JUSTIFICATION: NEW FULL-TIME FACULTY POSITION
Academic Year 2014-2015

Full-Time Faculty Hiring Prioritization Committee
A Standing Committee of the Academic Senate

Title of the Full-Time Faculty Position Requested: Environmental Studies

ACADEMIC UNIT - Check One
☑ Advanced Technology & Applied Science
☑ Business Science and Economic Workforce Development
☐ Counseling Services
☐ Emeritus Institute
☐ Fine Arts and Media Technology

☐ Health Sciences & Human Services
☐ Kinesiology & Athletics
☐ Liberal Arts
☐ Mathematics, Science & Engineering
☐ Online Education and Learning Resources
☐ Social & Behavioral Sciences
☐ Transfer, Career, and Special Programs

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<tr>
<th>Classroom ☒</th>
<th>OR</th>
<th>Library/Counseling/Coaching Instruction ☐</th>
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<tr>
<td>Name of Division:</td>
<td>Advanced Technology &amp; Applied Science</td>
<td>Name of Department:</td>
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<td>Division Dean Signature</td>
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<td>Department/Program Chair Signature</td>
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<tr>
<td>Print Name of Dean: Don Taylor</td>
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<td>Print of Name Chair/Program:</td>
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<tr>
<td>Date: 8/15/13</td>
<td>Phone: 4311</td>
<td>Date: 7/29/13</td>
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This Justification for Hiring form is composed of three parts.

Part A: OBJECTIVE DATA

Requires objective data-driven information and is divided into ten areas:

- College Mission, Vision and Values
- Strategic Plan Alignment
- Institutional Need
- Supplemental Funding
- Current Program/Discipline Data
- Projected Program/Discipline Data
- Program/Discipline Limitations
- Census and Student Contact Data
- Capacity Enrollment
- Program Review Alignment

Part B: NARRATIVE

A narrative argument for the position is required. More detail on the structure of the Narrative is given in Part B below.

Part C: ATTACHMENTS: JOB DESCRIPTION AND ANNOUNCEMENT, INFORM REPORTS
PART A: OBJECTIVE DATA

1. COLLEGE MISSION, VISION AND VALUES

The College Mission is:

Saddleback College enriches its students and the south Orange County community by providing a comprehensive array of high-quality courses and programs that foster student learning and success in the attainment of academic degrees and career technical certificates, transfer to four-year institutions, improvement of basic skills, and lifelong learning.

The College Vision is:

Saddleback College will be the first choice of students who seek a dynamic, innovative, and student-centered postsecondary education.

The College Values are:

1. **Commitment**
   We commit to fulfilling our mission to serve the south Orange County community.

2. **Excellence**
   We dedicate ourselves to excellence in academics, student support, and community service.

3. **Collegiality**
   We foster a climate of integrity, honesty, and respect.

4. **Success**
   We place our highest priority on student learning and delivering comprehensive support for student success.

5. **Partnership**
   We strive to develop strong and lasting partnerships among students, faculty, staff, and the community.

6. **Innovation**
   We anticipate and welcome change by encouraging innovation and creativity.

7. **Academic Freedom**
   We endorse academic freedom and the open exchange of ideas.

8. **Sustainability**
   We promote environmental sustainability and use our resources responsibly to reduce our ecological impact.

9. **Inclusiveness**
   We cultivate equity and diversity by embracing all culture, ideas, and perspectives.

10. **Global Awareness**
    We recognize the importance of global awareness and prepare our students to live and work in an increasingly interconnected world.

Approved by Consultation Council 7/21/09

List the item number(s) of the relevant College Values the program/discipline fulfills.

1.2.3.4.5.6.7.8.9.10
2. STRATEGIC PLAN ALIGNMENT

As approved February 9, 2010, the elements of the strategic plan are as follows:

I. Improve Student Preparedness
   Saddleback College will ensure that student gain the foundational skills necessary to complete college level work and achieve career goals.

   I.1 80% of all students who seek certificates, associate degrees, and declare transfer as a goal will be assessed, placed and complete a professional educational plan.

   I.2 by 5% the number of individuals with an identified career goal who receive career assessments and job acquisition skill development services.

   I.3 Improve the progression rate of students in Math, English and the ESL program sequence from levels 300 to 200 and from 200 to transfer courses by 5% in each level.

II. Excel in College Transfer
    Saddleback College will increase student transfers to four-year colleges and universities.

   II.1 Improve by 5% student transfers to four-year institutions.

   II.2 Improve by 15% the number of students classified as transfer ready.

   II.3 Increase by 20% the number of students in the Honors Program.

III. Enhance Resources
     Saddleback College will improve its ability to expand and develop alternative sources of revenue to support college priorities.

   III.1 Increase external foundation contributions to $1 million annually.

   III.2 Realize a minimum of $1 million in savings per year through the implementation of college efficiencies.

   III.3 Meet funding requirements to fulfill the “20-year Facilities and Scheduled Maintenance Plan”.

IV. Foster Innovation

   IV.1 Double the training services offered to faculty in the areas of teaching innovation and best teaching practices.

   IV.2 Improve by 20% the efficiency of college-wide communications in marketing strategies through a centralized system.

List the item number(s) of the relevant Strategic Direction(s) or Strategic Goal(s).

I.1, I.2, II.1, II.2
3. **INSTITUTIONAL NEED**

Check all appropriate statements explaining the college-wide role of the program or discipline:

- **Basic Language Skills:** The program/discipline provides basic language skills necessary for success in all courses.

- **Student Support Services:** The program provides essential student support services such as library, counseling and disabled student services affecting all areas of instruction or the program.

- **Relevance to General Education Requirements:** The program/discipline provides courses that are required of students as part of the General Education requirement.

- **Relevance to Other Certificates or Majors:** Applicable to an AA degree or transfer requirements. The program/discipline offers a certificate or a major.

If applicable, please check ONE of the following:

- **The program/discipline provides courses which are prerequisites to two or three certificates and/or majors.** List the certificates and/or majors:

  - Environmental Studies AA; Ecological Restoration Certificate; Sustainability Studies Occupational Skills Award

- **The program/discipline provides courses which are prerequisites for four or five certificates and/or majors.** List the certificates and/or majors:

- **The program/discipline provides courses which are prerequisites for six or more certificates and/or majors.** List the certificates and/or majors:

- **The program/discipline provides services for student retention and success in all areas.**

4. **SUPPLEMENTAL FUNDING FOR POSITION**

Full time faculty positions are paid from the college's allocation of the general fund.

Is any part of this position to be permanently funded by an outside source? No ☒ Yes ☐

If yes, what percentage: ______

What source(s): ______

Add further information to the Narrative.
5. **CURRENT PROGRAM/DISCIPLINE DATA**

*For classroom faculty position:*
Using CTR WFCH and TOT WFCH data for the previous three academic years, the committee will calculate the percentage of full-time load (%FTLD) for the program/discipline.

*For faculty assigned to library/counseling/coaching instruction:*
What percentage of direct student contact and services is provided by full-time faculty for load in the program for which the position is requested?

- Fall 2012
- Spring 2013
- Fall 2011
- Spring 2012
- Fall 2010
- Spring 2011

6. **PROJECTED PROGRAM/DISCIPLINE DATA**

*For classroom faculty position:*
Using adjusted CTR WFCH and TOT WFCH data for the previous three academic years, the committee will calculate the percentage of full-time load (%FTLD) for the program/discipline.

*For faculty assigned to library/counseling/coaching instruction:*
If this position is filled, what will be the NEW percentage of direct student contact and/or services provided by full-time load in the program?

- Fall 2012
- Spring 2013
- Fall 2011
- Spring 2012
- Fall 2010
- Spring 2011

7. **PROGRAM/DISCIPLINE LIMITATIONS**

A. **Mandates**
Is the program/discipline mandated to limit class or lab size due to state requirements, college/board approved caps, or accreditation regulations?  **No**

   If yes, by whom?  _____

Is there a mandated faculty to student ratio for the program/discipline?  **No**

   If yes, by whom?  _____  What is that ratio?  _____

B. **Recommendations**
Is there a recommended faculty to student ratio for the program/discipline?  **No**

   If yes, by whom?  _____  What is that ratio?  _____

*For faculty assigned to library/counseling/coaching instruction:*
What is the program’s faculty/student ratio for the previous three academic years?

- AY = 20___ - 20___
- AY = 20___ - 20___
- AY = 20___ - 20___

- Fall ______
- Fall ______
- Fall ______

- Spring ______
- Spring ______
- Spring ______

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For Counseling: Does FTEC1/2H - SHCx2 indicate a deficit during the previous three academic years? _____ If yes, specify details:

AY = 20___ - 20___      AY = 20___ - 20___      AY = 20___ - 20___
Fall _____       Fall _____       Fall _____
Spring _____      Spring _____     Spring _____

For Special Services: Does FTEFH - SHCx4 or FTEFAH - NSHCx4 indicate a deficit during the previous three academic years? _____ If yes, specify details:

AY = 20___ - 20___      AY = 20___ - 20___      AY = 20___ - 20___
Fall _____       Fall _____       Fall _____
Spring _____      Spring _____     Spring _____

8. CENSUS AND STUDENT CONTACT

For classroom faculty position:
Using C1 ENRL data for the previous three academic years, the committee will calculate the census enrollment for the program/discipline in which the position is requested.

For faculty assigned to library/counseling/coaching instruction:
What is the number of service contacts in the previous three academic years?

AY = 20___ - 20___      AY = 20___ - 20___      AY = 20___ - 20___
Fall _____       Fall _____       Fall _____
Spring _____      Spring _____     Spring _____

Describe the types of contact: _____

9. CAPACITY ENROLLMENT

For classroom faculty position:
Using C1 ENRL and CRS CAP data for the previous three academic years, the committee will calculate the capacity utilization for the program/discipline.

10. PROGRAM REVIEW ALIGNMENT

Please indicate the portions of your most recent Program Review that address the need for this position.

The position is discussed in Program Overview - Challenges, Needs Assessment - Human Resources Needs, and under Review Report - Faculty and Staff
The biggest challenge facing the department is the inability to meet the current interest in the environmental field. It is extremely difficult to run a program with only one full-time faculty member and associate faculty members who are only here to teach their classes and then leave. Without that desire of associate faculty members to help develop the program and do more than the bare minimum, managing, marketing, and growing the department can be overwhelming at times. In order for the program to grow, a second full-time faculty member will need to be hired.

The Environmental Studies Department has one full-time faculty and eight associate faculty members at this time. It is important to note that the department has only increased the number of sections from 21 sections in 2005-06 to 23 in 2010-11, but the student headcount has increased from 510 to 865, respectively. In order to meet current demand, the full-time faculty member teaches three large lectures and at least one additional class as overload every semester. It has been necessary to hire additional associate faculty members to help meet the demand. However, there is definitely a need for the addition of a second full-time faculty member to support the continued growth of the department.

As the demand in environmental jobs increase, the department will need to offer additional classes. A reason for the growth driver in this program area is the current and future California job market will be experiencing both a 20% growth in new hires of personnel and a 20% growth in replacement of professionals that either leave this technical area or retire. Therefore, the department would like to add a second full-time faculty member to fulfill growth needs. This position request is in direct alignment with Saddleback College’s Vision and Mission because it will support the program ensuring that the students who take the classes will be in the best position possible to achieve their academic learning and be able to attain degrees, certificates, or transfer to a 4-year institution.

The additional faculty member is not only imperative to support the current program, but will be essential if a new water program and occupational skills award is developed.
PART B: NARRATIVE

The Environmental Studies Department has experienced successful student enrollment growth over the last several academic years and it is anticipated that 15 – 20% student growth rate will continue. Several major factors are driving the student growth. Environmental Studies is continuing to expand with broad technical areas becoming more defined and the technology associated with these areas becoming more refined. This has resulted in a need for expansion of the courses and curriculum as well as a need for a second full-time faculty to assist in addressing both the existing and newly developed curriculum. Secondly, there is an ongoing and continued growth of technical jobs in this field giving students the driving factor to pursue environmental careers.

For the last several years, there has been a continually increasing interest in the field of environmental studies with more high schools offering environmental studies courses in high schools, an increase in the number schools offering environmental majors (including all UC and CSU campuses) many with whom we articulate with, and an increase in the number of advanced degrees in the environmental field. According to the Bureau of Labor Statistics' Occupational Outlook Handbook 2012-2013, employment of environmental scientists and specialists is projected to grow by 19 percent from 2010 to 2020. Also, employment of environmental science and protection technicians is expected to grow much faster than average, at a rate of 24 percent; these workers will be needed to help regulate waste products; to collect air, water, and soil samples for measuring levels of pollutants; to monitor compliance with environmental regulations; and to clean up contaminated sites. The Bureau of Labor Statistics (BLS) released a report in March 2012 that shows green jobs growing from 2010 through 2011 at a rate 4 times faster than all other industries combined. As of 2011, green jobs accounted for 2.6 percent of all jobs in the economy (up 4.9% in 2011), for a total over 3.4 million jobs in renewable energy, water management, recycling, and various positions that help improve the efficiency and environmental footprint of a company or institution. California has the highest number of green jobs in countries. The BLS study showed that California added 17,366 green jobs in 2011 for a total of 360,245. With this increase in jobs and higher degrees, there will be an increase in the demand for environmental classes both with incoming students and with professionals.

Evaluating this specific request for the new full-time faculty member fits directly into the Strategic Plan in Strategic Direction #2 – Excel in College Transfers. The current Environmental Studies Program has been designed with the intention to assist the students in fulfilling the requirements for either general science or environmental studies as part of their transfer activities. Currently, 65% of the students taking environmental studies classes have an educational goal of transferring to a four year university. The additional faculty member will be able to support teaching more classes that will not only fulfill requirements for environmental studies but general education and information competency requirements as well.

The projected growth of this program over the next 5 years is estimated to be 15 – 20% per year due to continuing industry and job growth and the further specialization of technical areas as the environmental studies field continues to expand. The full-time faculty is needed to address this growth and technical expansion. With full-time faculty there will be additional program cultivation and this will result in the projected growth continuing. This new full-time faculty will assist in the further building of relationships with high schools and the community to promote the program to prospective incoming students.

The Environmental Studies Department has added new courses over the last several years to meet the field's technical growth. It is necessary to continue developing additional
courses to ensure our students have the opportunity for a wide exposure to many different and applicable technical courses. The second full-time faculty will provide additional technical support to the current full-time faculty ensuring there is strong continuity among all courses provided.

The area of environmental studies is a specialized science area and requires that instructors have specific training in this area in order to be prepared to instruct and train our future students. The technical area is relatively new and has been rapidly expanding for the last two decades and continues to grow. It is important to have a new faculty member that is formally trained in several of these specialty technical areas so that there is the ability for our program to have a strong recognition in both higher education institutions and the industry. Technical areas that would be desired with this position would be to support both new and existing curriculum are: Water Resources, Environmental Regulation, Ecological Restoration, Energy Conservation, and general Environmental Sustainability.

In addition, the Environmental Studies Department is currently developing an additional degree and certificate program in the technical area of Water Resources and Conservation. The newly developed curriculum will require additional technical skills to support the existing staff. In addition, the department is developing an additional Occupational Skills Award for students to become a Naturalist and Interpretive Guide.
South Orange County Community College District  
Office of Human Resources  

ACADEMIC ANNOUNCEMENT  

☒ Saddleback ☐ Irvine Valley  

Position ID Number Position Title Environmental Studies Instructor  

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<tr>
<td>☒ Journals – Specify and list publication deadlines</td>
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<tr>
<td>Chronicle of Higher Education</td>
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Minimum Qualifications  
Master's degree or higher in Environmental Studies, Ecology, or Ecological Restoration from an accredited college or university; OR Bachelor's degree in any of the above from an accredited college or university AND Master's degree or higher in Environmental Science from an accredited college or university; OR a combination of education and experience that is at least the equivalent of item 1 and 2 above (candidates making application on the basis of equivalency must submit the Supplemental Application for Equivalency Determination form in addition to all other required materials).  

Experience Required  
Minimum of two (2) years of recent and successful teaching experience in Environmental Studies or equivalent at the postsecondary level. Evidence if sensitivity to and understanding of the diverse academic, socioeconomic, cultural, disability, and ethnic backgrounds of community college students.  

Desirable Qualifications  
An earned Ph.D. in Environmental Studies. Recent teaching experience in Environmental Studies or other related sciences at the community college level. Experience in program management at the college level. Previous experience in developing lower-division curriculum on the college/university level. Knowledge of and ability to integrate computer technology in the classroom and to be able to use such technology to offer curriculum and instruction through distance delivery modes, as appropriate.  

Summary of Duties and Responsibilities  
Instruct courses in Environmental Studies which may include Introduction to Environmental Studies, Introduction to Ecology, Water, Special Topics, and Ecological Restoration. Participation in the development and revision of curriculum in department and college committees, and in professional development activities. Maintain current knowledge in the subject matter area and in effective teaching/learning strategies. Maintain appropriate standards of professional conduct and ethics. Assignment may include evening or weekend hours. Participate in general faculty functions related to educational programs, in-service programs, and professional development.  

Additional Information
The above information was obtained from the following source(s). Mark all applicable boxes:

☑ Requestor  ☐ Human Resources  ☑ Dept./Program Chair
☐ Academic Senate  ☑ Sch./Div./Dept. Faculty  ☑ Dean/President or

APPROVALS FOR FACULTY ANNOUNCEMENTS SIGNATURE:

__________________________________________

Academic Senate President

Human Resources: Academic Announcement - PER004A (10/99) Rev 03/00
A. Human Resource Needs

The department has a lone classified support staff member. This 20 hour per week laboratory technician needs to be increased to full-time (40 hours). The Laboratory Technician position directly supports all aspects of the Environmental Studies Program and the student's success. Under the direction of the laboratory technician, students gain educational knowledge from volunteering in the California Native Garden about the importance of California native plants, specialized California ecosystems, and how to properly care for plants.

With the current Laboratory Technician's work load, there is insufficient time for any significant time to be dedicated to the California Native Garden except when there are assigned periods for student volunteers to perform activities in the area. These periods are limited to when the technician's time is available. During the Spring 2011 semester, there were approximately 25 hours set aside for the garden volunteers to perform the ongoing maintenance activities. This is insufficient to maintain an area that is approximately 2 acres.

The requested additional time would be used for area oversight, managing on-going activities, care and management of the native plants, performing general maintenance, addressing any safety issues or hazards, and improving the area for further instructional activities for the 2 department programs. These activities require the additional support requested throughout the year.

The additional hours are also necessary to meet the future demands of the programs. As the demand in environmental jobs increase, the department will need to offer additional classes. This will create increased need for more technician support time, which will be directed at instructional needs. The program simply cannot grow without additional classified support.

The program has been able to maintain a very high level of safety with no incidents in the last 9 years (amount of time I have been here) and this additional support will assist in the continuing of this incident free trend in the future years. With the growth of the program, there will be additional effort required to ensure that all aspects of the health and safety continue to be fully addressed. The department needs the increase in lab technician hours not only for lab safety but to also maintain a safe learning environment in the California Native Garden.

The additional labor cost and associated benefits is fair and very reasonable for the additional benefits that the Program will receive. This support will both allow the program at its current level to continue to be successful as well as provide the additional support needed for the future growth in this program area.

As the demand in environmental jobs increase, the department will need to offer additional classes.
A reason for the growth driver in this program area is the current and future California job market will be experiencing both a 20% growth in new hires of personnel and a 20% growth in replacement of professionals that either leave this technical area or retire. Therefore, the department would like to add a second full-time faculty member to fulfill growth needs. This position request is in direct alignment with Saddleback College's Vision and Mission because it
will support the program ensuring that the students who take the classes will be in the best position possible to achieve their academic learning and be able to attain degrees, certificates, or transfer to a 4-year institution.

The additional faculty member and classified staff hours are not only imperative to support the current program, but will be essential if a new water program is developed.

At Saddleback College, there is no alternative available for the students to receive scientific education within the field of Environmental Studies and Ecological Restoration. The classes associated with the programs are predominantly within the Environmental Studies department.

B. Instructional Needs

The most crucial instructional need is an increase in the department's OSH budget. With the increase in demand for environmental studies classes, more OSH is needed to offer large lectures and/or more classes. Up until Fall 2011, the department has been allowed to slowly grow by adding an additional 2 sections and by adding large lecture. Unfortunately, there is a no growth moratorium so although there is demand, the department cannot meet it.

The Environmental Studies Department has been very fortunate with obtaining instructional equipment, however, the department could still use more to help continue to make the environmental studies lab state of the art. It is important that the needs continue to be met and all equipment remains working properly and is kept current. Also, as the field of environmental studies becomes more technologically advanced, the department will want to invest in technology, such as GIS and other relative software.

Other needs occur in the California Native Garden. In order to use it as a hands-on, interactive learning environment, more money will be needed to enhance the environments including plants, signs, lighting, irrigation, etc.

C. Research Needs

Even after this program review, the department will continue to research its institutional effectiveness and identify needed improvements or areas of concerns. In addition, the department will continue to maintain and further develop Student Learning Outcomes and use this information to help with future program reviews.

More research will also need to be done in order for the programs and classes to remain current. As environmental issues continue to evolve and new issues emerge, it will be important that the department incorporates those changes into the curriculum. It is also essential to continue to research the needs of businesses and the community in general. Finally, continual research is necessary to help with the recruitment process of associate faculty and students.

D. Technical, Equipment and Other Resource Needs

In order to modernize the environmental studies lab, updated equipment and technology will be essential and this will take money which currently is in limited supply. Furthermore,
maintaining a proper running lab safely will require additional funds as supplies, equipment, and technology needs to be added or replaced.

More money needs to be allocated to the California Native Garden to purchase more equipment, supplies, and plants, which are needed to sustain the garden. It is expected that additional resources will be needed to help reestablish the California Native Garden after the renovations of the TAS building.

E. Facilities Needs

The biggest need is a large lecture room. Large lecture rooms are in high demand and limited quantity at Saddleback College, and unfortunately, the large lecture classroom (TAS 226) that the Environmental Studies Department used to teach classes in was converted into a computer lab. When that occurred, it left TAS with no large lecture classrooms, so now large lecture classes have to be taught in other buildings, where they are competing with other large lecture classes offered at Saddleback College. It is strongly recommended, if possible, that an area within TAS be converted into a large lecture classroom.

Although it would be desirable to redesign the environmental studies lab and supply room, it is highly unlikely that it would occur. Therefore, improvements need to be made to make it more functional. For example, we need to have more storage for supplies and equipment, primarily microscopes. Additionally, a small laboratory area where students could conduct longer-term study projects to support their learning activities. Also, the environmental studies supply room was not designed to support a desk which is needed for the laboratory technician.

F. Marketing and Outreach Needs

The Environmental Studies program is marketed in various ways since the students vary from recent high school graduates to people seeking to change careers or upgrade their skills in their existing careers or professions. The department needs to reach out to the community and promote the programs to increase interest in environmental studies classes. In order to do this, the department needs either faculty, staff, or students to attend local events, but money and time limit this from happening.

It is also important to have a website that is accessible to students. The department is currently working updating its website, but money is needed to buy the necessary program and to maintain the website.

Resources are also needed to purchase marketing materials that can be handed out at events. This includes brochures, flyers, and giveaways.

It would also be great to have a short video produced that advertises the department's offerings. This video could be handed out at events and posted on the department's website.