



Environmental Technology and SustainabilityAdvisory Committee

Lake Tahoe Community College
Tuesday June 6th, 2017
3:00 – 4:30 PM
Room E100

- Welcome and Introductions
- Program Data Overview
 - Annual Unit Plan
 - Annual Program Review
- ETS Student Learning Outcomes
- Work Experience/Internship Opportunities
- Promotional Materials
- New Courses
- Deputy Sector Navigator Grant
- Other Topics



Environmental Technology & Sustainability Advisory Committee Meeting Minutes June 6th, 2017

Present

- Brad Deeds Dean of Workforce Development and Instruction, Lake Tahoe Community College (LTCC)
- David Reichel Wilderness Education Coordinator, LTCC
- Gizeh Martinez Student Equity Program Assistant, LTCC
- Greg Hoover Veteran's Liaison, LTCC
- Jamie Rhone CTE Program Specialist, LTCC
- Jenna Palacio Adjunct Faculty/Internship Coordinator, LTCC
- ❖ Jeremy Brown Director of Institutional Effectiveness, LTCC
- Kathy Strain Laboratory Science and Instructional Safety Specialist and Biology Adjunct Faculty, LTCC
- Laura Salinas Director of Equity, LTCC
- Sarah Marquez Counselor, LTCC

The meeting was called to order at 3:05 PM

Welcome and Introductions

The goal of Career & Technical Education (CTE) advisory meetings is to discuss the current status of the program and to address the workforce needs of related agencies throughout the region. Kathy Strain is the Laboratory Science and Instructional Safety Specialist and Biology Adjunct Faculty for Lake Tahoe Community College (LTCC). She teaches pre-med courses such as "Microbiology" and "Introduction to Cell and Molecular Biology". Kathy was the major writer for the ETS Degree and Certificate program. The only difference between the ETS Degree and the Certificate is the General Education requirement. She also teaches three Environmental Science courses, (EVS-102) Environmental Science: System Dynamics, and (EVS-103) Environmental Science: Human Impacts (ETS) and (EVS-104) Laboratory Methods (ETS). Madelyn Rios, Part-time Adjunct Faculty, teaches the fourth EVS course (EVS-105) Environmental Technology and Sustainability Field Methods.

Annual Program Overview

Kathy Strain briefed the committee on the status of the ETS Degree and Certificate program. This program runs with no full-time faculty or a department chair, which is one of the biggest issues it's facing right now. All four of the EVS courses are growing and a request for additional space was submitted in the latest (AUP) Annual Unit Plan for ETS. There are currently inadequate storage areas at the college. Funding through the Deputy Sector Navigator Grant allowed LTCC to buy \$20,000 worth of equipment and supplies last year. Another \$5,000 was used for marketing and promotional flyers. New interactive televisions were recently purchased and will be displayed outside the Science Department. These televisions have large LED screens and are 3-D for programs such as Google Earth. The top priorities right now are finding housing space for all of the new equipment and funding for a department chair.

We are currently in the second year of the program. FTES (Full-Time Equivalent Students) for 2015-16 is 2.93 and the total duplicated headcount was 42 students. 54.3% of the students were male and 42.9% were female. Course success rates were higher for females, at 94.4%, compared to males, at 77.3%. Latinos are still underrepresented, at 22.7%, compared to White or Non-Hispanic, at 77.3%. We need to do some more work with the Hispanic community. Laura Salinas did some outreach to the "Generation Green" students at South Tahoe High School (STHS). It is the largest club on campus. Students are required to intern with the USDA Forest Service and are compensated at the General Schedule (GS) I level, about \$252/week. This program targets low-income, diverse and youth-with-a barrier students and provides job opportunities, while building work ethic, job skills, leadership, experience and teamwork skills. Youths are shown a variety of jobs found in natural resource fields and connect with Forest Service mentors.

Kathy Strain would like to build a database to keep track of all of the ETS students, including employment, degrees/certificates earned. Greg Hoover is the first student to graduate with a Certificate of Achievement and an Associate in Arts Degree in ETS, with a concentration in Physical Resources. He also graduated this spring with honors. More students should be in the pipeline soon to graduate, so we need to encourage students to apply for their certificate and/or degree. Students can find information on how to apply for a certificate and/or degree in LTCC's catalog, under the pages, "Certificates" and "Graduation Requirements".

Work Experience/Internship Opportunities

Jenna Palacio, Adjunct Faculty/Internship Coordinator at LTCC, enrolled 14 students in (WLD 133) Internship - Occupational Work Experience. Both Jenna and Laura did a presentation last year for one of the EVS classes. She would also like to see the "Generation Green" students visit Kathy's class in the fall, EVS 102. Jenna has also been enrolling at least one student, per quarter, in (EVS 133) Internship - Occupational Work Experience. There are numerous Internship possibilities with various agencies around the basin, such as Tahoe Regional Planning Agency, Tahoe Resource Conservation District, Regional Water Quality Control Board-Lahontan Region, United States Forest Service- Lake Tahoe Basin Management Unit, California State Parks, and California Tahoe Conservancy. Jenna would also like to work with Laura Salinas in the Equity program to place some of her students in Internships. There is also opportunity to work with the local High School graduates and Dual Enrollment possibilities.

EVS students can also work with TRPA's <u>Water Quality & Stormwater Management</u> program, which implements Best Management Practices on existing development to improve Lake Tahoe's water quality and clarity. The Tahoe Keys Property Owners Association offers a volunteer program, <u>Eyes on The Lake</u>, which reports on aquatic invasive species. These programs will also overlap with Wilderness students enrolled in WLD-133. Kathy Strain's students are working for various business around the area, such as McFarlane Mortuary. She would like to see more students placed with <u>South Tahoe Public Utility District (STUPD)</u>.

Student Learning Outcomes

Kim Gorman assessed EVS 102 and Madelyn Rios assessed EVS 105 in the fall of 2015. EVS 104 was assessed by Kathy Strain in the winter of 2016. All three instructors had no significant results in their reports. EVS 103 was missed in the last assessment cycle and will be assessed this year. See attachment, "2015-16 Assessment Summary: ETS".

General Discussion

EVS courses have a field component and there are vast opportunities for field trips here in Lake Tahoe. Grants are a vital component to the program and students in the past have been able to ride the Gondola at Heavenly and hike trailheads, go on zip lines and rope courses.

Prior to the advent of the ETS degree and certificate, EVS 101 "Environmental Science" was the only EVS course offered. It was originally designed to span a semester; however, since LTCC is on the quarter system, it was broken out into two quarters. In 2015, EVS 101 was modified to become two different courses, EVS 102 and EVS 103.

Kathy Strain will be a part of a new program to teach local elementary school teachers how to introduce science into their curriculum and to their students. She will start with K-5 and will work her way through the higher levels. This will incorporate into Lake Tahoe Unified School District's (LTUSD) potential use of the old Al Tahoe school site and the developmental process for the proposed reopening and modernization of Al Tahoe STEAM (science, technology, engineering, art, mathematics) Academy. The development of a state-of-the-art STEAM academy education program with focus on robotics and engineering in preschool to 5th grade and adding a branch of Lake Tahoe Community College and Sierra Nevada College Teacher Preparation Program which will serve as a lab school to allow college students to earn an Elementary Education credential.

Promotional Materials

New marketing will emphasize that students with Natural Science majors such as Chemistry, Biology, etc., may be as few as four courses away from earning an AA degree or certificate, depending on their Natural Science degree courses. The new ETS website page needs to be worked on to make it look friendlier and more interactive. The 2016-17 "Pathways to Completion" flyers will be updated on the ETS page on LTCC's website and new course flyers will be created for next year.

New Courses

Kathy would like to get Canvas trained and create a hybrid class. Not all courses in the ETS degree have been offered every year and we may want to consider removing some of them. Several Geology and other ETS courses have been canceled in the last two years. BIO 122 "Systems Biology" should be removed from the ETS degree. Inactivating, instead of deleting, courses is better as to not alter the ETS degree. Otherwise, we may have to resubmit the degree and start over again. The degree seems to have too many courses and we don't have enough student population to run them all. Greg Hoover, LTCC Student Representative, suggests students take WLD 112C "Map, Compass, and GPS" (1.75 units) before taking the required course CIS 135/GEG 134 "Introduction to Geographic Information Systems" (3.5 units). For CIS 135, there is a heavy map component to it and students are required to manipulate various forms of data to generate plots, maps, and computer displays. WLD 112C is an excellent beginning map course which enables students to take command of the common and reliable tools used for wilderness land navigation. We will make sure to add an advisory for students on updated flyers.

The Science Department is trying to move to the <u>Open Educational Resources</u> Initiative by working to adopt free or reasonably-priced textbooks and other course materials. Many faculty members will be looking this year into using online and free textbooks. The textbook used for EVS 102/103, "Environmental Science: Global Concern" is expensive, about \$254.

The meeting adjourned at 4:32 p.m.

The following handouts were presented as an attachment to the meeting minutes:

- Annual ETS Program Review (APR) Report (2015-16)
- ETS Biennial Review (2015-16)
- ETS Certificate of Achievement "Pathways to Completion" Flyer (2017-18)
- ETS Assessment Summary (2015-16)

Respectively submitted,
Melissa Liggett
Career & Technical Education Technician

Environmental Science

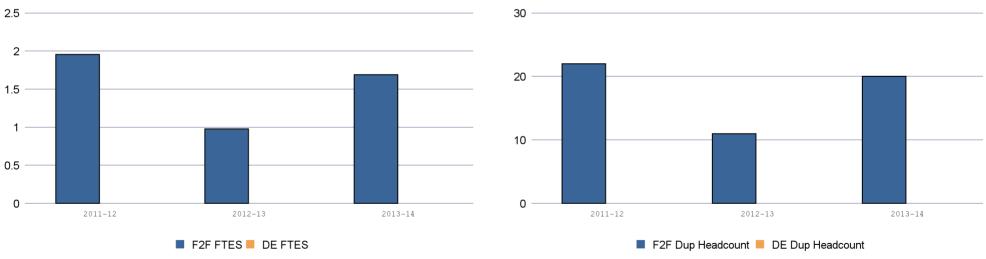
ENVIRONMENTAL SCIENCE SUMMARY

This report contains data from Academic Year (AY) 2011 to 2015. Information on program size based on full-time equivalent students (FTES), Student Success, and Student Achievement are presented below.

| The state of the s | Total Sections | F2F Sections | Dist Ed Sections | Total FTES | F2F FTES | Dist Ed FTES | Total Duplicated Headcount | F2F Duplicated Headcount | Dist Ed Duplicated Headcount |
|--|-------------------|-----------------|---------------------|---------------|-------------|-----------------|----------------------------------|--------------------------------|------------------------------------|
| 2011-12 | 1 | 1 | 0 | 1.96 | 1.96 | 0.00 | 22 | 22 | 0 |
| 2012-13 | 1 | 1 | 0 | 0.98 | 0.98 | 0.00 | 11 | 11 | 0 |
| 2013-14 | 1 | 1 | 0 | 1.69 | 1.69 | 0.00 | 20 | 20 | 0 |
| 2-Yr Chg (11-12 to 13-14) | 0.0% | 0.0% | | -13.6% | -13.6% | | -9.1% | -9.1% | |
| 1-Yr Chg (12-13 to 13-14) | 0.0% | 0.0% | | 0.0% | 0.0% | | 0.0% | 0.0% | |

RESIDENT FTES

DUPLICATED HEADCOUNT



Environmental Science

DEMOGRAPHICS

| | 2011-12 | | 20 | 12-13 | 2013-14 | | |
|--------|---------|-------|---------|-------|---------|-------|--|
| | N % | | N | % | N | % | |
| Male | 16 | 72.7% | 8 | 72.7% | 16 | 80.0% | |
| Female | 6 27.3% | | 3 27.3% | | 4 | 20.0% | |

| | 2011-12 | | 20 | 12-13 | 2013-14 | | |
|--------------------|---------|-------|--------|-------|---------|-------|--|
| | N | % | N | % | N | % | |
| Asian | 0 | 0.0% | 0 | 0.0% | 1 | 5.0% | |
| Hispanic | 5 | 22.7% | 1 | 9.1% | 4 | 20.0% | |
| White Non-Hispanic | 17 | 77.3% | 10 | 90.9% | 14 | 70.0% | |
| Two or more races | 0 0.0% | | 0 0.0% | | 1 | 5.0% | |

| | 2011-12 | | 20 | 12-13 | 2013-14 | | |
|-------------|---------|-------|--------|-------|---------|-------|--|
| | N % | | N | % | N | % | |
| Age < 25 | 18 | 81.8% | 7 | 63.6% | 11 | 55.0% | |
| Age 25 - 49 | 4 | 18.2% | 4 | 36.4% | 8 | 40.0% | |
| Age 50 + | 0 0.0% | | 0 0.0% | | 1 | 5.0% | |

| | 2011-12 | 2012-13 | 2013-14 |
|------------|---------|---------|---------|
| Median Age | 20 | 24 | 23 |
| Youngest | 17 | 17 | 18 |
| Oldest | 41 | 61 | 68 |

Environmental Science

COURSE SUCCESS

| | 2011-12 | | 2012 | -13 | 2013-14 | | |
|--------|--------------------|--|------------|---------|------------|---------|--|
| | Enrollment Success | | Enrollment | Success | Enrollment | Success | |
| Male | 14 71.4% | | 8 | 100.0% | 14 | 85.7% | |
| Female | 6 100.0% | | 3 66.7% | | 4 | 100.0% | |

| | 2011-12 | | 2012 | -13 | 2013-14 | | |
|--------------------|------------|---------|------------|---------|------------|---------|--|
| | Enrollment | Success | Enrollment | Success | Enrollment | Success | |
| Hispanic | 5 60.0% | | 1 | 0.0% | 4 | 100.0% | |
| White Non-Hispanic | 15 86.7% | | 10 100.0% | | 13 | 84.6% | |
| Two or more races | 0 0.0% | | 0 | 0.0% | 1 | 100.0% | |

| | 2011-12 | | 2012 | -13 | 2013-14 | | |
|-------------|------------|---------|------------|---------|------------|---------|--|
| | Enrollment | Success | Enrollment | Success | Enrollment | Success | |
| Age < 25 | 16 75.0% | | 7 | 85.7% | 11 | 90.9% | |
| Age 25 - 49 | 4 100.0% | | 4 100.0% | | 7 | 85.7% | |

| | 2011 | -12 | 2012 | -13 | 2013-14 | | |
|-----|------------|---------|------------|---------|------------|---------|--|
| | Enrollment | Success | Enrollment | Success | Enrollment | Success | |
| F2F | 20 80.0% | | 11 | 90.9% | 18 | 88.9% | |

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

Environmental Science

2015-16 COURSE STATISTICS

% FULL TIME INSTRUCTORS** (2015-16):
% ADJUNCT INSTRUCTORS** (2015-16):

| FACE TO FACE | Sections Offered | Cancel % | FT % ** | Adjunct % ** | Avg Census Enroll | Avg End of Term Enroll | Retention % *** | Success % *** | FTES | wscн | FTEF | Productivity |
|--------------|---------------------|-------------|------------|-----------------|----------------------|---------------------------|--------------------|------------------|------|------|------|--------------|
| | | | | | | | 0.0% | | | | | |
| Total | | | | | | | 0.0% | | | | | |

| 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

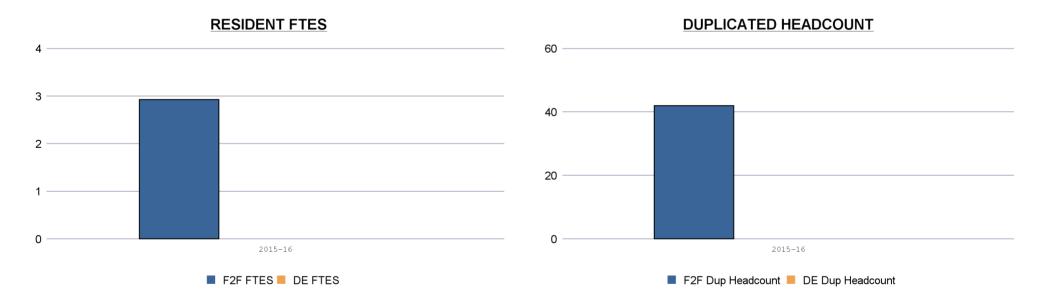
^{***} Withdrawal and success statistics exclude noncredit classes.

Environmental Science - Environmental Tech and Sustain

ENVIRONMENTAL SCIENCE - ENVIRONMENTAL TECH AND SUSTAIN SUMMARY

This report contains data from Academic Year (AY) 2011 to 2015. Information on program size based on full-time equivalent students (FTES), Student Success, and Student Achievement are presented below.

| | 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 |
| 0-Yr Chg (15-16 to 15-16) | 0.0% | 0.0% | | 0.0% | 0.0% | | 0.0% | 0.0% | |
| 1-Yr Chg (to 15-16) | | | | | | | | | |



Environmental Science - Environmental Tech and Sustain

DEMOGRAPHICS

| | 2015-16 | |
|---------|---------|-------|
| | N | % |
| Male | 19 | 54.3% |
| Female | 15 | 42.9% |
| Unknown | 1 | 2.9% |

| | 2015-16 | |
|--------------------|---------|-------|
| | N | % |
| Asian | 1 | 2.9% |
| Hispanic | 7 | 20.0% |
| White Non-Hispanic | 25 | 71.4% |
| Two or more races | 2 | 5.7% |

| | 2015-16 | |
|-------------|---------|-------|
| | N | % |
| Age < 25 | 21 | 60.0% |
| Age 25 - 49 | 9 | 25.7% |
| Age 50 + | 5 | 14.3% |

| | 2015-16 |
|------------|---------|
| Median Age | 26 |
| Youngest | 18 |
| Oldest | 68 |

Environmental Science - Environmental Tech and Sustain

COURSE SUCCESS

| | 2015-16 | | |
|--------|-------------------|-------|--|
| | Enrollment Succes | | |
| Male | 22 | 77.3% | |
| Female | 18 | 94.4% | |

| | 2015-16 | | |
|--------------------|------------|--------|--|
| | Enrollment | | |
| Asian | 1 | 100.0% | |
| Hispanic | 8 | 75.0% | |
| White Non-Hispanic | 28 | 89.3% | |
| Two or more races | 3 | 66.7% | |

| | 2015-16 | | |
|-------------|------------|---------|--|
| | Enrollment | Success | |
| Age < 25 | 21 | 71.4% | |
| Age 25 - 49 | 14 | 100.0% | |
| Age 50 + | 5 | 100.0% | |

| | 2015-16 | | |
|-----|-------------------|-------|--|
| | Enrollment Succes | | |
| F2F | 40 | 85.0% | |

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

ANNUAL PROGRAM

CTE PROGRAM ADDENDUM

Environmental Technology & Sustainability (2015 -2016)

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

| 1. Purpose of this Pro | gram | | |
|---|---|--|---|
| Significantly Changed Purpose in the Last Two Years | Minor Changes in Pu in the Last Two Yea | • | No Changes in Purpose in the Last Two Years |
| V | | | |
| | (Description, mission, target p | opulation, etc.) | |
| 2. Demand for this Pr | ogram | | |
| High Demand | Adequate Demand for our students | | Low Demand |
| | V | | |
| | (Labor market data, advisor | y input, etc.) | |
| 3. Quality of this Prog | ram | | |
| Highest Quality | Meets Student Need | s | Needs Significant Improvement |
| | —————————————————————————————————————— | | |
| - | ore indicators, student outcomes, partne rticulation, faculty qualifications, diversit | | |
| 4. External Issues | | | |
| Benefits From and Contributes to External Issues | Complies with External Issues | , — <u>, — </u> | Not Consistent with External Issues |
| | | | |
| (Legislation, | CCCCO mandates, VTEA, Tech Prep, CalW | /ORKs, WIA, BOG Career L | adders, etc.) |
| 5. Cost of this Progra | n | | |
| Income Exceeds Expenditures | Income Covers Expenditures | | Expenditures Exceed Income |
| (Enrollment/FTEs gene | rated & in-kind contributions of time/res | sources minus salaries/equ | uipment/supplies, etc) |
| 6. Two-Year Plan | | | |
| _ | | | Need Significant Changes |
| Significant Growth Anticipated | On Track for Next Two Yea | | and/or Increased Resources to Continue |
| Anticipated | Next I wo fea | | nesources to continue |
| | | | |
| (Recom | mendations, project future trends, perso | onnel and equipment need | ls, etc.) |

STUDENT LEARNING OUTCOME ASSESSMENT SUMMARY

ENVIRONMENTAL TECHNOLOGY & SUSTAINABILITY

There were three assessment reports completed for Environmental Technology in 2015-16:

| COURSE CODE AND TITLE | INSTRUCTOR | QUARTER | RESULTS |
|--|--------------|-------------|--|
| EVS-102 Environmental Science: System Dynamics | Kim Gorman | Fall 2015 | This is the first time this course has been offered. The current Text is a good tool however, I will assign in the future, end of chapter questions to ensure their reading is kept current. I will also show a few more videos for those who tend to learn by visual and oratory means. topics were discussed as a group following the readings and or videos and in class assignment questions. The student really enjoyed this approach and gained a lot from the group discussions. |
| EVS-105 Environmental Technology and Sustainability Field Methods | Madelyn Rios | Fall 2015 | With the minor exception of students being slightly off while walking their compass bearing (within 1-2 degrees), I was very satisfied with the accuracy and precision students demonstrated while using field methodology and displaying results. It was challenging to adequately cover every topic to the depth I would like to because it is only a 2 unit class that meets for (2) 1:20 hour periods per week. Making the class periods last 2 (or 1:50) hours would be a very effective change as it would allow students to practice skills more intensely. Having 2-3 more clinometers and 3-5 Biltmore sticks would be very useful as well. We were short on clinometers and students had to wait in line to practice this skill. |
| EVS-104 Environmental Technology & Sustainability Laboratory Methods | Kathy Strain | Winter 2016 | I will continue to try and find non- threatening and less scary ways to approach the metric calculations. Some students are very math-phobic and just the sight of an equation tends to make their eyes glaze over. Playing games seems to help. |
| | | | |
| | | | |

Environmental Technology and Sustainability

Certificate of Achievement

The Environmental Technology and Sustainability certificate of achievement program is an interdisciplinary course of study that focuses on preparing students for employment with an introduction to environmental components, processes, and issues. Students pursuing this major have the option of exploring diverse fields in environmental management and restoration, natural resources conservation, and sustainability. Many of the courses emphasize exploration and study of the Lake Tahoe Basin and the surrounding areas, a natural lab of outstanding beauty and richness.

Student Learning Outcomes for this major are:

- Apply the scientific method to analyze organisms, structures, processes, and issues associated with local, regional, national, and global environments.
- Dissect, model, and communicate the complexity of the natural environment into its component interconnected systems.

A. REQUIRED COURSES:

18 units distributed as follows:

3.5 units minimum from the following:

CHM 100 Introduction to General Chemistry

CHM 101 General Chemistry

GEG 134/CIS 135A Introduction to Geographic Information

Systems

MAT 201 Elementary Statistics

11.5 units distributed as follows:

EVS 102 Environmental Science: System Dynamics

EVS 103 Environmental Science: Human Impacts

EVS 104 Environmental Technology and

Sustainability Laboratory Methods

EVS 105 Environmental Technology and

Sustainability Field Methods

3 units of Occupational Work Experience:

EVS 133 Internship Occupational Work Experience

AREAS OF CONCENTRATION: (Choose any option)

In addition to the required core courses listed above, students seeking an Environmental Technology and Sustainability Certificate must select an area of concentration. Multiple areas of concentrations may be achieved by completing an additional 10 units

in any of the following areas listed.

Required core courses cannot be duplicated.

1. ETS: BIOLOGICAL RESOURCES

A minimum of 10 units distributed as follows:

5 units distributed as follows:

BIO 111 Introduction to Plant and Animal Biology

5 units minimum not already used from the following:

BIO 112 Systems Biology

BIO 113 Field Methods in Wildlife Ecology

BIO 141A Birds of the Lake Tahoe Basin

BIO 149 Ecology

BIO 201 Botany

BIO 212 Zoology

2. ETS: PHYSICAL RESOURCES

A minimum of 10 units distributed as follows:

5 units minimum from the following:

GEG 101 Physical Geography

GEL 102 Physical Geology

5 units minimum not already used from the following:

GEG 101 Physical Geography

Conservation of Natural Resources

GEG 106 California Geography

GEG 107 Water Quality Monitoring of Streams and Lakes

GEG 108 Water Resources

GEG 113 Meteorology

GEG 114 Economic Geography

GEL 101 Geology of California

GEL 102 Physical Geology

GEL 103 History of Earth and its Life

GEL 107 Geology of the Eastern Sierra

GEL 110 Geology of the National Parks and Monuments

GSE 110 History of Taming Water in the West

GSE 111 Water Conservation

3. ETS: SUSTAINABILITY

A minimum of 10 units distributed as follows:

5 units minimum from the following:

GSE 101 Introduction to Sustainability

GSE 103 Lake Tahoe Issues and Agencies
GSE 107 Energy, Society and Sustainability

5 units minimum not already used from the following:

BIO 149 Ecology

GEG 107 Water Quality Monitoring of Streams and Lakes

GSE 101 Introduction to Sustainability

GSE 103 Lake Tahoe Issues and Agencies

GSE 105 Introduction to Green Business

GSE 106 Landscape Design and Sustainable Site Plan

GSE 107 Energy, Society and Sustainability

GSE 110 History of Taming Water in the West

GSE 111 Water Conservation

GSE 115 Introduction to Geotourism

GSE 120 Residential and Small Business Energy Auditing

GSE 126 Introduction to Solar Energy: Thermal,

Photovoltaic, Passive Design

WLD 100 Foundations of Recreation Land Management

Students are required to meet with a counselor, counselor@ltcc.edu or 530-541-4660 ext. 211, to develop an educational plan. All schedules subject to change!

2017-2018 CTE Schedules – Environmental Technology & Sustainability

| | | , | | <u> </u> | ,, | • |
|----------------|--|-----------------|----------------|-------------------------|----------------------|--------------------|
| Code | Description | Instructor | 2017-18 | Meeting Day(s) | Meeting Times | Meeting Dates |
| EVS-102- 01 | Environmental Science: System Dynamics | Kathy Strain | Fall 2017 | Tuesday and Thursday | 10:00AM - 12:05PM | 9/26 - 12/7/17 |
| EVS-105- 01 | Environmental Technology and Sustainability Field Methods | Madelyn Rios | Fall 2017 | Monday and Wednesday | 9:00 - 10:25AM | 10/16 - 12/6/17 |
| EVS-104- 01 | Laboratory Methods (ETS) | Kathy Strain | Winter 2018 | Tuesday and Thursday | 10:00 - 11:25AM | 2/27 - 3/29/18 |
| EVS-103- 01 | Environmental Science: Human Impacts (ETS) | Kathy Strain | Spring 2018 | Tuesday and Thursday | 9:30 - 11:40AM | 4/24 - 6/28/18 |

Updated:5/11/2017 9:32 AM

LTCC offers a Certificate of Achievement and an Associate Degree in *Environmental Technology & Sustainability*. For more information, go to our website at www.ltcc.edu and click on the "Academics" tab, click on "Academic Programs" and then click on Environmental Technology & Sustainability, or use this link:

http://www.ltcc.edu/academics/academic programs/evs ets.php

To view the online catalog, go to our website at www.ltcc.edu and click on "ACADEMICS" tab and then click on "CATALOG", or use this link: http://www.ltcc.edu/academics/catalog.php

To view online the current schedule of classes, go to our website at www.ltcc.edu and click on the "ACADEMICS" tab and then click on "SCHEDULE OF CLASSES", or use this link: http://www.ltcc.edu/academics/scheduleofclasses.php

To become a student at Lake Tahoe Community College, you will need to complete an online application before you can register for classes. Please go to our website at www.ltcc.edu/admissions and click on "Apply Now!" Or see attached "Steps to Get Started at LTCC" for step by step instructions. Your application might take up to 24 hours to process prior to your being able to enroll in specific courses, so please be patient and check the LTCC email you are assigned for updates. Contact Enrollment Services at 530-541-4660 ext. 211 or enrollmentservices@ltcc.edu for information on assessment, orientation, and counseling. To view the schedule of current classes, go to LTCC's website at www.ltcc.edu and click on the "Academics" and the "Schedule of Classes" tab.