



Agenda

Environmental Technology and Sustainability

Advisory Committee

Lake Tahoe Community College

Wednesday March 20th, 2019

1:00 – 2:30 PM

Aspen Room

- Welcome/Introductions
- Annual Program Review/Program Data
- General Discussion/Feedback from Industry Partners
- LTCC Audubon Cooperative Sanctuary
 - Arboretum
 - Interpretive trail
 - “Take Care” signageSTHS Industry Trade Fair - Junior/Senior Open House
- New EVS/ETS Brochure
- Website
- Perkins



Environmental Technology & Sustainability Advisory Committee Meeting Minutes March 20th 2019

- **Welcome and Introductions**

- Meeting called to order at 1:07 p.m.
- LTCC Staff Attendance:
 - Deeds, Brad – Dean of Workforce Development and Instruction
 - Dixon, Pete – Counselor
 - Goligosky, Amber – Program Coordinator of Work-Based Learning
 - McCoubry, Scott - Program Assistant Institutional Effectiveness
 - Rhone, Jamie – Career and Technical Education Program Specialist
 - Smith, Lakin – Work-Based Program Assistant
 - Strain, Kathy - Science Technician/Adjunct Faculty Lake Tahoe Community College
- Workforce Partners, Stakeholders, Regional Collaborators:
 - Jensen, Adam – Environmental Education Specialist, Tahoe Regional Planning Agency
 - Middlebrook, Devin – Sustainability Program Coordinator, Tahoe Regional Planning Agency
 - Peterson, Carrie - ETS Deputy Sector Navigator (DSN) North/Far North Region California Community Colleges

- **General Discussion**

- The discussion centered around what jobs are available for students who complete the Environmental Technology & Sustainability (ETS) degrees, and the minimum educational qualifications required for most related industry jobs in the Tahoe basin. TRPA representatives reported that jobs that students can get after completing one of the ETS degrees are typically entry-level seasonal positions with the US Forest Service, Tahoe Resource Conservation District, etc. Those jobs could actually be obtained with a Certificate of Achievement vs. an Associate's degree. As most jobs in the industry require a minimum of a Bachelor's degree, and the current ETS degree is not a degree aligned with the needs of transfer students, individuals who wish to continue their education to get a Bachelor's or Master's degree are currently required to take significantly more units prior to transfer. Institutional Research looked into degree completers for ETS: the majority of students who have earned AAs in Environmental Technology & Sustainability (a couple in Biological Resources & Physical Resources, zero in Sustainability) eventually did transfer on to four-year universities, thus further supporting the ETS advisory committee's recommendation yesterday of reworking the ETS program from 3 terminal AA degrees to:
 - one (streamlined) Certificate of Achievement,
 - (possibly one or more lower-unit) Employable Skills Certificates, and then
 - design an Associate in Science for Transfer (AST) in Environmental Science instead .
- Industry representatives validated the jobs students can get with an ETS AA degree (Forest Service, STPUD, Tahoe Resource Conservation District, etc.) are typically entry-level and/or seasonal, and would be accessible to students earning a Certificate. They also verified that students wishing to secure jobs in the Tahoe Basin in the related Environmental/Science industry would need a bachelor's degree at minimum. Thus the unanimous committee recommendations above.

- **Perkins**
 - Perkins funding helps the Career & Technical Education department provide a Quarterly Textbook Lending Program, which provides textbooks for eligible students who are pursuing a CTE degree or certificate.

- **Adjournment**
 - The meeting adjourned at 2:23 p.m.

- **Handouts**
 - Program Reviews/Biennial Review
 - Environmental Technology & Sustainability Biennial Review/Awards (2017-18))

Respectively submitted,
Melissa Liggett
Career & Technical Education Technician



CTE PROGRAM BIENNIAL REVIEW

For all Career and Technical Education (CTE) Programs, please fill out the following worksheet as part of the required biennial review.

CTE Program: Environmental Technology & Sustainability

Date Reviewed: March 2019

<p>1. Purpose of this Program</p> <p>Significantly Changed Purpose in the Last Two Years Minor Changes in Purpose in the Last Two Years No Changes in Purpose in the Last Two Years</p> <p><input type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/> ————— <input checked="" type="checkbox"/> ————— <input type="checkbox"/></p> <p>(Description, mission, target population, etc.)</p>
<p>2. Demand for this Program</p> <p>High Demand Adequate Demand for our students Low Demand</p> <p><input checked="" type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/></p> <p>(Labor market data, advisory input, etc.)</p>
<p>3. Quality of this Program</p> <p>Highest Quality Meets Student Needs Needs Significant Improvement</p> <p><input type="checkbox"/> ————— <input checked="" type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/></p> <p>(Core indicators, student outcomes, partnerships, certificates, degrees, articulation, faculty qualifications, diversity, grants, equipment, etc.)</p>
<p>4. External Issues</p> <p>Benefits From and Contributes to External Issues Complies with External Issues Not Consistent with External Issues</p> <p><input checked="" type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/></p> <p>(Legislation, CCCC mandates, VTEA, Tech Prep, CalWORKs, WIA, BOG Career Ladders, etc.)</p>
<p>5. Cost of this Program</p> <p>Income Exceeds Expenditures Income Covers Expenditures Expenditures Exceed Income</p> <p><input type="checkbox"/> ————— <input type="checkbox"/> ————— <input checked="" type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/></p> <p>(Enrollment/FTEs generated & in-kind contributions of time/resources minus salaries/equipment/supplies, etc)</p>
<p>6. Projected Schedule (formerly Two Year Plan)</p> <p>Significant Growth Anticipated On Track for Next Two Years Need Significant Changes and/or Increased Resources to Continue</p> <p><input checked="" type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/> ————— <input type="checkbox"/></p> <p>(Recommendations, project future trends, personnel and equipment needs, etc.)</p>

2017-18 ANNUAL PROGRAM REVIEW

Environmental Science - Environmental Tech and Sustain

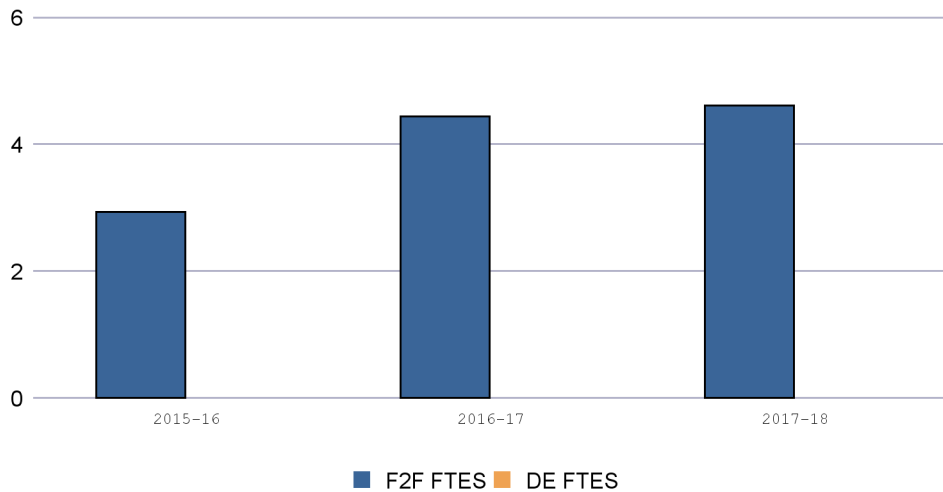


ENVIRONMENTAL SCIENCE - ENVIRONMENTAL TECH AND SUSTAIN SUMMARY

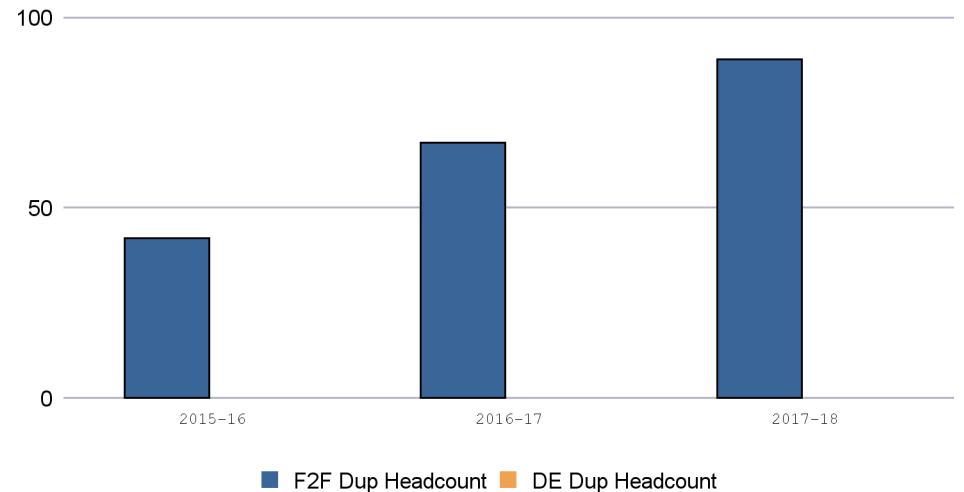
This report contains data from Academic Year (AY) 2014 to 2017. Information on program size based on full-time equivalent students (FTES), Student Success, and Student Achievement are presented below. Except for in the Awards section, students enrolled through the Incarcerated Students Program are excluded.

	Total Sections	F2F Sections	Dist Ed Sections	Total FTES	F2F FTES	Dist Ed FTES	Total Duplicated Headcount	F2F Duplicated Headcount	Dist Ed Duplicated Headcount
2015-16	4	4	0	2.93	2.93	0.00	42	42	0
2016-17	4	4	0	4.44	4.44	0.00	67	67	0
2017-18	7	7	0	4.62	4.62	0.00	89	89	0
2-Yr Chg (15-16 to 17-18)	75.0%	75.0%	---	57.6%	57.6%	---	111.9%	111.9%	---
1-Yr Chg (16-17 to 17-18)	75.0%	75.0%	---	3.9%	3.9%	---	32.8%	32.8%	---

RESIDENT FTES



DUPLICATED HEADCOUNT



2017-18 ANNUAL PROGRAM REVIEW

Environmental Science - Environmental Tech and Sustain

DEMOGRAPHICS

	2015-16		2016-17		2017-18	
	N	%	N	%	N	%
Male	19	54.3%	22	55.0%	16	31.4%
Female	15	42.9%	18	45.0%	35	68.6%
Unknown	1	2.9%	0	0.0%	0	0.0%

	2015-16		2016-17		2017-18	
	N	%	N	%	N	%
Asian	1	2.9%	2	5.0%	1	2.0%
Hispanic	6	17.1%	10	25.0%	9	17.6%
Native Amer/Alaska Native	0	0.0%	0	0.0%	1	2.0%
White Non-Hispanic	25	71.4%	26	65.0%	37	72.5%
Two or more races	3	8.6%	2	5.0%	1	2.0%
Other	0	0.0%	0	0.0%	1	2.0%
Unknown	0	0.0%	0	0.0%	1	2.0%

	2015-16		2016-17		2017-18	
	N	%	N	%	N	%
Age < 25	21	60.0%	23	57.5%	18	35.3%
Age 25 - 49	9	25.7%	15	37.5%	27	52.9%
Age 50 +	5	14.3%	2	5.0%	6	11.8%

	2015-16	2016-17	2017-18
Median Age	26	24	29
Youngest	18	17	17
Oldest	68	69	63

2017-18 ANNUAL PROGRAM REVIEW

Environmental Science - Environmental Tech and Sustain

AWARDS

	Award Type	Award Title	Awards Conferred
2016-17	AA Degree	Biological Resources	1
	AA Degree	Physical Resources	1
	Certificate	Physical Resources	1
2017-18	AA Degree	Biological Resources	1
	AA Degree	Physical Resources	3

2017-18 ANNUAL PROGRAM REVIEW

Environmental Science - Environmental Tech and Sustain

COURSE SUCCESS

	2015-16		2016-17		2017-18	
	Enrollment	Success	Enrollment	Success	Enrollment	Success
Male	22	77.3%	37	83.8%	19	84.2%
Female	18	94.4%	26	84.6%	66	92.4%

	2015-16		2016-17		2017-18	
	Enrollment	Success	Enrollment	Success	Enrollment	Success
Asian	1	100.0%	2	0.0%	1	100.0%
Hispanic	7	85.7%	14	57.1%	13	92.3%
Native Amer/Alaska Native	0	0.0%	0	0.0%	2	50.0%
White Non-Hispanic	28	89.3%	44	97.7%	63	92.1%
Two or more races	4	50.0%	3	66.7%	4	100.0%
Other	0	0.0%	0	0.0%	1	0.0%
Unknown	0	0.0%	0	0.0%	1	100.0%

	2015-16		2016-17		2017-18	
	Enrollment	Success	Enrollment	Success	Enrollment	Success
Age < 25	21	71.4%	33	75.8%	19	73.7%
Age 25 - 49	14	100.0%	27	92.6%	56	96.4%
Age 50 +	5	100.0%	3	100.0%	10	90.0%

	2015-16		2016-17		2017-18	
	Enrollment	Success	Enrollment	Success	Enrollment	Success
F2F	40	85.0%	63	84.1%	85	90.6%

NOTE: Enrollment = duplicated headcount, excluding audits, noncredit, and drops w/ no record.

2017-18 ANNUAL PROGRAM REVIEW

Environmental Science - Environmental Tech and Sustain

2017-18 COURSE STATISTICS

ENVIRONMENTAL SCIENCE - ENVIRONMENTAL TECH AND SUSTAIN PRODUCTIVITY* (2017-18):	221.12
% FULL TIME INSTRUCTORS** (2017-18):	23%
% ADJUNCT INSTRUCTORS** (2017-18):	57%

FACE TO FACE		Sections Offered	Cancel %	FT % **	Adjunct % **	Avg Census Enroll	Avg End of Term Enroll	Retention % ***	Success % ***	FTES	WSCH	FTEF	Productivity
EVS-102	Environ Science: System Dyn	1	0.0%	100%	0%	14.0	14.0	100.0%	85.7%	1.01	56	0.08	225.40
EVS-103	Enviro Science: Human Impacts	1	0.0%	0%	100%	20.0	17.0	85.0%	76.5%	1.55	80	0.08	320.00
EVS-104	Env Tech and Sust Lab Methods	1	0.0%	0%	0%	9.0	9.0	100.0%	88.9%	0.24	14	0.03	144.00
EVS-105	Env Tech and Sus Field Methods	1	0.0%	0%	0%	11.0	10.0	90.9%	90.0%	0.37	22	0.04	176.00
EVS-131D	ST: STEM/STEAM (Part I)	2	50.0%	0%	100%	14.0	14.0	100.0%	100.0%	0.57	28	0.04	224.00
EVS-131E	ST:STEM/STEAM Earth Science	1	0.0%	0%	100%	11.0	11.0	100.0%	100.0%	0.45	22	0.04	176.00
EVS-131F	ST: STEM/STEAM (Part III)	1	0.0%	0%	100%	10.0	10.0	100.0%	100.0%	0.42	20	0.04	160.00
Total		8	12.5%	23%	57%	12.7	12.1	95.5%	90.6%	4.62	242	0.36	

DISTANCE EDUCATION		Sections Offered	Cancel %	FT % **	Adjunct % **	Avg Census Enroll	Avg End of Term Enroll	Retention % ***	Success % ***	FTES	WSCH	FTEF	Productivity
			---					0.0%					---
Total			---					0.0%					

* Excludes Summer, noncredit, work experience, internship, and cancelled sections

** Excludes summer assignments. Based on instructional workload and the percentage of workload assigned under full-time contracts versus adjunct contracts

*** Withdrawal and success statistics exclude noncredit classes.