Result Type: Benchmark Not Met 57% overall met expectations 42/53 students met expectations - College Chemistry, Organic Chemistry, College Physics 10/30 students met expectations - Physiology 5/8 students met expectations - Zoology 13/22 students met expectations - Principles of Biology (05/23/2011)	Action: Modifications will be to model a complete and accurate essay using examples of past student work. Clarification of questions and expected results. (05/23/2011)
		Action Status: Action Complete Result Type: Benchmark Met Nutrition: only 50% (5/10) of the class made an 80% or	Action: I did not grade the papers until @ Thanksgiving and the end of the course. I need to get the

Outcomes	Assessment Tools	Results	Actions
		higher; 50% made 35 ? 78% and 6 did not turn research papers in and were given a zero. Microbiology: 87% (13/15) made an 80% or better; 13% (2/15) made a 73-79% and two did not turn in research papers and were given a zero. (12/31/2010)	grades done sooner and be more proactive about them getting the papers done. (12/31/2010) Follow-Up: Grade the papers earlier and get the results back to the students in a more reasonable amount of time. Be more proactive about getting them in at the deadline. (01/01/2011)
	Indirect - Class/Lab Grade Benchmark: 80% of students will receive a C or better in the class or lab	Action Status: Action Plan in Progress Result Type: Benchmark Met A total of 122 of 143 of students or 85% demonstrated effective written communication skills (05/18/2022)	
	Schedule: End of the semester	Action Status: Action Plan in Progress Result Type: Benchmark Not Met 188 of 242 students or 78% demonstrated effective written communication when assessed indirectly (05/26/2020)	
		Action Status: Action Plan in Progress Result Type: Benchmark Not Met Anatomy & Physiology: 16 of 33 met Biology for majors: 4 of 4 met Principles of Biology: 22 of 43 met Chemistry in Society: 18 of 22 met College Chemistry: 47 of 56 met Engineering Physics: 16 of 16 met Human Anatomy: 4 of 10 met Human Physiology: 15 of 23 met Introduction to Chemistry: 4 of 4 met Physical Science: 23 of 27 met	
		for program, 169 of 238 (71%) met the outcome. (05/15/2019)	
		Action Status: Action Plan in Progress Result Type: Benchmark Met Engineering Physics- 5 of 5 met expectations Physical Science- 8 of 10 met expectations General Physics- 2 of 2 met expectations Principles of Biology- 21 of 22 met expectations	

Benchmark: 80% of our students will

generating insights, and applying

Outcomes Assessment Tools Results **Actions** receive a C or better on the **Action Status:** Action Plan in Progress content. Result Type: Benchmark Met Outcome Status: Active assessment tools Outcome Type: Curricular 285 of 349 or 82% showed critical thinking in direct **Start Date:** 08/15/2010 Schedule: Each semester measurements (05/26/2020) **Action Status:** Action Plan in Progress Result Type: Benchmark Not Met Engineering Physics: 9 of 16 met Physical Science: 17 of 27 met Chemistry in Society: 5 of 22 met College Chemistry: 35 of 50 met Anatomy & Physiology: 2 of 15 met Principles of Biology: 20 of 25 met Overall 88 of 155 (57%) met the critical thinking outcome. (05/15/2019) **Action Status:** Action Plan in Progress Result Type: Benchmark Not Met Engineering Physics- 4 out 5 met expectations Physical Science - 3 of 10 met expectations General Physics I- 2 of 2 met expectations Intro to Engineering Careers- 7 of 7 met expectations Principles of Biology- 35 of 55 met expectations Anatomy & Physiology- 6 of 12 met expectations College Chemistry- 28 of 60 met expectations Intro to Chemistry 3 of 7 met expectations Organic Chemistry- 4 of 4 met expectations The science program overall had 92 out of 162 students assessed meet expectations on direct measurements of critical thinking. This is a 57% met rate which is below the benchmark. A science program meeting is planned in August to address instructional tools that can be used to help students in critical thinking. (05/15/2018)**Action Status:** Action Plan in Progress Result Type: Benchmark Not Met 84 of 173, 48.6% (05/16/2017) **Action Status:** Action Plan in Progress **Result Type:** Benchmark Not Met 59 out of 111 met the requirement

Action Status: Action Plan in Progress

Result Type: Benchmark Met

Priciples of Biology 75 meet 19 do not meet Chem 1 26 meet 10 do not meet Chem 2 8 meet 4 do not meet Chem in Society 31 meet 6 do not meet Micro 19 meet 2 do not meet A&P 7 meet 0 do not meet Totals 166 meet 41 do not meet

80% meet (05/19/2015)

Action Status: Action Plan in Progress

Result Type: Benchmark Met

Physiology Oral Presentation 38 meet 8 below

Priciples of Biology 79 meet 9 below

Zoology 1 meet 2 below

Chem 1 lab investigations 4 meet 5 below Chem in Society essay 14 meet 3 below

Overall 136 meet 27 below 83% meet (05/20/2014)

Action Status: Action Plan in Progress

Result Type: Benchmark Met

42/46

91.3% completed all requirement successfully

Totals 128/163 79% (08/14/2013)

Action Status: Action Complete
Result Type: Benchmark Not Met
Principles of Biology 48/65 74%
Zoology 1/4 25%
Chem 1 27/35 77%
Chemistry in Society 10/13 77%

Totals 86/117 74% (05/20/2013)

Action Status: Action Plan in Progress

Result Type: Benchmark Met Principles of Biology 40/53

Physiology 41/42 Chemistry I 7/11 Totals 88/106

Outcomes	Assessment Tools	Results	Actions	
		83% success (05/17/2012)		
	Indirect - Class/Lab Grade Benchmark: 80% of students will receive a C or better in the class or lab	Action Status: Action Plan in Progress Result Type: Benchmark Not Met 52 % students met expectations 28/58 students met expectations - Principles of Biology 17/29 students met expectations - College Chemistry (05/23/2011) Action Status: Action Plan in Progress Result Type: Benchmark Met A total of 168 of 202 students or 83% demonstrated critical thinking skills when measured indirectly. (05/18/2022)	Action: Ongoing, better definition of expectations. (05/23/2011)	
	Schedule: End of the semester	Action Status: Action Plan in Progress Result Type: Benchmark Not Met 203 of 280 students or 73% expressed critical thinking. (05/26/2020)		
		Action Status: Action Plan in Progress Result Type: Benchmark Not Met Engineering Physics: 16 of 16 met Physical Science: 17 of 27 met Anatomy & Physiology: 9 of 15 met Principles of Biology: 21 of 25 met Biology for majors: 3 of 4 met		
		Overall 66 of 87 (75%) met indirect measures for critical thinking outcomes. (05/15/2019)		
		Action Status: Action Plan in Progress Result Type: Benchmark Met Engineering Physics- 5 of 5 met expectations Physical Science- 7 of 10 met expectations General Physics- 2 of 2 met expectations Microbiology- 30 of 30 met expectations Nutrition- 14 of 25 met expectations Principles of Biology- 21 of 22 met expectations College Chemistry- 14 of 20 met expectations Introduction to Chemistry- 3 of 7 met expectations Organic Chemistry- 4 of 4 met expectations Biology for majors- 5 of 5 met expectations		
		For the Science program as a whole 105 out of 130 students assessed (81%) successfully met the expectations. This is in		

alignment with the benchmark for this program outcome. (05/15/2018)

Action Status: Action Plan in Progress Result Type: Benchmark Not Met 18 of 32, 56.3% (05/16/2017)

Action Status: Action Plan in Progress
Result Type: Benchmark Not Met

53% out of 111 students met requirement (05/23/2016)

Action Status: Action Plan in Progress

Result Type: Benchmark Met

Chem 1 25 meet 10 do not meet Chem 2 10 meet 0 do not meet Organic 4 meet 2 do not meet Chem in Society 7 do not meet 26 meet Principles of Biology 84 meet 12 do not meet Micro 19 meet 2 do not meet A&P 7 meet 0 do not meet Totals 175 meet 33 do not meet

84% meet the goal

(05/19/2015)

Action Status: Action Plan in Progress

Result Type: Benchmark Met

Indirect

Priciples of Biology 78 meet 11 below

Zoologoy 1 meet 1 below Chem 1 10 meet 1 below

Chem in Society 16 meet 10 below Physiology 41 meet 7 below Overall 146 meet 30 below

83% meet (05/20/2014)

Diversity - Students will understand and demonstrate the rich dimensions of diversity by working as a team, engaging with community, exhibiting cultural awareness, and creating equity.

Direct - Presentation assignment Discussion to Quizzes and Cultural awareness, and Creating Eab journal Benchmark

Direct - Presentations, writing assignment Discussion threads Quizzes and exams Lab journal

Benchmark: 80% of students will

Action Status: Action Plan in Progress Result Type: Benchmark Not Met

A total of 22 of 33 students or 67% show understanding of

diversity. (05/18/2022)

Action Status: Action Plan in Progress

Result Type: Benchmark Met

Outcomes	Assessment Tools	Results	Actions
Outcome Type: Curricular Start Date: 08/13/2013	receive a C or better on the assignment	72 of 81 students or 89% demonstrated diversity (05/26/2020)	
	Schedule: Each semester	Action Status: Action Complete Result Type: Inconclusive none reported. A change in the wording of the institutional outcome on diversity no longer aligns with the application of science to various cultures. This outcome is being deleted from the science program as a result. (05/15/2018)	d
		Action Status: Action Plan in Progress Result Type: Benchmark Not Met 35 of 45, 77.8% (05/16/2017)	
		Action Status: Action Plan in Progress Result Type: Benchmark Not Met only 25 of 45 met the requirement, which is 56%. (05/23/2016)	
		Action Status: Action Plan in Progress Result Type: Benchmark Met Microbiology 18 met 3 did not Chem in Society 31 met 6 did not Totals 49 meet, 9 do not 84% meet goal (05/19/2015)	
		Action Status: Action Plan in Progress Result Type: Benchmark Not Met Direct Chem is Society Culture Essay 14 meet 3 below Exam Question 9 meet 16 below Indirect Chem in Society Lab Project 16 meet 7 below	
	Indirect - Literature research and discussion Lab projects Benchmark: 80% of students will receive a C or better in the class or lab Schedule: End of the semester	Overall 39 meet 26 below 60% (05/20/2014) Action Status: Action Plan in Progress Result Type: Benchmark Met a total of 68 of 85 students or 80 % show an indirect understanding of diversity (05/18/2022)	
		Action Status: Action Plan in Progress Result Type: Benchmark Met 165 of 212 students or 78% met the diversity outcome	

(05/26/2020)

Action Status: Action Complete Result Type: Inconclusive

NONE REPORTED. Change occurred in the wording of the institutional outcome that no longer fits the cultural impact of science. This outcome is being dropped from the science

program outcomes as a result. (05/15/2018)

Action Status: Action Complete Result Type: Benchmark Met

0 of 0 (05/16/2017)

Action Status: Action Plan in Progress Result Type: Benchmark Not Met

55.6% out of 45 students met the requirement

(05/23/2016)

Action Status: Action Plan in Progress

Result Type: Benchmark Met

Microbiology 19 met, 2 did not Chem in Society 34 met, 3 did not

Totals 53 meet, 5 did not 91% met the benchmark (05/19/2015)

Action Status: Action Plan in Progress Result Type: Benchmark Not Met

Direct Chem in Society

Culture Essay 14 meet 3 below Exam Question 9 meet 16 below

Indirect Chem in Society
Lab Project 16 meet 7 below
Over All 39 meet 26 below
60% meet (05/20/2014)