# ASSESSMENT DAY

College of Arts and Sciences School of Biological and Physical Sciences April 20, 2018 Strengths

Challenges

Recommendations

# Academic Assessment

	LEVEL	FOCUS	CONDUCTED BY	FREQUENCY
Academic Success Committee	Program	Quality of assessment practices	Committee of peers	Years 1 & 2
Instructional Program Review	Program / Cluster	<ul> <li>Enrollment, retention, completion</li> <li>Industry certifications and job placement</li> <li>Program budget and staffing</li> <li>Advisory committees</li> <li>Curriculum changes</li> </ul>	Committee of peers	Year 3
Assessment Day	Course/ Program	<ul> <li>Enrollment by demographics</li> <li>Graduation and retention</li> <li>Average class size</li> <li>Course success rate</li> <li>Placement rate</li> <li>SLOs, PLOs and ILOs</li> </ul>	Program Chair and Faculty	Years 1, 2, 3

# Programs

2230 - Environmental Science Technology

# Last Assessment Day – Action Items

#### 11/21/2016:

- 1. Cross training;
- 2. Course sequence;
- 3. Data regarding guaranteed sections;
- 4. Course assessment reports: suggesting adding a lab assignment for those courses with labs; make sure all SLOs has level of achievement.
- 5. For Institutional Effectiveness: compare courses that include SI to those that do not (look at campuses too)

# BSC1010 - Course Learning Outcomes

SLO 1: Describe the basic chemical molecules of life. (1, 2, 4)

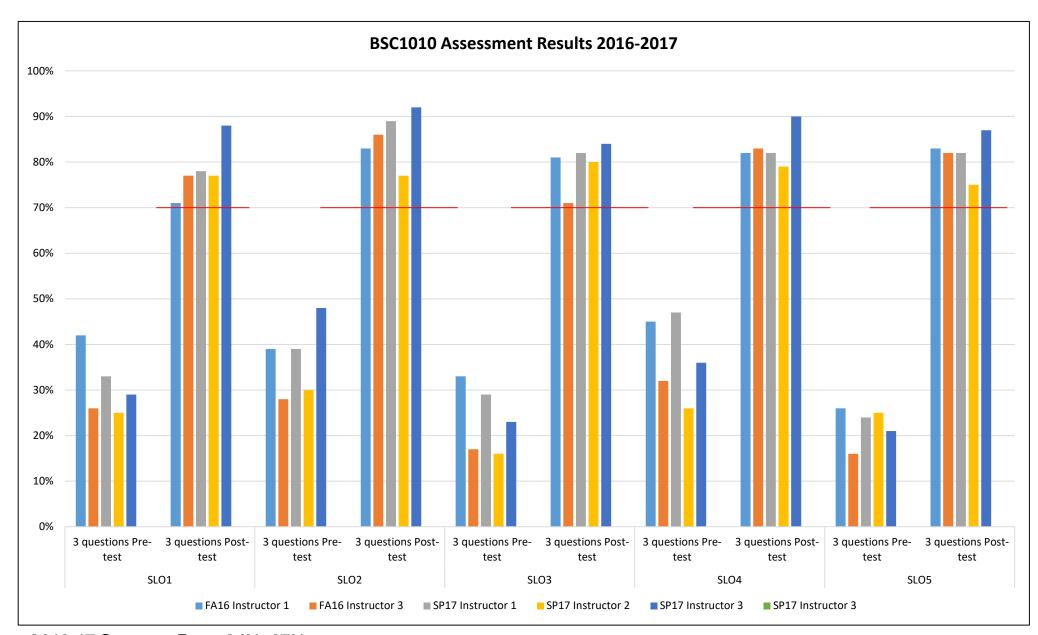
SLO 2: Distinguish between the different types of cells and identify basic cellular structures and their functions. (1)

SLO 3: Describe energy and ATP production during the process of cellular respiration and the conversion of light energy into the chemical bonds of sugar during photosynthesis. (1)

SLO 4: Describe the structure of DNA, its replication and protein synthesis. (1)

SLO 5: Use the principles of Mendelian Genetics to solve problems. (1)

#### BSC1010 - Course Assessment Results 2016-2017



2016-17 Success Rate: 94%, 67%

# BSC1086 - Course Learning Outcomes

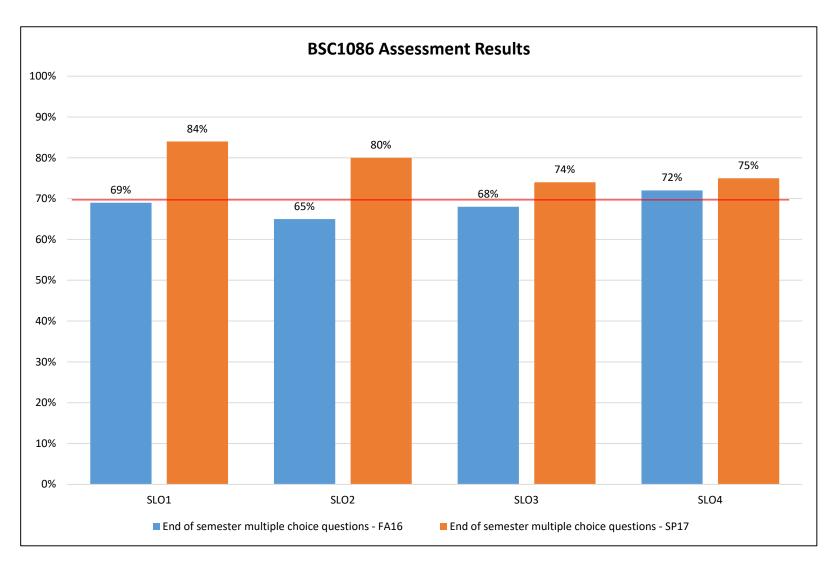
SLO 1: Identify the structures and organs of the ANS, digestive, urinary, circulatory, respiratory, endocrine and reproductive systems.

SLO 2: Explain the physiology of the above seven systems.

SLO 3: Demonstrate the homeostatic mechanisms of each system.

SLO 4: Demonstrate the interrelationships between the systems studied and how they relate to the well-being of the human organism.

# BSC1086 - Course Assessment Results 2016-2017

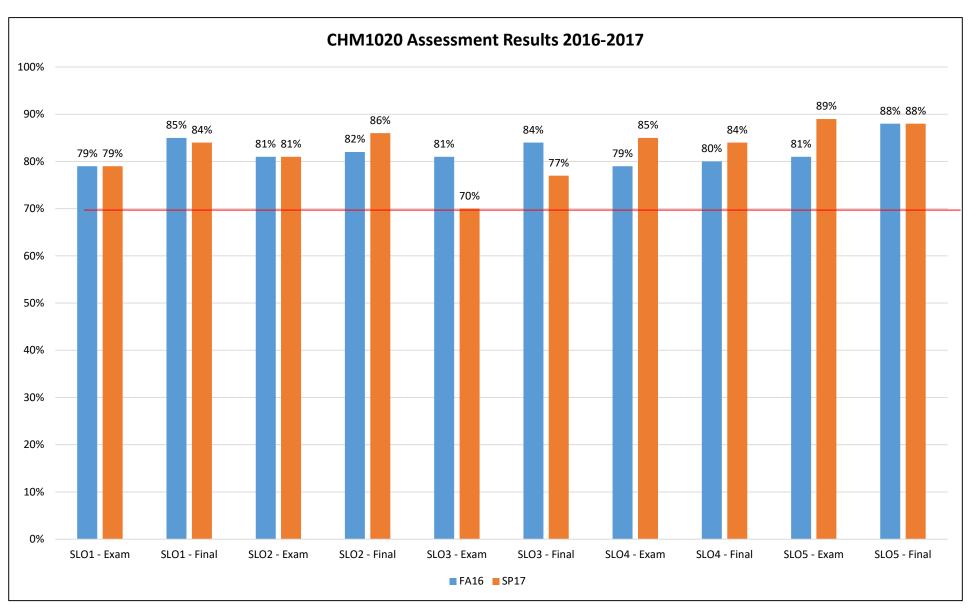


2016-17 Success Rate: 84%, 85%

# CHM1020 - Course Learning Outcomes

- SLO 1: Demonstrate an understanding of basic chemical concepts, including classification of matter.
- SLO 2: Gain an understanding of the vocabulary of chemistry, which permeates society on food and product labels, climate change, and in the discussion of sustainable energy.
- SLO 3: Demonstrate the ability to apply chemistry-centered mathematical concepts to real world solutions.
- SLO 4: Communicate scientific findings clearly and effectively using oral, written or graphic forms.
- SLO5: Analyze information from multiple perspectives, including that presented in tabular or graphic format. The student will apply logical reasoning skills in this task.

## CHM1020 - Course Assessment Results 2016-2017



2016-17 Success Rate: 87%

# CHM1025 - Course Learning Outcomes

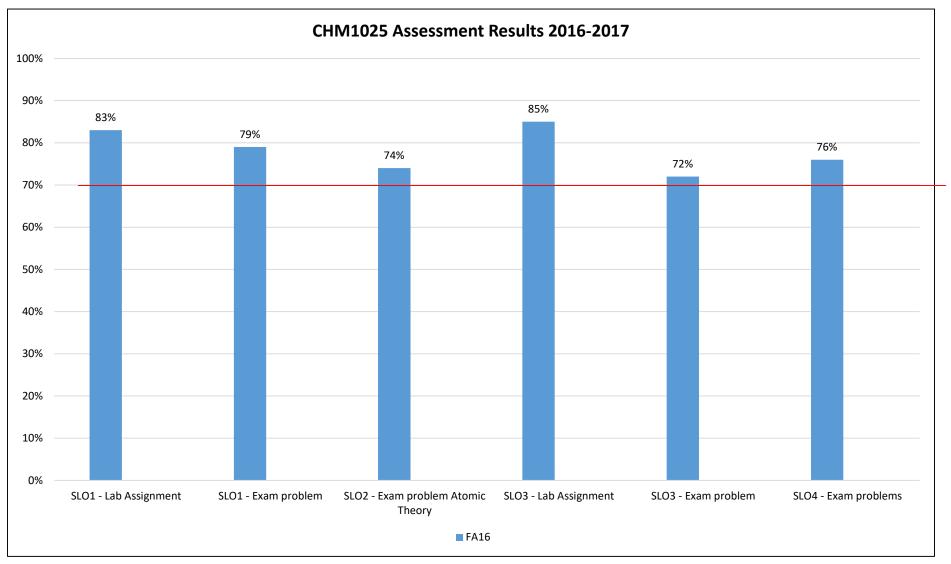
SLO 1: Demonstrate that all measured numbers contain a certain degree of error.

SLO 2: Demonstrate knowledge of the evolution of atomic structure theories.

SLO 3: Employ basic math techniques to solve common chemistry problems.

SLO 4: Demonstrate basic chemistry vocabulary.

# CHM1025 - Course Assessment Results 2016-2017



2016-17 Success Rate: 91%, 82%

# CHM2210 - Course Learning Outcomes

SLO 1: Identify the major functional groups.

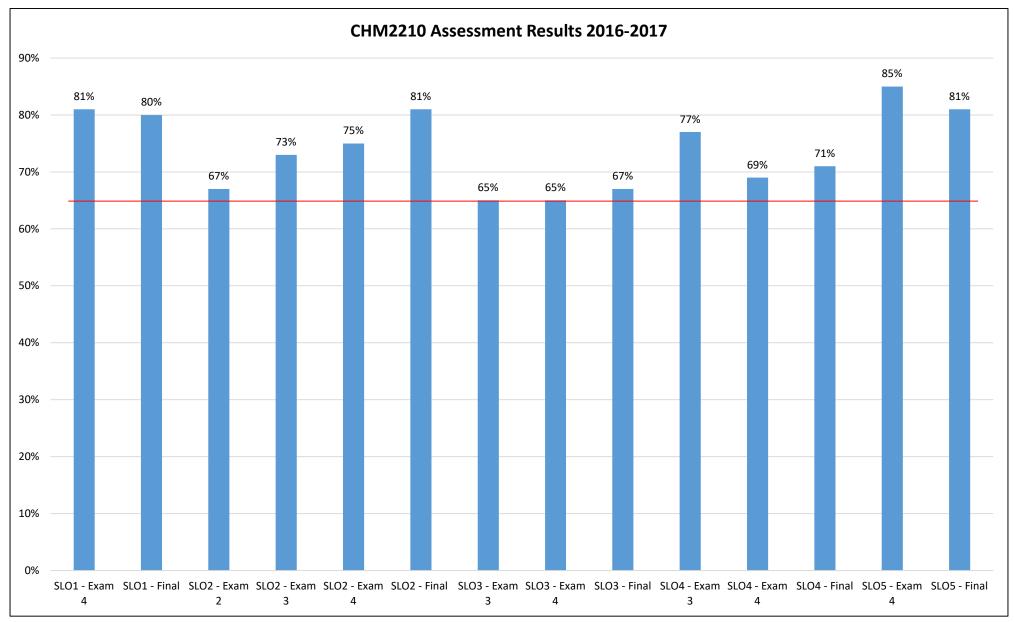
SLO 2: Identify the products of chemical reactions of the functional groups covered.

SLO 3: Apply an understanding of chemical reactions to multistep synthesis of organic compounds.

SLO 4: Apply the concepts of stereochemistry to organic reactions.

SLO 5: Identify compounds on the basis of the evidence of spectroscopic tests

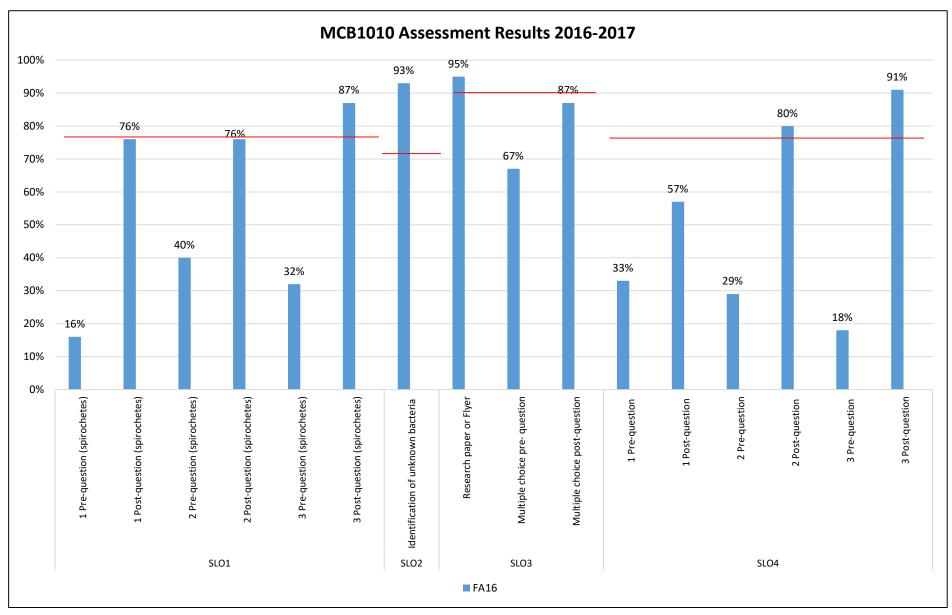
# CHM2210 - Course Assessment Results 2016-2017



# MCB1010 - Course Learning Outcomes

- SLO 1: Describe morphological and structural features of bacteria and its function in the organism.
- SLO 2: Operate the microscope to observe bacteria stained with various staining procedures.
- SLO 3: Describe how infectious agents may be transmitted to a host and how they may cause disease.
- SLO 4: Describe the nonspecific and specific immune host responses to an infectious agent.

## MCB1010 - Course Assessment Results 2016-2017



2016-17 Success Rate: 95%, 86%

# OCE1001 - Course Learning Outcomes

SLO 1: Identify Earth's oceans ad their major features on a map of the world.

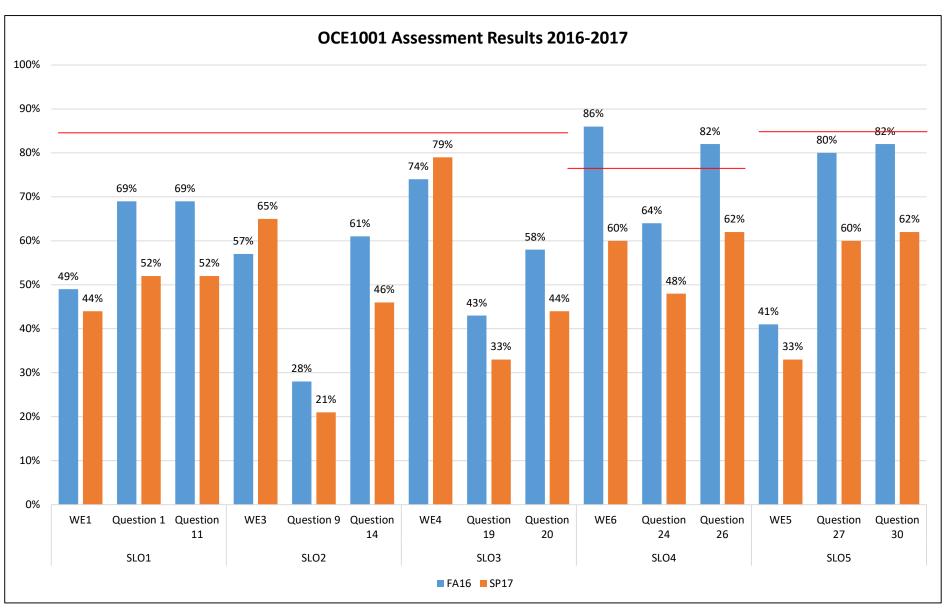
SLO 2: Explain plate tectonics and the features of the sea floor including the sediments, rocks and mineral deposits.

SLO 3: Explain the chemical and physical properties of seawater.

SLO 4: Evaluate the coupling effects of ocean and atmosphere.

SLO5: Distinguish types of ocean currents and the causes and nature of tides and waves.

## OCE1001 - Course Assessment Results 2016-2017

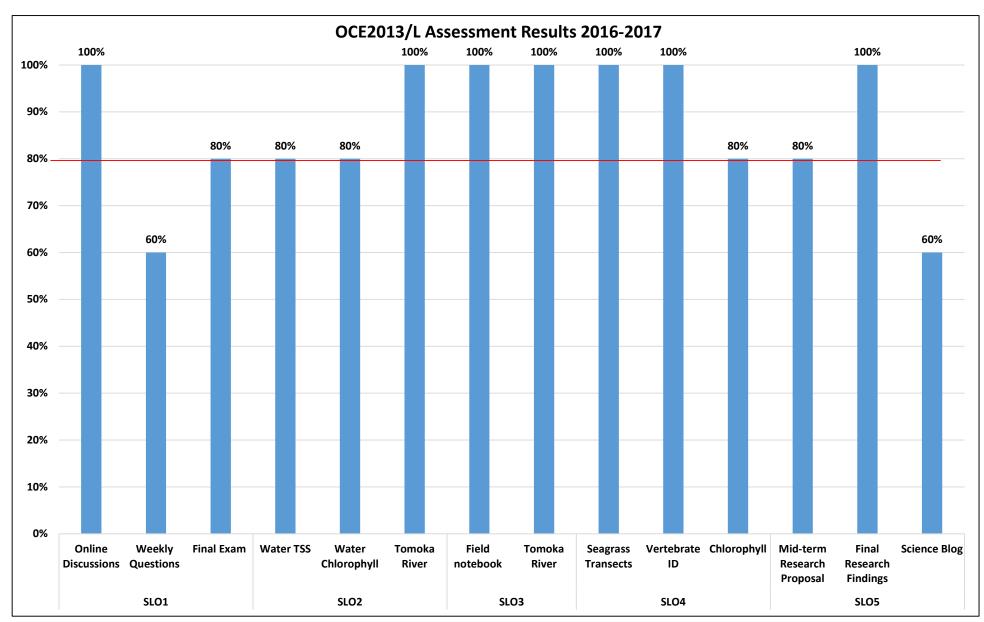


2016-17 Success Rate: 82%

# OCE2013/L - Course Learning Outcomes

- SLO 1: Research and evaluate the multi-disciplinary phenomena that occur in the aquatic environment.
- SLO 2: Calibrate and operate field and laboratory equipment for water quality measurements.
- SLO 3: Appropriately collect water and sediment samples from various field locations for field and laboratory analysis.
- SLO 4: Prepare graphics to suitably support the interpretation of field observations and laboratory analysis.
- SLO5: Design and defend an effective presentation of their data.

## OCE2013/L - Course Assessment Results 2016-2017



2016-17 Success Rate: 100%

# PCB3060 - Course Learning Outcomes

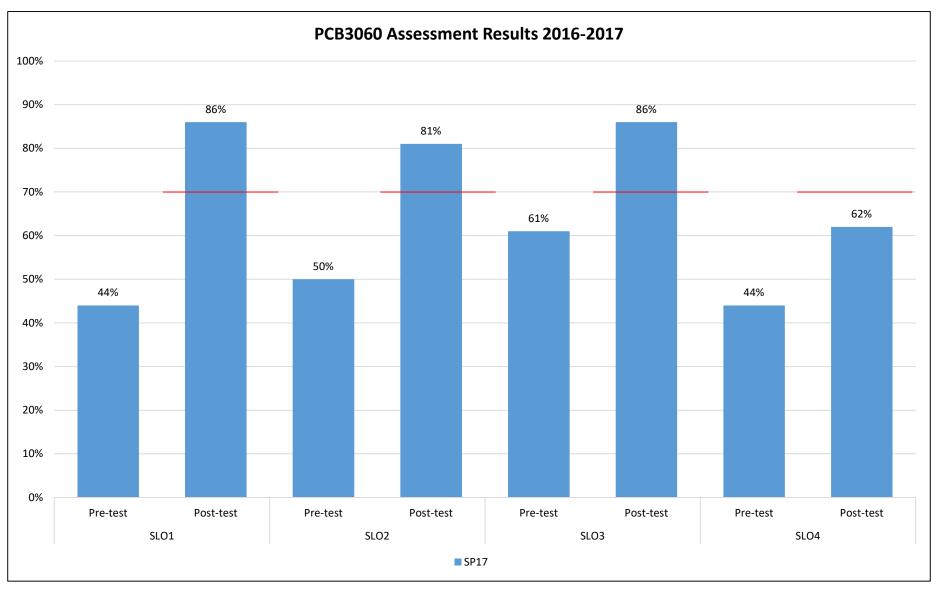
SLO 1: Use basic principles of heredity to solve genetic problems and solve population genetics problems using the Hardy-Weinberg equation and identify the assumptions upon which it is based.

SLO 2: Describe replication, transcription and translation, listing the molecules and events of each process and differences between prokaryotes and eukaryotes.

SLO 3: Distinguish between the various structures and functions of DNA and RNA and describe the processes of DNA mutation and repair.

SLO 4: Describe how mutations and chromosomal variations occur and explain their consequences.

# PCB3060 - Course Assessment Results 2016-2017



2016-17Success Rate: 100%

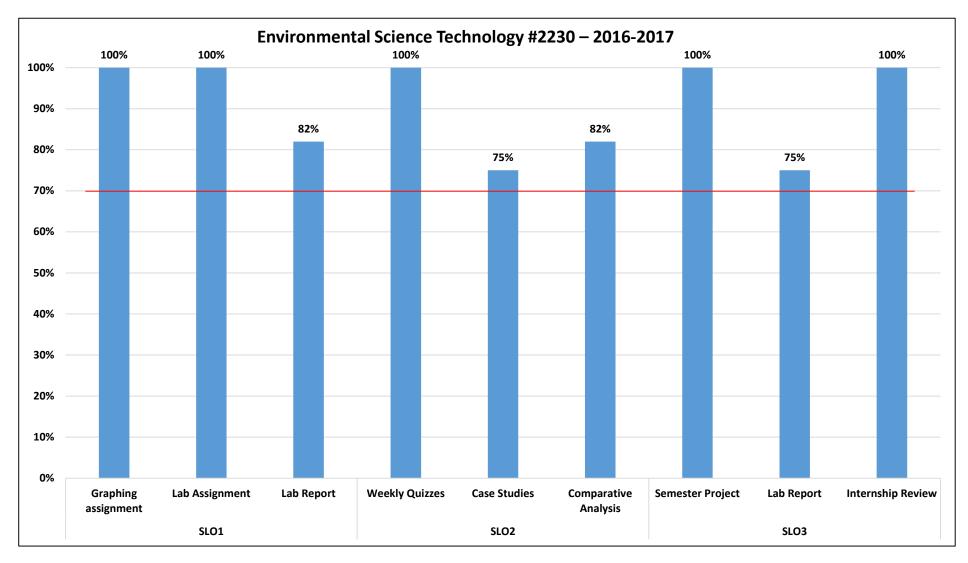
# Environmental Science Technology # 2230 Program Learning Outcomes

SLO 1: Students will be able to identify and explain environmental processes and human - environment interactions. (1, 2,3,4)

SLO 2: Students will be able to apply interdisciplinary perspectives and approaches in order to critically analyze and evaluate environmental issues on local and global scales. (1,2,4)

SLO 3: Students will be able to monitor, sample and evaluate environmental conditions and design effective presentations of their data. (1, 2, 4)

# Environmental Science Technology # 2230 Program Assessment Results 2016-2017



Target: 70% of students will achieve an 80% or higher in all assessment measures

# Assessment Data 2015-2016 and 2016-2017: Programs and Institutional Learning Outcomes

Program	Critical/ Creative Thinking		Commur	nication		tural racy	Information and Technical Literacy	
	2015/16	2016-2017	2015/16	2016-2017	2015/16	2016-2017	2015/16	2016-2017
Environmental Science Technology (2230)	71%-100%	82%-100%	71%-100%	82%-100%	100%	75%-88%	71%-100%	63%-100%

# **Course Success Rate (1 of 3)**

Major or Depart	ment, Associated	2013	-2014	2014	-2015	2015	-2016	2016	-2017	
Courses and Ins	tructional Method	Attempted	% Successful							
	AST1002	632	71%	551	87%	712	82%	685	86%	ŀ
	BOT1010C	58	84%	38	92%	37	81%	40	90%	
	BOT2150					9	89%	7	57%	
	BSC1005	764	81%	747	82%	902	82%	1242	77%	١
	BSC1010	577	72%	523	70%	612	73%	674	68%	١
	BSC1011	131	82%	112	83%	143	69%	144	78%	ľ
	BSC1020	619	77%	664	76%	760	73%	629	71%	١
CI- Biological &		1,316	62%	1,366	62%	1536	63%	1514	63%	١
Physical Science		814	85%	786	80%	958	81%	807	85%	l
	BSC2930	337	76%	440	79%	199	79%			1
	CHM1020					75	87%	129	87%	١
	CHM1025	766	89%	772	85%	813	86%	644	84%	١
	CHM1045	329	67%	353	78%	373	77%	450	80%	ľ
	CHM1046	122	80%	167	83%	152	85%	152	90%	١
	CHM2210C	37	84%	34	82%	49	96%	41	98%	
	CHM2211C	25	76%	24	96%	37	97%	32	94%	

## **Course Success Rate (2 of 3)**

Major or Depart	ment, Associated	2013	-2014	2014	-2015	2015-2016		2016-2017	
Courses and Ins	Courses and Instructional Method		% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
	EVR2001	6	67%	7	100%	35	69%	165	68%
	GLY2010C	14	93%	16	100%	14	93%	5	100%
	GLY2100					3	100%		
	MCB1010	532	88%	539	88%	628	86%	567	88%
	MET2010	324	79%	390	73%	293	73%	251	79%
	OCB2000C	72	74%	59	78%	48	77%	35	83%
SCI- Biological &	OCE1001	116	85%	143	78%	120	87%	172	82%
Physical Science	OCE2905					4	100%	3	100%
	PHY1020	25	68%	25	72%	48	73%	93	75%
	PHY1053C	49	90%	83	84%	115	89%	79	84%
	PHY1054	38	97%	39	95%	29	97%	40	98%
	PHY2048C	38	82%	65	94%	110	89%	107	93%
	PHY2049	21	67%	44	86%	59	97%	68	97%
	PSC1121	744	84%	792	90%	656	91%	424	92%
	Total		77%		78%		79%		77%

## **Course Success Rate (3 of 3)**

Major or Depar	tment, Associated	2013	-2014	2014	1-2015	2015-2016		2016-2017	
Courses and In	Courses and Instructional Method		% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
	EVR2861	4	100%						
	EVR2933	2	100%	5	100%	5	80%	5	60%
2230 –	EVR2943					4	75%	5	60%
Environmental Science Tech.	GIS2040	16	75%	16	94%	10	100%	16	75%
	OCE2013C	1	100%	7	86%	5	80%	5	100%
	PCB2033C	2	100%	5	100%	5	80%	9	100%
	BCH3023C	17	100%	6	100%	10	100%	15	100%
	CHM3085					8	100%		
	CHM3120C					4	100%	1	100%
5	PCB3034C	3	100%	3	100%	5	80%	2	100%
Upper Division	PCB3060	10	80%	11	64%	10	50%	7	100%
	PCB3203	10	80%	5	80%	8	88%	10	80%
	BOT3151	7	100%	2	50%	4	100%	3	100%
	OCE3014C					4	100%	1	100%

#### **Course Success Rate by Campus – Multiple Campuses Only (1 of 3)**

Dont Ass	nesisted Cou	rses and Campus	201	3-2014	2014	1-2015	201	5-2016	2016	-2017	
Dept., As:	sociated Cou	rses and Campus	Attempted	% Successful	ļ						
		Daytona	157	66%							
	AST1002	Deland	106	81%	63	90%	89	89%	95	93%	ľ
	A311002	Deltona	45	76%					37	92%	L
		Flagler/Palm Cst	41	78%	66	97%	78	82%	38	92%	ľ
		Daytona	334	87%	327	87%	300	90%	331	85%	1
		Deland	104	79%	78	90%	66	95%	92	92%	
	BSC1005	Deltona	45	84%	38	76%	29	86%	39	79%	
		Flagler/Palm Cst	68	84%	91	79%	93	87%	118	86%	
Biological/ Physical		New Smyrna Beach	38	68%	36	64%	37	57%	48	67%	ľ
Sciences		Daytona	305	65%	279	59%	318	64%	351	58%	
	BSC1010	Deland	125	71%	120	77%	164	80%	169	74%	
	B3C1010	Flagler/Palm Cst	111	90%	85	91%	85	87%	91	88%	ľ
		New Smyrna Beach	36	75%	39	87%	45	73%	63	79%	
	BSC1011	Daytona	111	80%	100	82%	124	67%	123	77%	l
	BSCIUII	Deland	20	90%	12	92%	19	79%	21	95%	
		Daytona	145	83%	146	62%	127	61%	122	62%	
	BSC1020	Deland	83	76%	119	87%	87	87%	50	82%	
		Deltona	33	88%	26	88%	18	100%			

#### **Course Success Rate by Campus – Multiple Campuses Only (2 of 3)**

Dont A	ssociated (	Courses and Campus	201	13-2014	2014	I-2015	2015	-2016	2016	-2017
Dept., A	Dept., Associated Courses and Campus		Attempted	% Successful						
		Daytona	632	58%	644	56%	757	50%	766	52%
	BSC1085	Deland	356	63%	371	58%	350	71%	331	74%
	D3C 1003	Flagler/Palm Cst	126	61%	141	79%	143	68%	142	63%
		New Smyrna Beach	78	76%	54	80%	172	85%		
		Daytona	363	84%	344	78%	400	73%	277	77%
	BSC1086	Deland	197	83%	214	80%	177	83%	184	90%
Biological/		Flagler/Palm Cst	87	83%	98	85%	96	77%	68	75%
Physical Sciences		New Smyrna Beach	63	92%	51	88%	175	93%		
Sciences		Daytona	440	86%	380	82%	386	80%	316	81%
	CHM1025	Deland	151	89%	129	87%	140	89%	108	83%
	CHIVI 1025	Flagler/Palm Cst	139	96%	148	88%	131	92%	115	85%
		New Smyrna Beach	36	92%	35	83%	34	88%		
		Daytona	248	64%	283	78%	316	76%	355	73%
	CHM1045	Deland	81	75%	70	76%	57	86%	75	75%
	Flagler/Palm C								20	75%

#### Course Success Rate by Campus – Multiple Campuses Only (3 of 3)

Dept.,	Associated	Courses and	201:	3-2014	2014	1-2015	2015	5-2016	2016-2017	
	Campus		Attempted	% Successful						
		Daytona	104	83%	150	84%	139	84%	129	79%
	CHM1046	Deland	18	61%	17	71%	13	92%	13	85%
		Flagler/Palm Cst							10	80%
		Daytona	199	85%	211	82%	254	85%		
		Deland	130	90%	133	95%	145	94%		
	MCB1010	Flagler/Palm Cst	98	96%	96	98%	84	92%		
		New Smyrna Beach	17	76%	19	84%	65	82%		
		Daytona	93	87%	67	82%	68	90%	83	80%
Biological/ Physical		Deland	23	78%					27	89%
<b>y</b> =	OCE1001	Flagler/Palm Cst			24	75%	12	83%	35	83%
Science		New Smyrna Beach			52	75%	40	83%	27	81%
	PHY1053C	Daytona	49	90%	66	85%	101	88%	66	83%
	F111 1033C	Deland			17	82%	14	93%	13	85%
	PHY1054C	Daytona					16	94%	14	100%
	FH11034C	Deland					13	100%	8	100%
		Daytona	121	62%	75	89%				
	PSC1121	Deland	45	96%	28	96%	30	90%		
	F301121	Deltona			38	82%				
		Flagler/Palm Cst	24	83%	28	96%				

#### **Overall Course Success Rate by Campus**

Don't Associated Co	ourses and Commun	2016-	-2017
Dept., Associated Co	ourses and Campus	Attempted	% Successful
2230 Environmental Science Tech.	Daytona	40	80%
	Daytona	4237	74%
Biological/ Physical	Deltona	76	86%
Science	Deland	1464	84%
	Flagler/Palm Cst	844	83%
	New Smyrna Beach	172	78%
Upper Division Courses	Daytona	38	95%
opper Division Courses	Deland	1	100%
	Grand Total	6,872	77%

#### **Course Success Rate By Instructional Method – Multiple Methods Only (1 of 3)**

Dept., Asso	ociated Cours	ses and	2013	-2014	201	4-2015	2015-2016		2016-2017		
Instru	structional Method.		Attempted	% Successful							
	AST1002	Lecture	349	73%	129	94%	167	86%	170	92%	l۱
	A311002	Online	283	69%	422	85%	545	81%	515	84%	
		Hybrid	16	69%	54	78%	90	78%	39	85%	
	BSC1005	Lecture	573	84%	516	84%	435	89%	589	84%	
		Online	175	74%	177	76%	377	75%	614	69%	
	BSC1010C	Hybrid							45	93%	
	BSCIUIUC	Lecture							629	66%	
Biological/ Physical	BSC1020	Lecture	261	82%	291	75%	232	74%	172	68%	
Science	B3C1020	Online	358	73%	373	77%	528	73%	457	72%	
		Lecture	1192	61%	1210	60%	1250	58%	1168	59%	
	BSC1085	Online	124	77%	156	72%	286	84%	275	79%	ľ
		Hybrid							71	63%	
	BSC1086	Lecture	710	84%	707	80%	673	76%	529	81%	lt
	D3C1000	Online	104	90%	79	77%	285	93%	278	91%	
	BSC2930	Lecture	59	78%	65	78%	34	82%			
	D302930	Online	278	76%	375	79%	165	79%			

#### Course Success Rate By Instructional Method – Multiple Methods Only (2 of 3)

Dept., Ass	ociated Cour	ses and	201	3-2014	201	4-2015	201	5-2016	201	6-2017	1
Instru	Instructional Method		Attempted	% Successful	4						
	CHM1020	Hybrid					9	78%	36	97%	ľ
	CHIVI 1020	Online					66	88%	93	83%	
		Hybrid	131	87%	120	85%	198	91%	171	86%	
	CHM1025	Lecture	635	89%	572	84%	493	82%	368	80%	
		Online			80	88%	122	94%	105	90%	
	EV/Dood4	Hybrid							105	69%	1
	EVR2001	Online							60	68%	
		Hybrid					28	71%	65	88%	1
Biological/	MCB1010	Lecture	444	89%	459	89%	455	90%	363	89%	
Physical		Online	88	84%	80	81%	145	77%	139	86%	
Science	14570040	Lecture	113	74%	143	65%	106	64%	77	69%	1
	MET2010	Online	211	81%	247	78%	187	79%	174	84%	ı
	DI IV/4000	Online							55	76%	1
	PHY1020	Lecture							38	74%	
	DUN/40500	Hybrid					41	83%			1
	PHY1053C	Lecture					74	92%	79	84%	
		Hybrid	24	83%	28	96%					1
	PSC1121	Lecture	166	71%	141	89%	30	90%	28	89%	
		Online	554	87%	623	90%	626	91%	396	92%	1
	Hyl	brid		82%		84%		82%		81%	1
DSC		ture		77%		78%		80%		81% 76%	
	On	line		75%		76%		78%		76%	

#### **Overall Course Success Rate by Instructional Method**

Dont Associated Co	was and Campus	2016-	-2017
Dept., Associated Co	ourses and Campus	Attempted	% Successful
2230 Environmental	Lecture	35	77%
Science Tech.	Hybrid	5	100%
	IS	3	100%
Biological/ Physical	Labs	400	91%
Science	Online	3,161	80%
	Lecture	5,353	75%
	Hybrid	1,037	82%
	IS	1	100%
Upper Division Courses	Daytona	37	95%
	Deland	1	100%
	Grand Total	10,033	78%

#### Course Success Rates- Multiple Sessions or Sub-sessions Only (1 of 4)

Major or Dept., As	ssociated Co	urse	es and Sub-	201	3-2014	201	4-2015	2015	-2016	2016-2017	
	session			Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successfu
			A term	34	59%	69	84%	74	82%	73	79%
		FA	B term	51	51%	42	83%	80	76%	68	85%
			Full term	213	72%	124	85%	165	85%	167	88%
AST1002	AST1002		A term	47	83%	57	89%	81	89%	71	97%
		SP	B term	83	82%	109	83%	157	76%	138	78%
		Full term	146	70%	65	97%	74	77%	75	93%	
		SU	Full term	58	69%	85	89%	81	90%	93	84%
	DOT40400	FA	Full term	32	84%	19	89%	20	80%	19	79%
	BOT1010C	SP	Full term	26	85%	19	95%	17	82%	21	100%
	F		A term							74	62%
iological/ Physical			B term					38	68%	65	68%
cience				Full term	397	81%	372	81%	331	86%	430
	BSC1005		A term					72	82%	70	70%
		SP	B term					77	69%	73	56%
			Full term	321	80%	338	81%	384	84%	389	81%
		SU	Full term	46	91%	37	95%			141	78%
		FA	Full term	311	74%	252	71%	290	74%	352	69%
BSC <sup>-</sup>	BSC1010	SP	Full term	225	67%	233	67%	280	70%	290	64%
		SU	Full term	41	83%	38	84%	42	81%	32	94%
		FA	Full term	37	78%	39	72%	32	59%	35	74%
	BSC1011	SP	Full term	77	79%	62	87%	79	62%	79	77%
		SU	Full term	17	100%	11	100%	32	94%	30	87%

#### Course Success Rates- Multiple Sessions or Sub-sessions Only (2 of 4)

Dept., Associated	Couross	nd C.	ıh sassian	201	13-2014	20 <sup>-</sup>	14-2015	201	5-2016	2016-2017		
Dept., Associated	Courses a	na st	ib-session	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successfu	
			A term	88	78%	49	76%	59	58%	23	61%	
		FA	B term	87	59%	57	75%	67	54%	43	60%	
			Full term	197	81%	270	75%	215	80%	188	69%	
	BSC1020		A term							44	73%	
		SP	B term	66	73%	74	77%	109	71%	40	65%	
			Full term	181	82%	214	77%	188	74%	165	67%	
		SU	Full term					122	81%	126	85%	
		FA	A term	22	86%	17	82%	74	88%	68	91%	
		ra —	Full term	605	63%	656	55%	650	66%	666	54%	
	BSC1085	C1085 SP	A term	29	72%	16	88%	36	89%	37	76%	
siological/			Full term	529	55%	573	65%	640	53%	577	63%	
Physical Sciences		SU	Full term	131	81%	104	76%	136	74%	166	81%	
			<b>5</b> 4	B term	18	94%	17	82%	68	94%	63	95%
		FA	Full term	213	78%	208	78%	211	75%	204	78%	
	BSC1086	0.0	B term	21	95%	18	89%	54	89%	47	89%	
		SP	Full term	409	84%	396	78%	422	78%	326	86%	
		SU	Full term	153	95%	147	88%	203	87%	167	84%	
	BSC2930		B term	36	69%							
		FA	Full term	96	80%	171	79%	137	79%			
		0.5	B term			56	77%					
		SP	Full term	133	71%	131	79%					
	S		Full term	72	82%	82	80%	62	81%			

#### Course Success Rates- Multiple Sessions or Sub-sessions Only (3 of 4)

Dept., A	ssociated Cou	rses a	and Sub-	201	3-2014	20	14-2015	20	15-2016	2016-2017	
, í	session			Attempted	% Successful						
		FA						24	83%	39	87%
	CHM1020	SP	Full term					51	88%	76	87%
		SU	Full term							14	86%
		FA	Full term	347	90%	343	84%	334	82%	299	83%
	CHM1025C	SP	Full term	348	88%	357	84%	382	88%	245	82%
	_	SU	Full term	71	90%	72	94%	97	93%	100	91%
		FA	Full term	139	63%	151	81%	157	79%	217	71%
	CHM1045C	SP	Full term	134	64%	148	78%	167	71%	180	73%
		SU	Full term	56	82%	54	69%	49	92%	53	83%
		FA	Full term	33	88%	35	66%	32	63%	29	66%
	CHM1046C	SP	Full term	58	72%	88	84%	82	89%	73	78%
		SU	Full term	31	84%	44	93%	38	95%	50	90%
Biological/	CHM2905	FA	Full term			1	100%				
Physical Physical	CHIVI2905	SP	Full term			1	100%				
Sciences	EV/D2004	FA	Full term					6	83%	71	65%
	EVR2001	SP	Full term					29	66%	94	71%
	CL V2040C	FA	Full term			16	100%			5	100%
	GLY2010C	SP	Full term	14	93%						
		FA	Full term	192	88%	195	86%	250	87%	175	85%
	MCB1010	SP	Full term	232	87%	247	87%	316	84%	271	87%
		SU	Full term	108	92%	97	95%	62	94%	121	95%
		FA	Full term	1	100%	1	100%				
	MCB2905	SP	Full term	3	100%						
		SU	Full term	1	100%						
		FA	Full term					126	75%	109	76%
	MET2010	SP	Full term					88	65%	80	75%
		SU	Full term					79	81%	62	90%

#### Course Success Rates- Multiple Sessions or Sub-sessions Only (4 of 4)

								•	(1011)		
Danie Associate			L	2013	3-2014	2014	1-2015	2015-2016		2016-2017	
Dept., Associated	d Courses a	na Su	ib-session	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successfu
	OCB2000C	<b>FA</b>	Full term	38	71%	40	75%	28	75%	21	90%
	ОСВ2000С	SP	Full term	34	76%	19	84%	20	80%	14	71%
	OCE1001	FA	Full term	81	80%	63	89%	57	82%	74	78%
	OCETOOT	SP	Full term	35	97%	80	70%	63	90%	98	85%
	OCE2905	FA	Full term							2	100%
	OCE2903	SP	Full term							1	100%
	PHY1020	FA	Full term					10	90%	55	76%
	PH11020	SP	Full term					38	68%	38	74%
	PHY1053C	FA	Full term	49	90%	83	84%	74	92%	53	81%
	PH 1 1053C	SP	Full term					41	83%	26	88%
	PHY1054	SP	Full term	38	97%	39	95%			22	100%
iological/ hysical Sciences	PH 1 1054	SU	Full term							18	94%
	PHY2048C	FA	Full term	38	82%	65	94%	74	88%	68	93%
	PH 1 2046C	SP	Full term					36	92%	39	95%
	PHY2049	SP	Full term	21	67%	44	86%			49	98%
	PH 1 2049	SU	Full term							19	95%
			A term	70	87%	86	87%	96	93%	76	92%
		FA	B term	63	90%	65	92%	77	92%	84	90%
PSC1121		Full term	178	79%	211	90%	116	91%			
	PSC1121		A term	84	79%	95	91%	83	90%	74	92%
		SP	B term	88	83%	97	84%	83	87%	81	89%
			Full term	214	84%	152	91%	113	89%	28	89%
		SU	Full term	47	96%	86	93%	88	91%	81	95%

### **Overall Course Success Rate by Session and Sub-session**

Dont Accesists	d Courses and	Compue	2016-2017			
Dept., Associate	a Courses and	Campus	Attempted	% Successful		
2230 Environmental	Fall	Full term	25	84%		
Science Tech.	Spring	Full term	15	73%		
	Summer	Full term	2,028	87%		
		A term	314	80%		
	Fall	B term	323	82%		
Biological/ Physical Science		Full term	3,319	73%		
		A term	296	83%		
	Spring	B term	379	76%		
		Full term	3,295	77%		
Una an Biodalan Causas	Fall	Full term	27	93%		
Upper Division Courses	Spring	Full term	12	100%		
		10,033	78%			

# **Grade Distribution (1 of 4)**

Department/	0	0		20	016-2017 (SU16	6, FA16, SP17		
Major	Session	Course	Pass (A, B, C)	Fail (D, F)	FNs	Ws	W1s	Incs
	Fall 2016	GIS2040C	12	3	0	1	0	0
		PCB2033C	9	0	0	0	0	0
2230 –		Fall 2016 Total	21 (84%)	3 (12%)	0 (0%)	1 (4%)	0 (0%)	0 (0%)
Environmental Science Tech.	Spring 2017	EVR2933	3	2	0	0	0	0
	- John 19 - 10 11	EVR2943	3	2	0	0	0	0
		OCE2013C	5	0	0	0	0	0
	Sp	ring 2017 Total	11 (73.3%)	4 (26.7%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
		AST1002	78	5	8	2	0	0
		BSC1005	110	9	12	10	0	0
		BSC1010	30	1	0	1	0	0
		BSC1011	26	2	1	1	0	0
		BSC1020	107	11	5	3	0	0
		BSC1085	134	20	4	8	0	0
		BSC1086	141	10	3	13	0	0
Biological/	Summer	CHM1020	12	0	2	0	0	0
Physical	2016	CHM1025	91	3	0	6	0	0
Sciences		CHM1045	44	2	1	6	0	0
		CHM1046	45	2	1	2	0	0
		MCB1010	115	2	2	2	0	0
		MET2010	56	5	0	1	0	0
		PHY1054	17	1	0	0	0	0
		PHY2049	18	1	0	0	0	0
		PSC1121	77	4	0	0	0	0
	Sun	nmer 2016 Total	1,101 (86.5%)	78 (6.1%)	39 (3.1%)	55 (4.3%)	0 (0%)	0 (0%)

# **Grade Distribution (2 of 4)**

Department/				20	)16-2017 (SU16	6, FA16, SP17		
Major	Session	Course	Pass (A, B, C)	Fail (D, F)	FNs	Ws	W1s	Incs
		AST1002	263	38	2	5	0	0
		BOT1010C	15	3	1	0	0	0
		BSC1005	439	72	25	33	0	0
		BSC1010C	243	51	14	44	0	0
		BSC1011C	26	3	1	5	0	0
		BSC1020	169	23	38	24	0	0
		BSC1085C	423	118	35	158	0	0
		BSC1086C	219	23	7	18	0	0
		CHM1020	34	0	3	2	0	0
		CHM1025C	247	30	5	17	0	0
		CHM1045C	153	26	3	35	0	0
Biological/	Fall 2016	CHM1046C	19	2	2	6	0	0
Physical	1 all 2010	CHM2210C	40	0	0	1	0	0
Sciences		EVR2001	46	18	3	4	0	0
		GLY2010C	5	0	0	0	0	0
		MCB1010C	148	7	2	18	0	0
		MET2010	83	17	6	3	0	0
		OCB2000C	19	1	0	1	0	0
		OCE1001	58	4	6	6	0	0
		OCE2905	2	0	0	0	0	0
		PHY1020	42	9	0	4	0	0
		PHY1053C	43	2	1	7	0	0
		PHY2048C	63	2	0	3	0	0
		PSC1121	146	8	3	3	0	0
		Fall 2016 Total	2,945 (74.4%)	457 (11.6%)	157 (4%)	397 (10%)	0 (0%)	0 (0%)

Department/				20	016-2017 (SU16	5, FA16, SP17		
Major	Session	Course	Pass (A, B, C)	Fail (D, F)	FNs	Ws	W1s	Incs
		AST1002	247	15	5	8	9	0
		BOT1010C	21	0	0	0	0	0
		BOT2150	4	2	0	0	1	0
		BSC1005	407	67	16	23	19	0
		BSC1010C	186	45	4	34	21	0
		BSC1011C	61	15	1	2	0	0
		BSC1020	168	34	12	19	16	0
		BSC1085C	394	113	10	64	33	0
		BSC1086C	323	28	1	20	1	0
		CHM1020	66	3	6	1	0	0
		CHM1025C	200	22	7	9	6	1
		CHM1045C	132	25	0	20	3	0
Biological/	Spring 2017	CHM1046C	57	6	0	10	0	0
Physical	Spring 2017	CHM2210C	30	1	0	1	0	0
Sciences		EVR2001	67	15	0	4	8	0
		MCB1010C	237	10	0	19	5	0
		MET2010	60	11	6	3	0	0
		OCB2000C	10	2	0	2	0	0
		OCE1001	83	8	0	4	3	0
		OCE2905	1	0	0	0	0	0
		PHY1020	28	6	2	2	0	0
		PHY1053C	23	1	0	2	0	0
		PHY1054C	22	0	0	0	0	0
		PHY2048C	37	1	0	1	0	0
		PHY2049C	48	0	0	1	0	0
		PSC1121	165	7	3	3	5	0
	S	pring 2017Total	3,077 (77.5%)	437 (11%)	73 (1.8%)	252 (6.3%)	130 (3.3%)	1 (0.04%)

# **Grade Distribution (4 of 4)**

Department/	Cassian	Course		20	)16-2017 (SU16	5, FA16, SP17		
Major	Session	Course	Pass (A, B, C)	Fail (D, F)	FNs	Ws	W1s	Incs
		BCH3023C	15	0	0	0	0	0
		PCB3034C	2	0	0	0	0	0
		PCB3203	8	0	1	1	0	0
		Fall 2016 Total	25 (92.6%)	0 (0%)	1 (3.7%)	1 (3.7%)	0 (0%)	0 (0%)
Upper Division Courses		BOT3151	3	0	0	0	0	0
	Spring 2017	CHM3120C	1	0	0	0	0	0
		OCE3014C	1	0	0	0	0	0
		PCB3060	7	0	0	0	0	0
	Spring 2017Total		12 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	Grand Total			979 (10.6%)	270 (2.8%)	706 (7.6%)	130 (1.4%)	1 (0.01%)

#### **Course Success Rates for Guaranteed Sections**

Course	2016-2	2017	Overall
Course	Attempted	% Successful	Overall
AST1002	37	92%	86%
BSC1005	103	78%	77%
BSC1020	83	70%	71%
CHM1020	36	97%	87%
OCE1001	27	81%	82%
PHY1020	38	74%	75%
PSC1121	28	89%	92%
Total	352	80%	

# **Average Class Size by Course (1 of 3)**

Dept. and As	sociated	2013	-2014	2014-	2015	201	5-2016	2016	-2017
Cours	es	Sections	Avg. Size						
	AST1002	21	30	13	42	12	59	12	57
	BOT1010C	2	29	2	19	2	19	2	20
	BOT2150					1	9	1	7
	BSC1005	21	36	18	42	21	43	24	52
	BSC1010	13	44	13	40	15	41	1	32
	BSC1010C							14	46
	BSC1011	5	26	5	22	5	29	1	30
	BSC1011C							4	29
	BSC1020	13	48	14	47	17	45	16	39
	BSC1085	26	51	24	57	25	61	3	55
Biological/	BSC1085C							22	61
Physical	BSC1086	23	35	23	34	22	44	4	42
Sciences	BSC1086C							17	38
	BSC2930	9	37	9	49	5	40		
	CHM1020					3	25	4	32
	CHM1025	17	45	20	39	20	41	3	33
	CHM1025C							16	34
	CHM1045	8	41	8	44	8	47	1	53
	CHM1045C							9	44
	CHM1046	5	24	5	33	5	30	1	50
	CHM1046C							5	20
	CHM2210C	1	37	1	34	1	49	1	41
	CHM2211C	1	25	1	24	1	37	1	32

Years are reporting years, SU-SP.

Blank cells or missing years indicate no enrollment.

To prevent data from skewing, excludes labs, OJT, clinicals, private/performance, open lab, co-op, directed independent study and internships.

# **Average Class Size by Course (2 of 3)**

Dept. and A	ssociated	2013	-2014	2014-	2015	2015	5-2016	2016-2017	
Cour	ses	Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size
	EVR2001	1	6	1	7	2	18	3	55
	EVR2943							1	5
	GLY2010C	1	14	1	16	1	14	1	5
	MCB1010	18	30	17	32	15	42	3	40
	MCB1010C							13	34
	MET2010	8	41	8	49	7	42	7	36
	OCB2000C	2	36	2	30	2	24	2	18
Biological/	OCE1001	4	29	5	29	5	24	6	29
Physical	PHY1020	1	25	1	25	2	24	2	47
Sciences	PHY1053C	1	49	2	42	3	38	3	26
	PHY1054	1	38	1	39	2	15	1	18
	PHY1054C							2	11
	PHY2048C	1	38	1	65	2	55	2	54
	PHY2049	1	21	1	44	1	59	1	19
	PHY2049C							1	49
	PSC1121	21	35	18	44	11	60	9	47
	Total	223	38	212	41	230	43	219	42

Years are reporting years, SU-SP.

Blank cells or missing years indicate no enrollment.

# **Average Class Size by Course (3 of 3)**

		2013	-2014	2014-	2015	2015-	2016	2016	-2017
Major and Asso	EVR2933 GIS2040C DCE2013C PCB2033C Total BCH3023C CHM3085 CHM3120	Sections	Avg. Size						
	EVR2861	1	4						
2230 -	EVR2933	1	2	1	5	1	5	1	5
Environmental	GIS2040C	1	16	1	16	1	10	1	16
Science Tech.	OCE2013C			1	7	1	5	1	5
PCB2033C	PCB2033C	1	2	1	5	1	5	1	9
	Total	6	9	6	11	8	14	4	9
	BCH3023C	1	17	1	6	1	10	1	15
	CHM3085					1	7		
	CHM3120					1	4		
	PCB3034C	1	3	1	3	1	5	1	2
Upper Division Courses	PCB3060	1	10	1	11	1	10	1	7
	PCB3203	1	10	1	5	1	8	1	10
	BOT3151	1	7	1	2	1	4	1	3
	OCE3014C					1	4	1	1
	Total	5	15	5	6	8	4	6	6

Years are reporting years, SU-SP.

Blank cells or missing years indicate no enrollment.

To prevent data from skewing, excludes labs, OJT, clinicals, private/performance, open lab, co-op, directed independent study and internships.

# **Average Class Size – Multiple Methods Only (1 of 2)**

			2013-	2014	2014	-2015	2015	-2016	2016	-2017
Dept., Associated	Courses and In	nstructional Method	Sections	Avg. Size						
	AST1002	Lecture	14	25	4	32	4	42	4	43
	A311002	Online	7	40	9	47	8	68	8	64
		Hybrid	1	16	2	27	3	30	1	39
	BSC1005	Lecture	14	41	11	47	10	44	12	49
		Online	6	29	5	35	8	47	11	56
	BSC1010C	Lecture							13	46
	B3C1010C	Hybrid							1	45
	BSC1020	Lecture	5	52	6	49	6	39	4	43
	B3C1020	Online	8	45	8	47	11	48	12	38
	BSC1085	Lecture	23	52	22	55	20	63	2	51
	B3C1083	Online	3	41	2	78	5	57	1	65
		Hybrid							1	71
	BSC1085C	Lecture							17	63
Biological/Physical		Online							4	53
Sciences	BSC1086	Lecture	20	36	21	34	17	40	2	32
	B3C1000	Online	3	35	2	40	5	57	2	52
	BSC1086C	Lecture							14	33
	B3C1086C	Online							3	58
	BCC2020	Lecture	2	30	2	33	1	34		
	BSC2930	Online	7	40	7	54	4	41		
	CUMADO	Hybrid					1	9	1	36
	CHM1020	Online					2	33	3	31
		Hybrid	5	26	5	24	6	33	2	26
	CHM1025	Lecture	12	53	13	44	11	45		
		Online			2	40	3	41	1	48
		Hybrid							4	30
	CHM1025C	Lecture							11	33
		Online							1	57

## **Average Class Size – Multiple Methods Only (2 of 2)**

Dont Associated	Courses and In	estructional Mathad	2013-	2014	2014	-2015	2015	-2016	2016-2017	
Dept., Associated	Courses and ir	structional Method	Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size
	EVR2001	Hybrid							2	53
	EVRZUUI	Online							1	60
		Hybrid					1	28	1	43
	MCB1010	Lecture	15	30	15	31	10	46	1	51
		Online	3	29	2	40	4	36	1	27
		Hybrid							1	22
	MCB1010C	Lecture							9	35
		Online							3	37
Biological/Physical Sciences	MET2010	Lecture	3	38	2	72	2	53	2	39
		Online	5	42	6	41	5	37	5	35
	DUV4000	Lecture							1	38
	PHY1020	Online							1	55
	DUIV4.050	Hybrid					1	41		
	PHY1053	Lecture					2	37		
		Hybrid	1	24	1	28				
	PSC1121	Lecture	6	28	3	47	1	30	1	28
		Online	14	40	14	45	10	63	8	50

### **Average Class Size Totals**

Major or Dont and Instru	estional Mathad	2013	-2014	2014	-2015	2015	-2016	2016	-2017
Major or Dept. and Instru	ictional Method	Sections	Avg. Size						
2230 - Environmental Science Tech.	Lecture	6	9	5	12	1	5	3	10
	Online			1	7	7	15	1	5
	Total	6	9	6	11	8	14	4	9
Science Tech.  Upper Division Courses  Biological/Physical	Hybrid	1	3	1	3	2	5	1	1
	Lecture	4	10	4	5	6	4	5	7
	Total	5	7	5	4	8	4	6	6
	Hybrid	12	25	14	26	36	23	21	34
Biological/Physical	Lecture	155	39	141	41	129	43	133	40
Sciences	Online	56	39	57	46	65	51	65	49
	Total	223	38	212	41	230	43	219	42
Total	234	37	223	40	246	40	229	40	

**College Total** 

Instructional Method	Avg. Size	Avg. Size	Avg. Size	Avg. Size
Hybrid	22	22	21	23
Lecture	23	22	22	21
Online	28	29	30	30

#### **Graduation Rates**

Major	Fall Cohort Year	# in Cohort	Graduated within 150% Time	150% Graduation Rate	Graduated within 200% Time	200% Graduation Rate
	2011	11	0	0.0%	0	0.0%
2230- Environmental Science Technology	2012	5	0	0.0%	1	20%
	2013 – 200% in progress	15	1	6.7%	1	6.7%
	2014 – in progress	17	3	17.6%	3	17.6%

#### **Retention Rates**

Program and V	n a r	Registered	Exclusions	Adjusted	Retaine	ed by DSC	Retained by Program		Total
Program and Year		Registered	LXCIUSIONS	Cohort	N	%	N	%	Retained
	2011	11	0	11	2	18.18%	4	36.36%	54.55%
	2012	22	0	22	2	9.09%	9	40.91%	50.00%
2230 - ENVIRONMENTAL SCIENCE TECH.	2013	39	2	37	6	16.22%	11	29.73%	45.95%
20	2014	33	3	30	5	16.67%	10	33.33%	49.99%
	2015	32	4	28	3	10.71%	9	32.14%	42.85%

#### College average (64.4%)

Registered - Includes all students enrolled in the fall term of the specified year, with the specified program as their primary major.

Exclusions - Includes students who are deceased or graduated fall of the specified year or the following spring or summer.

Retained by DSC - Students who were still registered at DSC the following fall but with a different primary major.

Retained by Program - Students who were registered the following fall with the same primary major.

#### 2016-2017 Retention Rates by Race/Ethnicity

Major	Fall Term	Registered	Exclusions	Adjusted	Retained by Program		
Major	Tun lenn	Registered	EXCIGIONS	Cohort	N	N % 0 0% 1 100% 1 20%	
	Black	2	0	2	0	0%	
2230 -	Hispanic	1	0	1	1	100%	
ENVIRONMENTAL SCIENCE TECH.	Two or More Races	6	1	5	1	20%	
	White	23	3*	20	7	35%	

<sup>\*</sup>three students retained by DSC

#### College average (African American: 48.1%, Hispanic: 62.1%)

Registered - Includes all students enrolled in the fall term of the specified year, with the specified program as their primary major.

Exclusions - Includes students who are deceased or graduated fall of the specified year or the following spring or summer.

Adjusted Cohort - Registered students less exclusions.

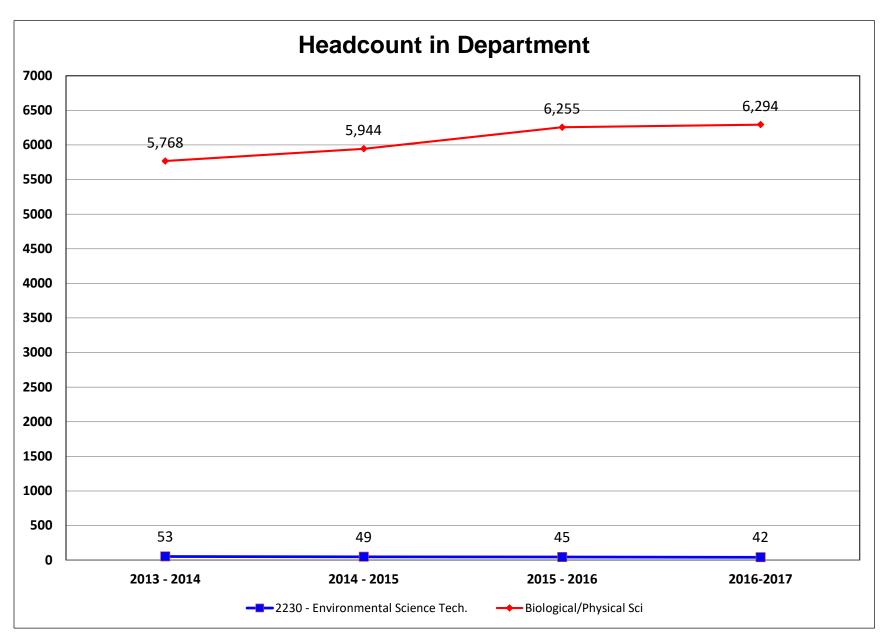
Not retained - Students who were not registered the following fall term.

Retained by DSC - Students who were still registered at DSC the following fall but with a different primary major.

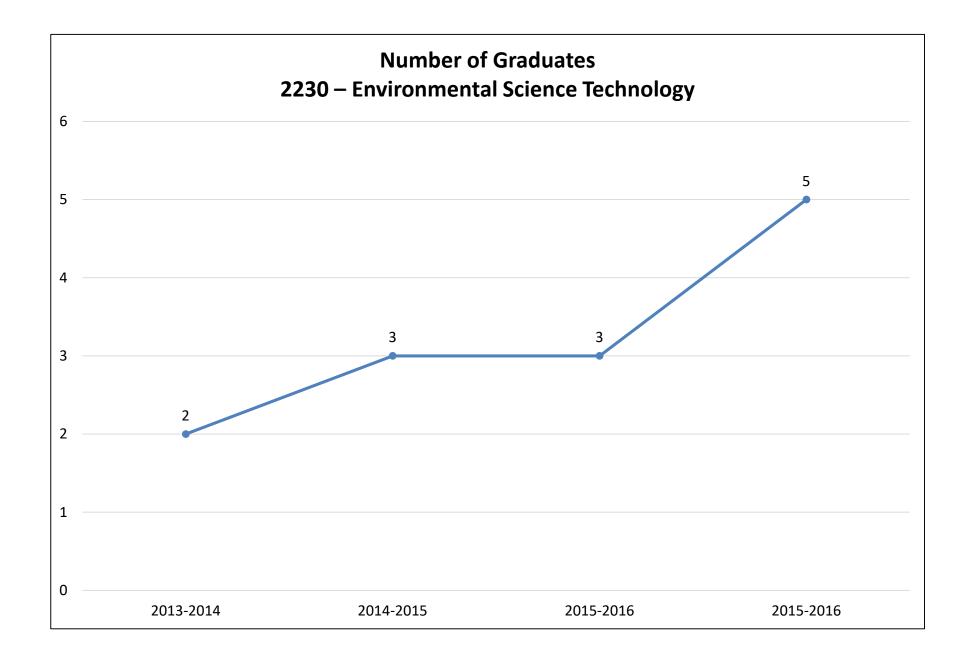
Retained by Program - Students who were registered the following fall with the same primary major.

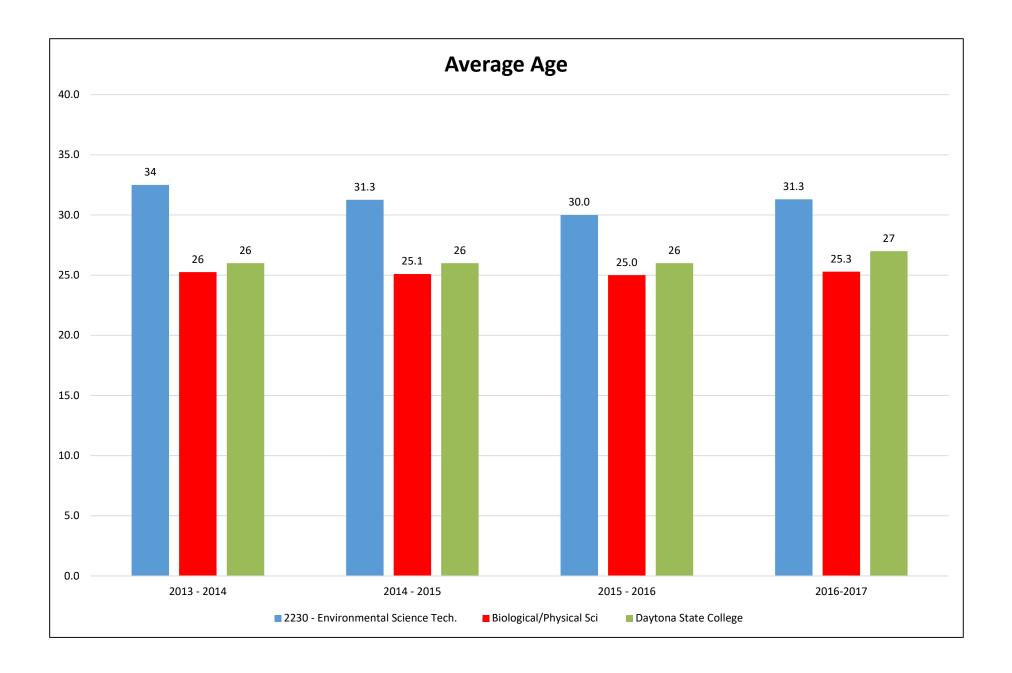
Source: IR Program Assessment Data

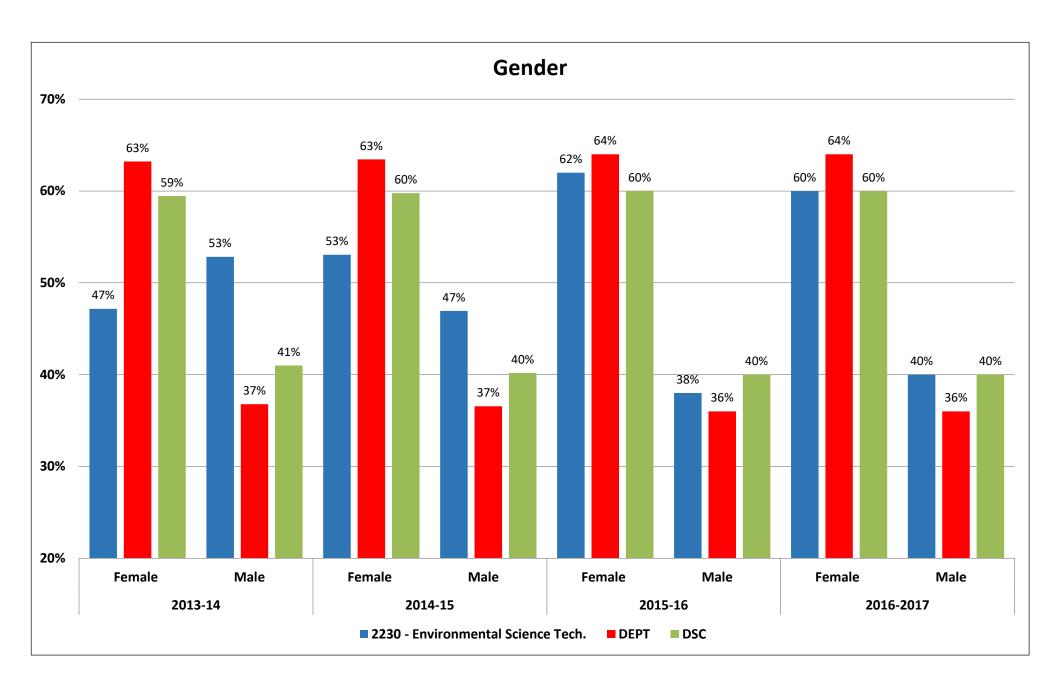
	Placement Rates												
											Average Annual		
Program Title	Major	DSC%	FCS%	DSC%	FCS%	DSC%	FCS%	DSC%	FCS%	DSC%	FCS%	Salary	
Environment al Science Tech.	2230		Prog	ram sta	arted in	2011		100%	79%	100%	68%	\$**,***	



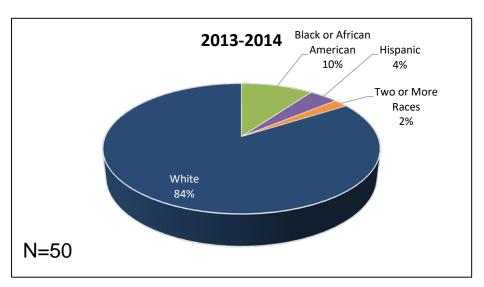
College Enrollment Decreased: 3%(13/14); 0.73%(14/15); 1.14% (15/16); 5.5%(16/17)

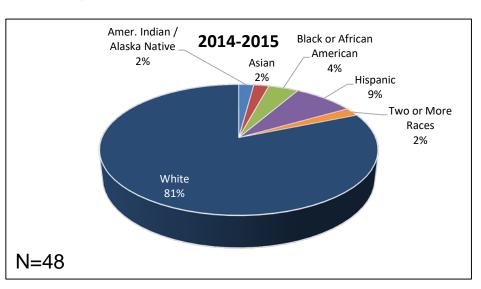


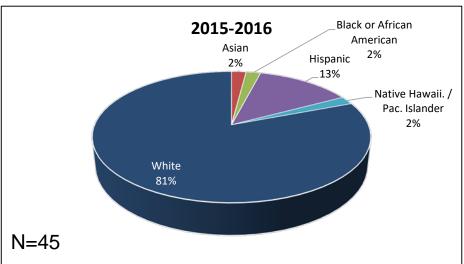


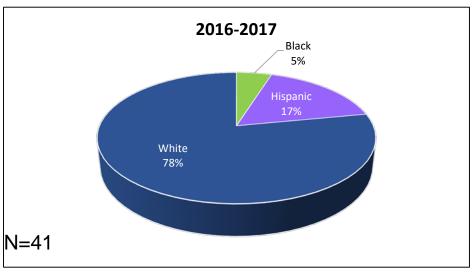


# **Enrollment by Race/Ethnicity** 2230 - Environmental Science Tech.



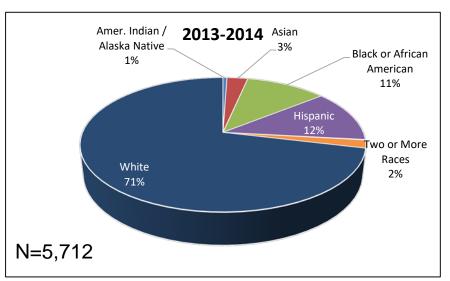


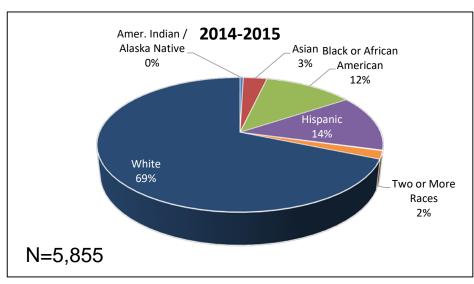


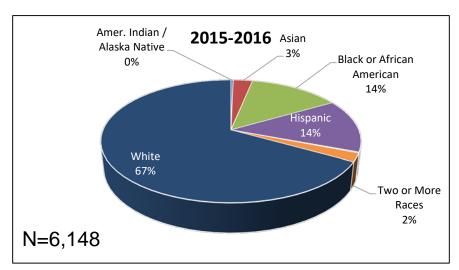


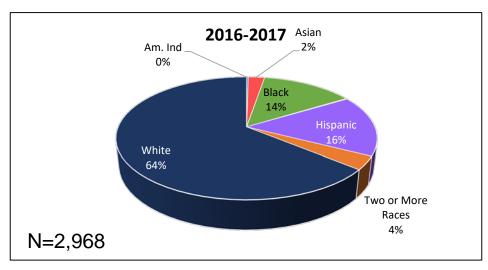
DSC Averages 2016-2017											
Amer Indian/ Alaska Native	Amer Indian/ Alaska Native   Asian   Black or African Amer   Hispanic   Nat Hawaiian Pacif Islander   2 or More Races   White										
0.4% 2% 14% 15% 0.2% 2% 66%											

# **Enrollment by Race/Ethnicity School of Biological and Physical Sciences**









DSC Averages 2016-2017											
Amer Indian/ Alaska Native	Amer Indian/ Alaska Native   Asian   Black or African Amer   Hispanic   Nat Hawaiian Pacif Islander   2 or More Races   White										
0.4% 2% 14% 15% 0.2% 2% 66%											