

Materials linked from the January 9, 2020 Faculty Senate agenda.

Proposal Transmittal Sheet

Full Category I and Abbreviated Category I Proposals

Submit proposals to: Office of Academic Programs, Assessment, and Accreditation 314 Waldo Hall – Oregon State University

Attach Transmittal Sheet; Proposal; Library Evaluation (performed by the Library for Full Category I proposals), Letters of Support (external to OSU); Liaison Correspondence (internal to OSU), External Review (new graduate program proposals), and Budget Information (both OSU and HECC budget sheets for Full Category I proposals and OSU budget sheets for Abbreviated Category I proposals)

Full Category I Proposals: New Progra Final Approval—for new degrees, extension to OSU's b campus, and substantive changes: Higher Education Coordinating Commission (HECC)	ranch Final App	viated Category I Proposals: Proposals proval—for new academic units, renames, reorganizations,
Final Approval for new certificate programs: OSU Pro	and, sus	pensions: OSU Provost
	Final App	proval- for terminations: OSU Board of Trustees
Check one:	C	heck one:
New Degree Program	E	stablish: new college, school, department or program
New Certificate Program	R	ename: change the name of an existing academic
Extend Program to OSU Branch Campus		program or academic unit eorganization: move the responsibility of an
Substantive Change	si	academic program from one academic unit to another; reorganize existing academic unit(s), including mergers and splits uspension (or Reactivation): suspend an academic program (maximum period: three years) ermination: terminate an academic program or academic unit
Title of Proposal:		Proposed Effective Term:
Outdoor Products		Fall 2019
School/Department/Program:	Col	lege:
NA	E	ngineering
I certify that the above proposal has been review administrators and committees. I approve this p	ed by the appro roposal.	priate Program, Department, School, and College
Sign (Department/School Chair/Head: Director)	Date	Print (Chair/Head; Director)
Furt a. allolfol	11/7/19	Scott A. Ashford
Sign (College Dean)	Date	Print (College Dean)

Source: Office of Academic Programs, Assessment and Accreditation (2-10-15; rev 1-8-16)

Yalin Hin- Newsong	1/23/19	Julie Gess-Newsome
Sign (OSU-Cascades Dean of Academic Affairs)	Date	Print (Dean)
- Alt -	1/23/19	Rebecca Johnson

Sign (OSU-Cascades Vice President)

Date

Print (Vice President)

OUTDOOR PRODUCTS EXECUTIVE SUMMARY PROPOSAL FOR BACHELOR OF SCIENCE DEGREE IN OUTDOOR PRODUCTS

Oregon State University - Cascades is proposing a four-year Bachelor of Science degree in Outdoor Products. The program will have a systems approach to product innovation, design, testing, and management; a curriculum that includes elements of sustainability throughout; and an understanding of natural resources and public lands. The Outdoor Products degree fulfills an important and unmet educational need in the global outdoor industry. In addition to key courses developed for Outdoor Products, existing courses from other programs and colleges such as business; marketing; natural resources; tourism, recreation and adventure leadership; and engineering will be leveraged to make up the core of this learning. Students will specialize their program through selection of experiences in the internship and practicum courses.

A 2017 Outdoor Industry Association report found that in the United States, outdoor recreation employed 7.6 million people, generated \$887 billion in consumer spending, almost \$65.3 billion in federal taxes, and \$59.2 billion in state and local taxes. Nationally, this is third in spending behind only financial services/insurance and healthcare. Around 30% of those dollars were in manufacturing and retail. In Oregon, these numbers are \$16.4 billion in spending, \$5.1 billion in wages and salaries, \$749 million in state and local taxes, and 172,000 direct jobs in Oregon.

During the months of December 2016 and January 2017, we conducted over 100 in-person interviews in Oregon, Washington, Utah, Colorado, and California. Other interviews were conducted by phone. We were able to conduct in-depth conversations with senior management from all of the following targeted outdoor product companies: Keen Footwear, Specialized Bicycle, Nike, Patagonia, Hydro Flask, Ruffwear, Smartwool, Columbia, Black Diamond, Under Armour, Adidas, Nau, Kelty, Toad & Co., Kialoa Paddles, Danner, Metolius Climbing, Mountain Khakis, Camelbak, The North Face, Mountain Hardware, Sierra Designs, Saxx, Merrell, New Balance, Filson, IPA Connect, Prana, Stanley, Eagle Creek, and The Outdoor Industry Association.

Our interviews were designed to determine the greatest educational needs for the outdoor product industry and how a degree program might address these needs. Specifically, we set out to learn the specific skills outdoor industry leaders would like to see developed in students who graduate with a 4-year degree in outdoor product

commercialization. We asked about skill development in two ways. First, in hiring junior employees, what skill-sets would they like to see in candidates for positions in their company? Second, we explored what skills outdoor industry leaders, in retrospect, wished they had acquired when first beginning their careers in the outdoor industry. This second line of inquiry was particularly interesting for interviews with iconic industry leaders who had started their own companies and grew them into very successful enterprises (Yvon Chouinard, Sally McCoy, Steve Barker, Peter Metcalf).

Without exception, industry leaders indicated that having such a degree would be a significant, if not determining, factor in hiring a new employee in their company. All of the outdoor product companies interviewed from Central Oregon expressed enthusiasm for partnering with OSU to craft meaningful internships and projects. Geographical proximity is not necessarily a prerequisite to such partnerships, as companies from California, Utah, and Western Oregon expressed similar interest.

The Outdoor Products program produces graduates that have a holistic approach to outdoor product with a respect for natural resources and public lands. This systems approach will fulfill an important and unmet educational need in the global outdoor industry. Students in the program graduate with a multidisciplinary systems approach; well-rounded and able to integrate lessons learned across their academic exposures. They will incorporate their studies in earth systems and sustainability into product development to create products that meet real needs of people and planet. Graduates will be prepared to create and manage products that will improve the human condition through thoughtful access to recreational opportunities. With entrepreneurial knowledge grounded in environmental stewardship, graduates of the program will be prepared to thoughtfully contribute to, and lead, the growth and direction of the global Outdoor Industry.

The mission of the Outdoor Products degree program is to educate and inspire future leaders for the opportunities and challenges in the outdoor industry. This mission is achieved through a rigorous curriculum combining product commercialization, lands stewardship and experiential learning. Graduates of the program will lead the outdoor industry in balancing product, profits, people, and the planet.



Proposal for a New Academic Program

Institution: Oregon State University - Cascades

College/School: College of Engineering

Department/Program Name: Outdoor Products

Degree and Program Title: BS Outdoor Products

1. **Program Description**

 a. Proposed Classification of Instructional Programs (CIP) number. CIP Code 30.9999 / Title: Multi-/Interdisciplinary Studies, Other. Definitions:

30.XXXX: Multi-/Interdisciplinary Studies: Instructional programs that derive from two or more distinct programs to provide a cross-cutting focus on a subject concentration that is not subsumed under a single discipline or occupational field. *30.999: Multi-/Interdisciplinary Studies*, Other. Any instructional program in multi/interdisciplinary studies not listed above.

b. Brief overview (1-2 paragraphs) of the proposed program, including its disciplinary foundations and connections; program objectives; programmatic focus; degree, certificate, minor, and concentrations offered:

As the land-grant institution in Oregon, OSU is uniquely qualified to respond to industry demand for bachelor's degree trained graduates in Outdoor Products; individuals educated in a systems approach to product commercialization, grounded in the themes of sustainability and corporate/social responsibility. Emphasizing the full product lifecycle, course of study will span from concept creation to design and development to commercialization to sales and marketing to end-of-life. From resource management to outdoor leadership, the course of study will be inseparably tied to respectfully enjoying the outdoors. These fundamentals will be critical for graduates of this land/sea/space/sun-grant university who will enter the local and global outdoor industry as stewards of our natural environment.

Overall, the program will have a systems approach to product innovation, design, testing, and management; a curriculum that includes elements of sustainability throughout; and an understanding of natural resources and public lands, in total, fulfilling an important and unmet educational need in the global outdoor industry. In addition to key courses developed for Outdoor Products, existing courses from other programs and colleges such as business; marketing; natural resources; tourism, recreation and adventure leadership; and engineering will be leveraged to make up the core of this learning. Students will specialize their program

through selection of experiences in the internship and practicum courses.

The Outdoor Products degree program combines product commercialization, lands stewardship, and experiential learning to educate and inspire future leaders for the opportunities and challenges in the outdoor industry. Graduates of the program will lead by balancing product, profits, people, and the planet.

Outdoor Products Proposal Summary Table

- CIP (Classification of Instructional Program)#: 30.9999
- CPS#: https://secure.oregonstate.edu/ap/cps/proposals/view/102419
- College Code:
- Degree Types: Bachelor of Science (BS)
- Program Level:
- Academic Home: College of Engineering Interdisciplinary Programs
- Contact: Geoff Raynak (geoff.raynak@osucascades.edu)
- Options:
- Areas of Concentration:
- Minors: Yes
- Program Total Credit Hours: 180
- Pre-Professional/Professional Model: NA
- Thesis or Non-Thesis:
- Location: OSU Cascades
- Course Designator: OP
- Delivery Mode: On Campus
- Enrollment Limitations: None
- Accreditation: None
- Proposed Effective Date: FA 2019
- Program Unique to Public Higher Education Institutions in Oregon: Yes
- Embedded Proposals:
- c. Course of study proposed curriculum, including course numbers, titles, and credit hours.

Catalog Description: The Outdoor Products degree program combines product commercialization, lands stewardship, and experiential learning to educate and inspire future leaders for the opportunities and challenges in the outdoor industry. Graduates of the program will lead by balancing product, profits, people, and the planet.

Outdoor Products Major Proposed Curriculum

Course of Study is intentionally inter-collegiate, drawing together foundational and practical knowledge necessary for immediate impact and broad success in the Outdoor Industry. Housed within the College of Engineering, the Outdoor Products degree is positioned to map this knowledge with analytical and subjective lenses consistent with traditional and contemporary programming. The below four-year plan is designed to illustrate a potential path through the degree program. The major is 117 total credits, unique Baccalaureate Core requirements are 24-28 credits, allowing for 35-39 general elective credits to complete 180 total credits. Electives here are following the OSU catalog definition of elective credits: "Courses students may select, either for general knowledge or for fulfilling specific degree requirements". These elective credits will be an integral component (along with the capstone and internships) to allow program personalization. Students may elect to add minors such as Business, Natural Resources, Sustainability or Tourism, Recreation Adventure Leadership, among other options.

The elective component also lends to a program that allows student to declare the major later in the their college experience and remain on track to complete a degree in a reasonable amount of time.

OSU Baccalaureate Core	(24-28 credits of non-major requirements)	
Requirement (1 course each)	Major requirements completing BC	Credits
WR 1		3
WR 2	WR 327 Technical Writing	3
Speech	COMM 111 Public Speaking	3
Fitness		3
Mathematics		4
Biological Science	SUS 102 Intro Enviro Science, Sustainability	4
Physical Science		4-5
Additional Science		4-5
Cultural Diversity		3-4
Literature and Arts		3-4
Social Processes and Institutions	ECON 201 Microeconomics	4
Western Culture	TRAL 132 History of Outdoor Adventure Profs	3
Difference, Power and Discrimination	GEO 309 Environmental Justice	3
Synthesis: Contemporary Global Issues	AEC 352 Environmental Economics	3
Synthesis: Science, Technology, Society	SUS 304 Sustainability Assessment	4

Skills and Support Courses (26 credits)					
COURSE	CR	BACC CORE			
COMM 111 Public Speaking*		3	Speech		
CH 121 General Chemistry	MTH 111 recommended	5			
ECON 201 Microeconomics*	MTH 111 recommended	4	SPI		
ENGR 248 Engineering Graphics & 3D Modeling		3			
ST 201 Principles of Statistics		4			
ST 202 Principles of Statistics	ST 201	4			
WR 327 Technical Writing	WR 121	3	WR 2		

Major Core for SLO: Systems Approach Toward Commercialization (51 Credits)						
COURSE	PRE-REQ	CR	BACC CORE			
BA 101 Business Now		6				
BA 260 Intro To Entrepreneurship	Soph standing	4				
BA 390 Marketing	ECON 201	4				
BA 357 Operations Management	ST 202	4				
DSGN 341 Design Thinking and Process Innovation	Jr. Standing	3				
OP 101 Introduction To The Outdoor Products Industry		4				
OP 231 Experiencing Outdoor Product Designs-WATER		2				

OP 232 Experiencing Outdoor Product Designs-WINTER		2	
OP 233 Experiencing Outdoor Product Designs-LAND		2	
OP 301 Product Ecosystem Connections	OP 231, 232 or 233	4	
OP 351 Outdoor Products Development I	OP 301	4	
OP 352 Outdoor Products Development II	OP 351	4	
OP 353 Outdoor Products Failure	OP 351	4	
OP 360 Outdoor Products Branding, Merch and Sales	OP 352	4	

Major Core for SLO: Impact, Access and Social Justice (18 credits)						
COURSE	CR	BACC CORE				
AEC 352 Environmental Economics & Policy*	ECON 201	3	CGI			
GEO 309 Environmental Justice*	WR 121	3	DPD			
SUS 102 Intro Environmental Science, Sustainability*		4	BIO SCI			
SUS 304 Sustainability Assessment*		4	STS			
TRAL 251 Recreation Resource Management		4				

Major Core for SLO: History and Ethics (6 credits)				
COURSE	CR	BACC CORE		
TRAL 132 Foundations History of Outdoor Adv. Profs.		3	WC	
TRAL 352 Wilderness Management		3		

Major Core for SLO: Experiential Learning (16 credits)					
COURSE	CR	BACC CORE			
OP 307 Pre-Practicum Seminar	OP 101	1			
OP 310 Practicum	OP 307	3			
OP 410 Internship	OP 307	4			
OP 450 Senior Capstone Outdoor Products 1	Sr. standing	4	WIC		
OP 451 Senior Capstone Outdoor Products 2	OP 450	4	WIC		

The below course table is designed to illustrate a potential minor in Outdoor Products. The minor is 30 total credits; blending three of the four core SLOs.

Representative Minor in Outdoor Products (30 Credits)					
COURSE	PRE-REQ	CR	BACC CORE		
ENGR 248 Engineering Graphics & 3D Modeling		3			
BA 260 Intro To Entrepreneurship	Soph standing	4			
OP 101 Introduction To The Outdoor Products Industry		4			
Choose 2 of OP 231 / OP 232 / OP 233		4			
OP 301 Product Ecosystem Connections	OP 231, 232 or 233	4			
OP 351 Outdoor Products Development I	OP 301	4			
OP 352 Outdoor Products Development II	OP 351	4			
TRAL 352 Wilderness Management		3			

An overview 'map' of the course-by-course connectedness for OP courses related directly to Outdoor Products commercialization processes is shown below. It is intended to visualize how the commercialization courses overlap, progress, and interact to provide multiple perspectives and contexts toward the systems approach to the Outdoor Products process.

OUTDOOR PRODUCTS COMMERCIALIZATION PROCESSES:	OP 101	OP 301	OP 351	OP 352	OP 353	OP 360	OP 310	OP 410	OP 450	OP 451
INSPIRATION										
AUTHENTICITY										
DEFINITION OF OPPORTUNITY										
IDEATION / EXPLORATION										
CONSUMER INSIGHTS										
ENVIRONMENTAL ASSESSMENT										
DATA DRIVEN										
SAMPLE CREATION										
PERMUTATIONS										
PERFORMANCE VALIDATION										
ITERATION										
INTEGRATED DESIGN										
PLANNING										
MASS PRODUCTION										
QUALITY										
PACKAGING / SUPPLY CHAIN										
MARKETING / SALES										
CONSUMER SUPPORT										
END-OF-LIFE										

Below is a list of proposed new courses for the Outdoor Products degree. The CPS CAT II proposal links are provided where applicable.

OUTDOOR PRODUCTS 101 INTRODUCTION TO THE OUTDOOR

PRODUCTS INDUSTRY (4) Introduction and history of the outdoor products industry. Characteristics of the industry through time. Current size and breadth of the industry, its economic significance, and its potential careers and employment sectors. Relationship of the industry to the environment and public lands. Scope of industry influence in social justice and public lands policy. (<u>link</u>)

OUTDOOR PRODUCTS 231 EXPERIENCING OUTDOOR PRODUCT

DESIGNS - WATER (2) Hands-on experience with multiple water-related outdoor products in classroom and outdoor settings. Identifying key characteristics for consumers and implications for design, development, marketing, business, and sustainability. Evaluating product performance and developing ideas for objective improvements. Includes one mandatory weekend outdoor-experience outing. (link)

<u>OUTDOOR PRODUCTS 232</u> EXPERIENCING OUTDOOR PRODUCT DESIGNS - WINTER (2) Hands-on experience with multiple winter-related outdoor products in classroom and outdoor settings. Identifying key characteristics for consumers and implications for design, development, marketing, business, and sustainability. Evaluating product performance and developing ideas for objective improvements. Includes one mandatory weekend outdoor-experience outing. (<u>link</u>)

OUTDOOR PRODUCTS 233 EXPERIENCING OUTDOOR PRODUCT

DESIGNS - LAND (2) Hands-on experience with multiple land-related outdoor products in classroom and outdoor settings. Identifying key characteristics for consumers and implications for design, development, marketing, business, and sustainability. Evaluating product performance and developing ideas for objective improvements. Includes one mandatory weekend outdoor-experience outing. (link)

OUTDOOR PRODUCTS 301 OUTDOOR PRODUCT COMMERCIALIZATION

(4) The interrelated processes and connections of product commercialization. How product design decisions impacts business considerations such as margin, inventory, supply chain, cash flow, and profitability. How design thinking and nurturing a design culture that promotes innovation is necessary for business success and growth. Challenges of product sales and distribution related to design. (<u>link</u>)

OUTDOOR PRODUCTS 351 OUTDOOR PRODUCTS DEVELOPMENT I (4) In

depth exploration of needs-based design for Outdoor Products. Experiential-based projects related to function and design. Understanding Design in context of Consumer Needs. Investigation of how design-choices impact upstream and downstream commercialization processes. (<u>link</u>)

<u>OUTDOOR PRODUCTS 352</u> OUTDOOR PRODUCTS DEVELOPMENT II (4) Exploration of development and product creation cycles for Outdoor Products. Bridging the design and operations phases of commercialization. Investigate quality, sample production, product testing, and costing. Managing how development decisions impact upstream and downstream commercialization processes. (<u>link</u>)

<u>OUTDOOR PRODUCTS 353</u> OUTDOOR PRODUCTS FAILURES (4) The outdoor industry is literally littered with used/discarded/broken gear. Each of these items tell a story and is an opportunity to understand consumer behavior, product design, product strength, quality-implications and product end-of-life strategies. This dynamic course will use analytic and pragmatic evaluation of failure as a systematic framework for continuous design improvement and enhanced consumer engagement.

OUTDOOR PRODUCTS 360 OUTDOOR PRODUCTS BRANDING,

MERCHANDISING AND SALES (4) Consumer behavior, emerging markets, building and nurturing brands, strategic communication. Content curation, merchandising and communication. Traditional and non-traditional sales channels. (*link*)

OUTDOOR PRODUCTS 307 OUTDOOR PRODUCTS PRE-PRACTICUM

SEMINAR (1) Seminar designed to prepare students for Practicums and Internships. Topics include professionalism, internship hunting skills, resumes, and interview skills. (<u>link</u>)

<u>OUTDOOR PRODUCTS 310</u> OUTDOOR PRODUCTS PRACTICUM (3) Planned experiences at selected cooperating agencies, companies or institutions; supervised by university and program personnel; supplementary conference, reports, and appraisal required. This course is repeatable for a target of 6 credits. (<u>link</u>)

OUTDOOR PRODUCTS 410 OUTDOOR PRODUCTS INTERNSHIP (4)

Planned experiences at selected cooperating agencies, companies or institutions; supervised by university and program personnel; supplementary conference, reports, and appraisal required. This course is repeatable for a maximum of 8 credits. (*link*)

OUTDOOR PRODUCTS 450 SENIOR CAPSTONE OUTDOOR PRODUCTS (4)

Comprehensive experiential learning project demonstrating and applying a systems overview approach toward product commercialization. Product should be explored within the contexts of sustainability, environmental impacts, historical relevance, and social justice. [BACC: WIC] (*link*)

OUTDOOR PRODUCTS 451 SENIOR CAPSTONE OUTDOOR PRODUCTS (4)

Comprehensive experiential learning project demonstrating and applying a systems overview approach toward product commercialization. Product should be explored within the contexts of sustainability, environmental impacts, historical relevance, and social justice. [BACC: WIC] (*link*)

SAMPLE FOUR-YEAR PLAN

Year 1				Total C	CR
Summer	Fall	Winter	Spring		
	BA 101 (6) Business Now	TRAL 132 (3) Hst Outdoor Advent. Prof*	COMM 111 (3) Public Speaking*		
	OP 101 (4) Intro Outdoor Prod inds.	ST 201 (4) Principles of Stats	WR 327 (3) Tech Writing*		
	MTH 111 (4) College Alg. or higher*	Bacc Core: Lit/Arts (3-4)*	HHS 231 + PAC (3) BC: Fitness*		
	WR 121 (3) English Comp*	Bacc Core: Cultural Diversity (3-4)*	ST 202 (4) Principles of Stats		
		Elective (3)			
		17	16-18	13	
Year 2					46-4
Summer	Fall	Winter	Spring		
	ECON 201 (4) Micro Econ*	ENG 248 (3) Engr Graphics 3-D model	Bacc Core: Phy Sci (4-5)*		
	OP 231 (2) Exp. OP Designs Water	OP 232 (2) Exp. OP Designs Winter	OP 233 (2) Exp. OP Designs Land		
	CH 121 (5) Gen Chem	Bacc Core: Bio or Phy Sci (4-5)*	OP 307 (1) Pre-Practicum Seminar		
	SUS 102 (4) Intro Env Sci Sustainability*	TRAL 251 (4) Rec Resource Mgmt	Elective (4)		
		Elective (3)	Elective (4)		
		15	16-17	15-16	
Year 3					46-4
Summer	Fall	Winter	Spring		
	BA 260 (4) Entrepreneurship	DSGN 341 (3) Design Thinking	GEO 309 (3) Enviornmental Justice*		
	OP 301 (4) OP Commercialization	OP 351 (4) OP Development 1	OP 352 (4) OP Development 2		
	OP 310 (3) Practicum	AEC 352 (3) Envr. Econ and Policy*	Elective (4)		
	OP 360 (4) OP Branding, Merch, Sales	BA 357 (4) Operations Mgmt	Elective (4)		
		15	14	15	
Year 4					4
Summer	Fall	Winter	Spring		
	BA 390 (4) Marketing	SUS 304 (4) Sustainability Assessment*	Elective (4)		
	OP 410 (4) Internship	TRAL 352 (3) Wilderness Mgmt	Elective (4)		
	OP 450 (4) Senior Capstone OP	OP 451 (4) Senior Capstone OP	Elective (4)		
	OP 353 (4) Outdoor Products Failure	Elective (1)	Elective (0-4 to complete 180)		
		16	12	12-16	
				Total 1	40-4
Flectives: Courses s	tudents may select, either for general knowledge or for	fulfilling specific degree requirements	TOTAL Credits 180	Total 1	.00
	hosen and used by students to supplement or enrich th		Baccalaureate Core: 24-28		
incy are generally c	nosen and used by students to supplement of enfirit in	erequired controlium.	Major Credits: 117		
		40 0 I			
		* Bacc Core classes	Elective Credits: 35-39		

d. Manner in which the program will be delivered, including program location (if offered outside of the main campus), course scheduling, and the use of technology (for both on-campus and off-campus delivery).

Outdoor Products is a program founded by and unique to OSU-Cascades, designed in partnership and consultation with industry leaders and innovators, many located in Central Oregon. The program will be an on-campus program, with traditional weekday course scheduling, combined with some extended-period, field-based learning.

e. Adequacy and quality of faculty delivering the program.

Many of the systems approach core courses will be offered by existing and expanding OSU-Cascades programs. Each program has hired academic ranked faculty specializing in that area. For example, engineering courses in the Outdoor Products program (e.g. ENG 248) are taught by Engineering faculty at OSU-Cascades.

The degree has a set of program-specific core courses designed to enable students to synthesize new information and lessons learned from courses of related programs. Core faculty for the program will include:

Geoff Raynak, PhD. Executive Director in Residence, OSU-Cascades: Dr. Raynak is the program lead for the Outdoor Products degree at OSU-Cascades with the responsibilities of establishing the program, liaising with local and global Outdoor Industry leaders, and teaching courses in the OP core. Geoff received a bachelor's degree in engineering from Cornell. After graduating from the University of Washington with a Ph.D. in Bioengineering (Biomechanics), Geoff moved to Oregon to design and market gear for local start-up brands everything from motorcycles to running shoes to biometric monitoring apparel. This work paved the way for him to work in the Nike Innovation Kitchen for five years. Geoff and his family moved to Bend where he became the Director of Product for Ruffwear. While at Ruffwear, he supported a fully-integrated team that included innovation, design, marketing, sales and overall customer satisfaction. Geoff has managed product commercialization on a local, regional and global scale.

Assistant Professor of Outdoor Products (to be hired in FY26): Search to be initiated after the program is approved and expanding. Teaches upper-division courses in OP, performs research in area of expertise.

Rebecca Webb, PhD. Program Lead & Instructor, OSU-Cascades: Dr Webb is an instructor and program lead for the energy systems engineering program. Prior to joining OSU-Cascades, she was an associate professor in the Mechanical and Aerospace Engineering Department at the University of Colorado Colorado Springs. Rebecca also worked as a R&D engineer at Agilent Technologies designing test and measurement equipment and as a senior engineer responsible for performing thermal analysis of laser cooling techniques at Directed Energy Solutions. Rebecca's research is focused on computational and experimental microscale fluidic and heat transfer studies. Her goal is to use research to help create a more sustainable world. Applications of her work include solar electric generating systems, solar thermal propulsion, and electronic cooling.

Matt Shinderman, PhD. Senior Instructor II, OSU-Cascades: Dr. Shinderman is program lead for the Sustainability program at OSU-Cascades and teaches courses in sustainability and natural resources. His research interests are in ecology of endangered species in wildlands and sustainable communities. Dr. Shinderman is affiliated with the Department of Fisheries and Wildlife in the College of Agricultural Sciences in Corvallis.

Michael Gassner, PhD. Senior Instructor I, OSU-Cascades, Honorary Assistant Professor, University of Hong Kong. Dr. Gassner is the program lead for the Tourism, Recreation, and Adventure Leadership program at OSU-Cascades and teaches outdoor leadership courses for the program. He has field tested outdoor products on expedition for Patagonia, Marmot, HiTech, Bausch and Lomb, Kelty, and others. Dr. Gassner has an active scholarship program concerning the long term benefits of outdoor adventure programs, their impact on students' connection to nature, overall student learning and development, and the history of outdoor adventure education programs in Asia and Southeast Asia. Dr. Gassner is affiliated with the Department of Forest Ecosystems and Society in the College of Forestry in Corvallis.

Ron Reuter, PhD. Associate Professor, OSU-Cascades: Dr. Reuter is the program lead for the Natural Resources program at OSU-Cascades and teaches soil science and natural resource management. His research involves the areas

of effective distance education technology and ecosystem processes in Oregon's high desert.

Seth Ganzhorn, PhD. Instructor, OSU-Cascades: Dr. Ganzhorn teaches classes in forest ecology and environmental science. His research integrates field-based experiments, molecular ecology, and spatial analysis to answer biological questions with ecological, economic, and conservation implications to find solutions to environmental challenges. Seth is particularly interested in the reproduction, dispersal, recruitment, and genetic diversity of forest species.

Andrew Hawley. Instructor, OSU-Cascades. Hawley teaches in the TRAL program with a focus on technically-based courses.

f. Adequacy of faculty resources – full-time, part-time, adjunct.

Our existing faculty will teach existing courses required for this degree. All of these class sections currently have capacity for the additional students that the OP degree will serve. Geoff Raynak and part-time teaching faculty will provide adequate staffing for all of the planned new OP courses in the roll-out phase of the program. As the program is established (FY26/ Year-5), the Assistant Professor role will be filled to assume expanded faculty needs.

g. Other staff.

We have allocated resources to hire a portion of a new academic advisor for this program (e.g. 0.33 FTE), based on the standard eligible-to-register student/advisor ratio.

h. Adequacy of facilities, library, and other resources.

The proposed program will add thirteen new classes to the overall curriculum.

Six of the new courses will be traditional classroom-lead instruction; a need that can currently be met with the existing facilities.

Three of these new courses will be experiential courses blending classroom teaching with *in situ* product testing/experiences. We will be testing snow gear on the snow; water gear in water; hiking gear on dirt and land. These classes will collectively require approximately 200 square feet of storage space for gear and testing equipment.

The remaining courses will be blended / co-curricular in nature. They will comprise of practicums, internships and capstone projects. Needs for these courses may include product creation and fabrication space.

OSU-Cascades will meet these requirements with a combination of existing space and new space in Academic Building 2, which will be built in 2020-2021. Spaces in Academic Building 2 specifically noted for shared use by the Outdoor Products program include the following:

- Flex Lab 1200 square feet
- Capstone Project Area 900 square feet
- Makerspace 700 square feet
- Makerspace with Art Storage 800 square feet
- Blackbox recording studio 250 square feet

• Storage - 500 square feet

The Facilities Assessment has been uploaded in the Curriculum Proposal System.

The Library Assessment has been uploaded in the Curriculum Proposal System.

Anticipated start date.
 First cohort of students will begin classes Fall 2020.
 Roll out of program-related courses will begin in the '19-20 Academic Year.

2. Relationship to Mission and Goals

a. Manner in which the proposed program supports the institution's mission, signature areas of focus, and strategic priorities.

Mission of Oregon State University

As a land grant institution committed to teaching, research, and outreach and engagement, Oregon State University promotes economic, social, cultural and environmental progress for the people of Oregon, the nation and the world. This mission is achieved by producing graduates competitive in the global economy, supporting a continuous search for new knowledge and solutions and maintaining a rigorous focus on academic excellence, particularly in the three Signature Areas of Distinction: Advancing the Science of Sustainable Earth Ecosystems; Improving Human Health and Wellness; and Promoting Economic Growth and Social Progress.

Mission of the Oregon State University OP Program

The mission of the Outdoor Products degree program is to educate and inspire future leaders for the opportunities and challenges in the outdoor industry. This mission is achieved through a rigorous curriculum combining product commercialization, lands stewardship, and experiential learning. Graduates of the program will lead the outdoor industry in balancing product, profits, people, and the planet.

The OP program produces graduates that have a holistic approach to outdoor product with a respect for natural resources and public lands. This systems approach will fulfill an important and unmet educational need in the global outdoor industry. Students in the OP program graduate with a multidisciplinary systems approach; well-rounded and able to integrate lessons learned across their academic exposures. They will incorporate their studies in earth systems and sustainability into product development to create products that meet real needs of people and planet. Graduates will be prepared to create and manage products that will improve the human condition through thoughtful access to recreational opportunities. With entrepreneurial knowledge grounded in environmental stewardship, graduates of the program will be prepared to thoughtfully contribute to and lead the growth and direction of the global Outdoor Industry.

Mission Congruence

Oregon State University (OSU)	OSU Outdoor Products Program
As a land grant institution committed to teaching, research, and outreach and engagement, Oregon State University promotes economic, social, cultural and environmental progress for the people of Oregon, the nation and the world. This mission is achieved by producing graduates competitive in the global economy, supporting a continuous search for new knowledge and solutions and maintaining a rigorous focus on academic excellence,	The mission of the Outdoor Products degree program is to educate and inspire future leaders for the opportunities and challenges in the outdoor industry. This mission is achieved through a rigorous curriculum combining product commercialization, lands stewardship, and experiential learning. Graduates of the program will lead the outdoor industry in balancing product, profits, people, and the planet.
producing graduates competitive in the global economy, supporting a continuous search for new knowledge and solutions	The OP program produces graduates that have a holistic approach to outdoor product with a respect for natural resources and public lands. This systems approach will fulfill an important and unmet educational need in the global outdoor industry.
maintaining a rigorous focus on academic excellence	Students in the OP program graduate with a multidisciplinary systems approach; well-rounded and able to integrate lessons learned across their academic exposures.
Advancing the Science of Sustainable Earth Ecosystems	Students incorporate their studies in earth systems and sustainability into product development to create products that meet real needs of people and planet.
Improving Human Health and Wellness	Graduates will be prepared to create and manage products that will improve the human condition through thoughtful access to recreational opportunities.
Promoting Economic Growth and Social Progress	With entrepreneurial knowledge grounded in environmental stewardship, graduates of the program will be prepared to thoughtfully contribute to and lead the growth and direction of the global Outdoor Industry.

b. Manner in which the proposed program contributes to institutional and statewide goals for student access and diversity, quality learning, research, knowledge creation and innovation, and economic and cultural support of Oregon and its communities.

We conducted over 100 interviews with industry leaders in Oregon, Washington, California, Utah, and Colorado to determine the need for an Outdoor Products degree, the skill sets they would like to see in candidates for positions in their company, and the insights outdoor industry leaders, in retrospect, wished they had acquired when first beginning their careers in the outdoor industry. In response, we have designed our curriculum around these consistent themes:

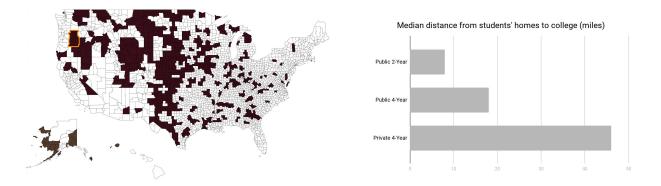
- 1. Students studying outdoor product need to develop a systems overview of product commercialization. [addresses: quality learning, research, knowledge creation and innovation]. Outdoor industry leaders and top recruiters believe that the most important skills for new employees relate to cross-discipline understanding and appreciation. This includes building skills based on knowledge and research of how the *entire* process of commercialization functions as an ecosystem of interrelated components. Interviewees emphasized that new employee onboarding is often hampered by siloed thinking typically reinforced in existing degree programs.
- 2. Reducing negative environmental impact and promoting social justice. [addresses: access and diversity, economic and cultural support of Oregon and its communities]. This is an element in every course on product creation and management. As Yvon Chouinard, founder of Patagonia, so eloquently put it, "Nature is not separate from the business of building outdoor product. At every step we need to assess and consider the impact on the planet and on humanity." Sustainability, as it relates to the creation and use of outdoor product, is defined expansively as teaching students how to reduce the negative environmental impacts of product while, at every opportunity, promoting social justice. Sustainability is a common thread that ties the proposed program together.
- 3. Understanding the history, use, management, and protection of Public Lands is an essential competency for work in the outdoor product industry. [addresses: access and diversity, economic and cultural support of Oregon and its communities]. The outdoor industry has historically placed great emphasis on the importance of protecting and maintaining public lands. The proposed program will emphasize the crucial relationship between outdoor industry viability and the careful management of public lands. Even more broadly, students will appreciate the history of public land management in the region and the United States, will understand issues related to conflicting uses and potential threats to these lands, and will have an understanding of the current government institutions empowered to manage these resources.
- 4. Key elements in a successful outdoor product degree program include

seminars, internships, and integrated cross-discipline projects.

[addresses: quality learning, research, access and diversity, economic and cultural support of Oregon and its communities]. The proposed program will include outdoor industry partnerships allowing students to gain practical, real-world experience in creating, testing, and managing product. In this way, students will be able to research, focus, and specialize on the part of the process they are most interested in (design, testing, development, marketing, finance, sourcing, retail, etc.). Internships will also help students develop industry connections and identify potential employment while allowing employers to get to know interns and assess their potential as prospective employees. In addition, field classes will allow students to trial and reformulate designs in the outdoors.

- c. Manner in which the program meets regional or statewide needs and enhances the state's capacity to:
 - improve educational attainment in the region and state;
 - respond effectively to social, economic, and environmental challenges and opportunities; and
 - address civic and cultural demands of citizenship.

According to a 2016 report sponsored by the American Council for Education, Central Oregon is identified as an education desert or a "community where students have few postsecondary options from which they can choose." Nationally, a majority of students travel less than 50 miles to attend a 4-year private university; that distance is more than halved for public universities. OSU-Cascades is a critical player in the social and economic development of Central Oregon and cannot serve the needs of the students and employers of the region without further expansion of academic programs and degrees. Outdoor Products graduates represent an important contribution to meeting Central Oregon's needs. This program supports efforts at increasing the diversity of the student body at OSU, and helps to attain the 40-40-20 Education Goals set by President Obama and adopted by Oregon.



Education Deserts: "The zip code that a child is born into oftentimes determines their life chances." Nicholas Hillman

As argued in 2b and 4d, the proposed degree program directly responds to an

educational and economic sector that is currently lacking in our state and across our country. The juxtaposition of a \$900B industry and only a handful of explicit degree programs speaks volumes to the opportunity and the responsibility at hand. OSU-Cascades not only seeks to produce graduates who are skilled in Outdoor Product to meets market demand, but also seeks to produce citizens who are committed to social justice, sustainability, and are ethically responsible in caring for the earth, our natural resources, and our public lands.

This program will be one of only a few Outdoor Product-directed degree programs in the nation, and the only one that addresses product commercialization while remaining grounded in the themes of sustainability and corporate/social responsibility. Interdisciplinary by necessity, the program will utilize an Advisory Board, industry feedback, and student placement as ways to assess the program's efficacy.

3. Accreditation

a. Accrediting body or professional society that has established standards in the area in which the program lies, if applicable.

This degree does not have an overseeing accrediting body and will not seek accreditation.

b. Ability of the program to meet professional accreditation standards. If the program does not or cannot meet those standards, the proposal should identify the area(s) in which it is deficient and indicate steps needed to qualify the program for accreditation and date by which it would be expected to be fully accredited.

Not Applicable.

c. If the proposed program is a graduate program in which the institution offers an undergraduate program, proposal should identify whether or not the undergraduate program is accredited and, if not, what would be required to qualify it for accreditation.

Not Applicable.

d. If accreditation is a goal, the proposal should identify the steps being taken to achieve accreditation. If the program is not seeking accreditation, the proposal should indicate why it is not.

Not Applicable.

4. Need

a. Anticipated fall term headcount and FTE enrollment over each of the next five years.

	Year 1	Year 2	Year 3	Year 4	Year 5
Headcount	20	30	30	40	50
FTE	13	20	20	26	33

FTE enrollment distribution:

Year	Freshman	Sophomore	Junior	Senior	Tota I
2019-20		6	7		13
2020-21	6	4	5	4	20
2021-22	6	4	6	4	20
2022-23	9	5	6	6	26
2023-24	12	8	7	6	33

b. Expected degrees/certificates produced over the next five years.

	Year 1	Year 2	Year 3	Year 4	Year 5
Graduates	0	0	8	12	25

c. Characteristics of students to be served (resident/nonresident/international; traditional/ nontraditional; full-time/part-time, etc.).

This program will serve the students who represent the OSU-Cascades demographic: resident/nonresident/international, traditional/nontraditional, full and part-time students.

d. Evidence of market demand.

A 2017 Outdoor Industry Association report found that in the United States, outdoor recreation employed 7.6 million people, generated \$887 billion in consumer spending, almost \$65.3 billion in federal taxes, and \$59.2 billion in state and local taxes. Nationally, this is third in spending, behind only financial services/insurance and healthcare. Around 30% of those dollars were in manufacturing and retail. In Oregon, these numbers are \$16.4 billion in spending, \$5.1 billion in wages and salaries, \$749 million in state and local taxes, and 172,000 direct jobs in Oregon.

Outdoor recreation is a complex system as it relies on human interests,

government, and private management of lands and waters, ecology, and ensuring the fun we have is sustainable over the long term. Recognizing these aspects of the outdoor recreation sector, in 2017 Oregon Governor Kate Brown signed into law House Bill 3350, which created the Office of Outdoor Recreation to coordinate the recreation policies across state and federal agencies.

Arguably, Oregon could be considered as the new physical and cultural epicenter for outdoor activities, outdoor lifestyle, and outdoor companies. With the 5th largest ski area in America, world class climbing, mountain biking, hiking, camping, water sports, and fishing, virtually every possible outdoor activity and sport exists within a relatively small radius. Bend, in particular, is becoming the destination for new outdoor product startups according to a recent article in Forbes online (Nov. 22, 2016), titled, "How the Outdoor Industry is Creating a Huge Boom in Bend." In the article, Nadine McCrindle, Director of Marketing for Picky Bars, based in Bend, said Bend has a "welcoming, helpful, and supportive entrepreneurial community. Everyone seems to be open to giving advice and introductions. We want to see each other succeed. This small town has so many entrepreneurs who respect each other because we all know how hard it is, nobody begrudges anyone's success which is different than you see in other places. For example, everyone's truly happy for Hydro Flask's success, it's just really a true community." Without a doubt, Bend's local entrepreneur community is powering the outdoor market.

During the months of December 2016 and January 2017, we conducted over 100 in-person interviews in Oregon, Washington, Utah, Colorado, and California. Other interviews were conducted by phone. We were able to conduct in-depth conversations with senior management from all of the following targeted outdoor product companies: Keen Footwear, Specialized Bicycle, Nike, Patagonia, Hydro Flask, Ruffwear, Smartwool, Columbia, Black Diamond, Under Armour, Adidas, Nau, Kelty, Toad & Co., Kialoa Paddles, Danner, Metolius Climbing, Mountain Khakis, Camelbak, The North Face, Mountain Hardware, Sierra Designs, Saxx, Merrell, New Balance, Filson, IPA Connect, Prana, Stanley, Eagle Creek, and The Outdoor Industry Association.

Our interviews were designed to determine the greatest educational needs for the outdoor product industry and how a degree program might address these needs. Specifically, we set out to learn the specific skills outdoor industry leaders would like to see developed in students who graduate with a 4-year degree in outdoor product commercialization. We asked about skill development in two ways. First, in hiring junior employees, what skill-sets would they like to see in candidates for positions in their company? Second, we explored what skills outdoor industry leaders, in retrospect, wished they had acquired when first beginning their careers in the outdoor industry. This second line of inquiry was particularly interesting for interviews with iconic industry leaders who had started their own companies and grew them into very successful enterprises (Yvon Chouinard, Sally McCoy, Steve Barker, Peter Metcalf).

Without exception, industry leaders expressed enthusiasm and strong support for

OSU-Cascades offering a degree that provided education and training for future outdoor product employees. Also, without exception, interviewees indicated that having such a degree would be a significant, if not determining, factor in hiring a new employee in their company. All of the outdoor product companies interviewed from Central Oregon expressed enthusiasm for partnering with OSU to craft meaningful internships and projects and geographical proximity is not necessarily a prerequisite to such partnerships. Companies from California, Utah, and Western Oregon expressed similar interest.

e. If the program's location is shared with another similar Oregon public university program, the proposal should provide externally validated evidence of need (e.g., surveys, focus groups, documented requests, occupational/employment statistics and forecasts).

There are currently no Oregon institutions (public or private) that offer a bachelor's degree in Outdoor Products. The University of Oregon's master's program in sports product management and Portland State's athletic and outdoor product planning certificate are the only programs in Oregon with *some* similarities to the proposed degree program although their target audience and learning outcomes are very different (see 6 a,b for detailed description of these programs).

f. Estimate the prospects for success of program graduates (employment or graduate school) and consideration of licensure, if appropriate. What are the expected career paths for students in this program?

As stated in 4d above, the 100 industry leaders we interviewed stated, without exception, overwhelming enthusiasm and strong support for OSU-Cascades offering a degree that provided education and training for future outdoor product employees. Also without exception, interviewees indicated that having such a degree would be a significant, if not determining, factor in hiring a new employee in their company. See letters of support for examples.

5. Outcomes and Quality Assessment

a. Expected learning outcomes of the program.

B=Business, D=Design, E=Engineering, T=Tourism & Recreation, N=Natural Resources, S=Sustainability, O=Outdoor Products, J=Social Justice

As a result of completing this program, students will be able to:

1. Demonstrate and apply a systems overview approach toward product commercialization.

- Describe the complete lifecycle deployed by the outdoor products industry, including creation/innovation, design, engineering, testing, production, marketing, sales, and end-of-life. (O)
- Demonstrate and communicate to outdoor products designers the business considerations of consumer demand, maintaining margin, managing inventory, supply chain, cash flow, and measuring profitability. (B)
- Demonstrate and communicate to those with business, management, and profitability responsibilities, the interrelated process of design thinking and problem solving and the need to nurture a design culture that promotes innovation. (B/D/E/O)
- Compare, contrast, and evaluate, based on personal and others' experience, specific outdoor products that are used in the field, regardless of the product discipline being studied. (D/T)
- Explain the mechanics and challenges of product sales and distribution (i.e. product sell-in, segmentation, consumer direct sales, wholesale, retail, internet sales) to those who work on product creation. (B)

2. Describe the value of minimizing negative environmental impact, increased access, and the importance of promoting social justice during a product's lifecycle.

- Identify the impact of materials selection, engineering, and development practices on the natural environment. (D/E/N/S)
- Explain how energy usage (manufacturing, transportation, buildings/offices/warehouses, product care) impacts the environment. (D/E/N/S)
- Describe how product development relates to social issues such as fair wages, wage disparity, factory pay, and working conditions oversight. (B/S/J)
- Examine issues of access related to historically underrepresented populations and those who are differently abled as it relates to the outdoor industry. (J)

- 3. Situate knowledge of iconic historical figures and their companies, and the history, use, management, and protection of public lands and ethical business practices as an essential competency for work in the outdoor product industry.
 - Describe the influence of innovative and influential people and their organizations on the outdoor industry (T)
 - Explain and reflect on the crucial relationship between outdoor industry viability and the careful management of public lands. (N/S)
 - Demonstrate an appreciation of the history of public land management in the United States. (T/N)
 - Evaluate the issues related to conflicting uses and potential threats to public lands and the role of government institutions in the management of these resources. (N/T/J)
- 4. Apply key elements of coursework to experiential learning opportunities that include internships and integrated cross-disciplinary projects.
 - Identify a particular product area of interest and specialize in the part of the process they are most interested in (design, testing, development, marketing, finance, sourcing, retail, etc.). (O/T)
 - Use technology to quantitatively, analytically, and creatively address a design commercialization problem. (D/E/O)
 - Formulate an outdoor product innovation/improvement then design, trial, refine, and develop a market plan for the innovation or product. (O/D/B/T
 - Communicate creative and design work to outdoor product professionals and consumers from diverse backgrounds through print and oral presentation. (B/D/E/O)
 - Model professionalism in the experiential learning process(B).

- b. Methods by which the learning outcomes will be assessed and used to improve curriculum and instruction.
 - See files uploaded into Curriculum Proposal System for program and course-level assessment plan. An overview of the mapping between courses and program-level SLOs is given here:

Column 2 (L	evel of Stud	ent Outcome ent Outcome	Learning up	on Course Er	ntry): I=In	troduce; R=I			ient				
Column 3 (li	ntentional C	orrelation wit	th Co-curricu	Ilar Activities): C=Co-Cu	irriculum							
Outcome # ⇔ 1. Systems Approach Towards Commercialization		2. Impacts, Access, Social Justice			3. History and Ethics			4. Experiential Learning					
Course	Course												
prefix	ID	1.1 🖵	1.2 🖵	1.3 🖵	2.1 🖵	2.2 🖵	2.3 🖵	3.1 🖵	3.2 🤜	3.3 🖵	3.1	3.2	3.3
OP	101	1	1		1	I		1	1				
OP	307	1	I		1	I		1	I		1	I	
OP	310	2	R		2	R		2	R		2	R	
OP	410	3	Е		3	E		3	Е		3	E	С
DSGN	341	2	R										
BA	260	2	R										
OP	231	1	1								1	I	
OP	232	1	1								1	I	
OP	233	1	1								1	I	
OP	301	1	1		2	R		2	R				
BA	357	2	R										
OP	351	3	E		2	R					2	R	
OP	352	3	E		2	R					2	R	
OP	353	3	Е					1	1		2	R	
OP	360	2	R		2	R		2	R				
OP	450	3	Е		3	E		3	Е		3	E	С
OP	451	3	E		3	E		3	Е		3	E	С
TRAL	132				1	I		1	1				
TRAL	251				2	R		2	R				
TRAL	352				2	R		2	R				
BA	101	1	1										
BA	390	2	R		2	R							
SUS	304				2	R							
AEC	352				3	Е							
GEO	309				3	Е							
SUS	102				1	1							

- Instructors will use course evaluations as one means to evaluate and improve their course and course delivery.
- The program will conduct exit interviews/surveys of graduating students and will attempt to contact alumni every five years to collect students' reflections on the program overall.
- Developmental Portfolio including reflections and industry experience including the product the student worked on during the OP program.

- We will also establish an **Outdoor Products Program Advisory Board** that includes leaders from the Outdoor Products Industry.
 - **Purpose:** Consistent with the program's mission, the purpose of the Advisory Board will be to ensure the program maintains currency, relevancy, and excellence, and produces highly qualified graduates ready to immediately step into the outdoor products industry and become leaders.
 - Functions:
 - 1. Advise OSU-Cascades, through the OP Executive Director, on issues that impact the degree program's mission and strategy.
 - 2. Serve as a sounding board on curriculum, development, planning issues, and program assessment.
 - 3. Identify opportunities for students to interact with outdoor product business, both public and nonprofit organizations, through internships, mentoring, and experiential learning.
 - 4. Develop activities that assist the university in the recruitment and retention of students.
 - 5. Provide access to outdoor product business leaders for the program.
 - 6. Assist in acquiring resources and fund raising in support of the program mission.
- c. Nature and level of research and/or scholarly work expected of program faculty; indicators of success in those areas.

The Executive Director will be appointed at the rank of Instructor, and will be expected to maintain currency in their field/discipline with a 10% workload allocation for this purpose. Instructors at OSU-Cascades are provided \$1800/yr in professional development funds to facilitate this expectation. Examples of success in maintaining currency include, but are not limited to: engaging in scholarly research that results in publishing/presenting abstracts and/or journal articles, writing book chapters, attending conferences, serving on professional committees or in a leadership position with a professional organization, and attending teaching workshops.

Other program faculty will be expected to engage in scholarly work at the level commensurate with their appointment type. Instructors are given 10% workload allocation for this purpose while tenure and tenure-track faculty are provided 30%-40% workload allocation to engage in scholarship.

6. Program Integration and Collaboration

a. Closely related programs in this or other Oregon colleges and universities.

Utah State University is the first and only university in the US to offer an undergraduate degree program focused on outdoor product; specifically on outdoor product design and development. There are three other universities that offer degrees and certificates which focus directly or indirectly on outdoor products, including:

- University of Oregon: Master of Science in Sports Product Management (Portland, Oregon)
- Portland State University: Outdoor Product Management Certificate Program (Portland, Oregon)
- Colorado State: B.S. in Apparel and Merchandising (future goal is to focus on outdoor products)
- b. Ways in which the program complements other similar programs in other Oregon institutions and other related programs at this institution. Proposal should identify the potential for collaboration.

The University of Oregon's master's program in sports product management and Portland State's athletic and outdoor product planning certificate are the only programs in Oregon with similarities or possible synergies with the proposed degree program.

The University of Oregon's Master's degree program focuses on the larger sports product industry. Students attending the program receive practical, graduate level training specifically designed to place students in footwear, apparel, and sports product companies. Students attending the U of O program are offered instruction in business and management of the entire life cycle of sports products. In seeking approval from the Oregon Higher Education Coordinating Commission the university described the students entering the program as follows: "Sports product management students will have backgrounds in biomechanics, engineering, chemistry, design, supply-chain management or business."

In terms of the curriculum, U of O's program is part of the Lundquist College of Business. Twelve of the 20 courses offered have a business-related focus (business, marketing, management, accounting). Two course offerings are science based (Industrial Ecology, Human Physiology), three address sports product design and development and one offering is in Journalism (the remaining two include a trade show visit to Europe and company internship).

The proposed program could certainly be an attractive feeder program into U of O's master's degree program and may contain courses that the U of O could consider as progress towards their degree, but our program will not directly compete with theirs.

Portland State's Athletic and Outdoor Product Management Certificate Program resides within the School of Business Administration, Center for Executive and Professional Education program (CEPE). CEPE has been offering educational courses for over 30 years with a focus on students who are already employed. Courses are taught year-round face-to-face and online and are specifically designed for working professionals. A stated goal of CEPE is to provide a continuing educational program to working professionals as a less expensive and time-consuming alternative to MBAs.

Although there are some business-related product courses, there are no courses within the certificate program that teach any element of product design/design technology with very little content regarding product development and production. PSU's certificate focuses on sales and distribution, retailing, and go-to-market strategies. From their website, "Students receive an overview of the product-planning process, from idea generation to consumer engagement, with an emphasis on brand and relationship management." All five courses in the certificate approach the product from a business perspective. As such, our program has a very different focus and leads to a bachelor's degree rather than a certificate.

c. If applicable, proposal should state why this program may not be collaborating with existing similar programs.

This program is unique in the state and while it could serve as a viable "feeder" program to U of O's masters degree program, its purpose is to produce baccalaureate trained professionals for industry.

d. Potential impacts on other programs.

Because the program is the only Outdoor Products undergraduate program in the region, it should impose minimal impact on other programs. It may draw a small number of students from OSU's Tourism, Recreation, and Adventure Leadership program as well as a few students from the Design and Innovation Management program, but we envision that the majority of students will be from the untapped Outdoor Products Industry market sector, which is underserved in the state and nationally.

7. External Review

If the proposed program is a graduate level program, follow the guidelines provided in *External Review of New Graduate Level Academic Programs* in addition to completing all of the above information.

Template Revised May 2016

Subject: Re: OSU Outdoor Products Degree Program

- Date: Saturday, December 15, 2018 at 4:31:43 PM Pacific Standard Time
- From: Adrienne Moser <adrienne.moser@gmail.com>
- To: Raynak, Geoffrey <geoff.raynak@osucascades.edu>

Geoff,

Here you go, please let me know if I need to expand any areas of the letter. While I have been a flaky contributor to this effort, I am a full supporter of the concept and was honored to provide Chris with input during his research. I hope I can be of help as you get this program off the ground!

Best,

Adrienne

I have been in the sports and outdoor apparel industry since the late 80's, starting my career at Hind Performance working in development, merchandising and sourcing before spending 15 years at Patagonia as GMM, and 5 at Columbia Sportswear leading the merchandising and design engines. I have worked along pattern makers, developers, sourcing, designers and merchants and have watched the personnel in the industry evolve from self-taught tinkerers and sewers who grew up in the factories, learning pattern making, development and production sewing by working on the floor themselves. This has evolved to present day, where those starting in the outdoor industry have passion for the product, the creation process, sports, environment and business, but do not necessarily have the well-rounded, ground up, full view of how to bring a product to market and in how the decisions we make in business effect the environment on both a short and long term basis. Many of the people I have interviewed have come from universities that teach design or merchandising, or they have worked for direct-to-consumer brands where they have a great background in buying. But too often, they have been silo'd, by school or their employer, and only understand a small slice of the go-to-market process that delivers revenue and market share growth.

This is finally being addressed by the OSU - proposed Bachelor of Science degree in Outdoor Products. This holistic program addresses the knowledge that is required to be successful in commercializing a product and developing a strong go-to-market plan. In addition, it addresses a critical aspect of the outdoor market, that of thinking broader than just the needs of the business's financial growth but delivering a bottom line the builds profits while supporting the people involved and the environmental impact of running the business. The viability of the outdoor market is directly tied to the passion of the consumer that participates in it. This participation leads to a desire, whether selfish, altruistic or both, to preserve outdoor spaces. Patagonia led the way, weaving environmental protection into their DNA, decreasing product impact while generously protecting the environment and rabid consumer loyalty has resulted. Where this was once leading edge now companies large and small are adopting programs of sustainability, and powerful retailers like REI and MEC are requiring sustainability improvements as a "pay to play" in their assortment decisions.

All of this points the needs for the future employees of the outdoor industry to be more well rounded, more knowledgeable and to have greater exposure to the thinking and realities of the interconnectedness of business and wild places. They must have more than book learning to be successful - while lectures and studies can give a baseline, internships in the industry are the only way to fully understand the multiple cogs that must align to move the product engine forward. I am such a believer in this, that in my 5 years of leading the apparel merchandising team at Columbia, we did not hire a junior merchant unless they had successfully interned at a company. I am excited for this program to get off the ground and provide the industry with a new generation of employees, more rounded, more global in thinking, more interconnected with the disciplines that drive the product engine.

VP Product, SAXX Underwear

Robert Axle Ponjact The Robart Aske Roject Connecting and Cultivating the Outdoor Industry Oregon Outdoor Alliance 700 SW Bonnet Way Bend, OR 97702 Attn: AM Higher Education Coordinating Commission 255 Capitol Street NE, Third Floor Salem, OR 97310

Re: Bachelor of Science degree in Outdoor Products proposed by Oregon State University

Dear Commission Members:

As members and contributors to the Oregon Outdoor Alliance, we hold true to the values of unifying and inspiring our outdoor community. We support and advocate for local and global growth for an industry we live in and live through.

In the spirit of these values and the quest for a vibrant local industry, we are proud to support the four-year Bachelor of Science degree in Outdoor Products proposed by Oregon State University - Cascades. The program will have a systems approach to product commercialization; including innovation, design, testing, and management. The curriculum will include elements of sustainability throughout and an understanding of natural resources and public lands, in total, fulfilling an important and unmet educational need in the local and global outdoor industry.

From our perspective, strength and growth for our industry will rely on well-prepared future employees with an understanding and respect for the four key fundamentals being put forth by the Outdoor Products degree. To reiterate, these four key learning outcomes are:

- Develop a systems overview of product commercialization.
- Reducing negative environmental impact; balancing commercialization and conservation; promoting social justice.
- Understanding the history, use, management and protection of Public Lands is an essential competency for work in the outdoor product industry.
- Pre-employment exposure to seminars, internships, and integrated cross-discipline projects.

The Oregon Outdoor Alliance is proud to support this important step toward creating new academic opportunities in Oregon and supporting future Outdoor Industry leaders with the educational foundation to balance product, profits, people, and the planet.

Sincerely,

Membership - Oregon Outdoor Alliance

EPIC MENDE CONSULTING Karty Pompe, The Robert Axle Privat Chris Kratsel, The Robert Atte Project Mike Wollenfels, VP 66001 Sales Hydro Flast Marg Ky Cup Ryan Culp, Entre Prises

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Oregon Outdoor Alliance 700 SW Bonnet Way Bend, OR 97702

Attn: Higher Education Coordinating Commission 255 Capitol Street NE, Third Floor Salem, OR 97310

Re: Bachelor of Science degree in Outdoor Products proposed by Oregon State University

Dear Commission Members:

As members and contributors to the Oregon Outdoor Alliance, we hold true to the values of unifying and inspiring our outdoor community. We support and advocate for local and global growth for an industry we live in and live through.

In the spirit of these values and the quest for a vibrant local industry, we are proud to support the four-year Bachelor of Science degree in Outdoor Products proposed by Oregon State University - Cascades. The program will have a systems approach to product commercialization; including innovation, design, testing, and management. The curriculum will include elements of sustainability throughout and an understanding of natural resources and public lands, in total, fulfilling an important and unmet educational need in the local and global outdoor industry.

From our perspective, strength and growth for our industry will rely on well-prepared future employees with an understanding and respect for the four key fundamentals being put forth by the Outdoor Products degree. To reiterate, these four key learning outcomes are:

- Develop a systems overview of product commercialization.
- Reducing negative environmental impact; balancing commercialization and conservation; promoting social justice.
- Understanding the history, use, management and protection of Public Lands is an essential competency for work in the outdoor product industry.
- Pre-employment exposure to seminars, internships, and integrated cross-discipline projects.

The Oregon Outdoor Alliance is proud to support this important step toward creating new academic opportunities in Oregon and supporting future Outdoor Industry leaders with the educational foundation to balance product, profits, people, and the planet.

Sincerely,

Sander Culliton CEO Entre-Prises Climbing Walls USA, Inc. Bend, OR Summit Sponsor - Oregon Outdoor Alliance



January 28, 2019

Higher Education Coordinating Commission

Dear HECC Committee,

As members of the Hydro Flask Executive Leadership Team, we would like to voice our support of the OSU Cascades Outdoor Products Degree. Creating a four-year Bachelor of Science Outdoor Products degree serving Central Oregon and the Outdoor Industry overall is an academic opportunity critical to the continued development of our higher education and outdoor industry economy – specific to product commercialization, innovation, design and management.

As one of Bend's outdoor industry leaders with approximately 100 Oregon employees (and growing), we recognize and support the need for well-prepared *future* employees, with the experience and education needed to thrive in this work environment. This program will fulfill this need.

Thank you for your consideration.

Sincerely,

Scott Allan SVP & Global GM Hydro Flask

MC) al

Mike Wallenfels VP World Wide Sales President, Oregon Outdoor Alliance

David Visnack

VP Product

Ahyllis Grove VP Marketing & eCommerce Board Member, Outdoor Industry Association



525 NW York Dr., Bend OR 97703 888 584 9376 www.hydroflask.com



Outdoor Economy Initiative

Lee Davis, Executive Director OSU Portland Center 555 SW Morrison, #2111 Portland, OR 97204 http://info.pace.oregonstate.edu/oei

Geoff Raynak, PhD Executive Director in Residence, Outdoor Products OSU-Cascades, Tykeson Hall 336 1500 SW Chandler Avenue Bend, Oregon 97702

January 29, 2019

RE: Letter of Support for OSU Outdoor Products Degree Program

Dear Dr. Raynak,

I'm writing you today in support of the OSU Cascades proposal to the Higher Education Coordinating Commission (HECC) for a four-year Bachelor of Science degree in Outdoor Products. I particularly appreciate the opportunity to provide feedback and input to the proposal as I was recently hired by Oregon State University to lead their new OSU Outdoor Economy Initiative, based in Portland. I also strongly see the industry need for this new degree program from the vantage of my new position and also from my previous role in leading statewide community organizing work for the outdoor recreation economy in Oregon.

As you know, through the new Outdoor Economy Initiative at OSU, my team is charged with broadly understanding the continuing education and workforce development needs of the whole outdoor economy, which means we are looking at private sector industry, as well as the associated workforce in our public sector agencies, and in the supporting nonprofits and NGOs. So, the work you are doing at OSU Cascades through this new degree program for the outdoor industry, and your holistic and systematic approach to curriculum design in particular, is foundationally synergetic to the work I am leading through this new initiative.

In my previous role as the Executive Director of the Mazamas, based in Portland, I was directly involved in many facets of the burgeoning outdoor recreation movement in Oregon. This work included the passage of HB3350 which created Oregon's Office of Outdoor Recreation, the formation of *Oregon Outdoors*, a statewide advocacy coalition, and the Governor and First Gentleman's Roadmap to the Outdoors task-force. I was then, and remain today, on the core team for the Travel Oregon Outdoor Recreation Network which is working to define key strategies to enhance the outdoor recreation economy across our state. I also served on the Governor's delegation to the National Outdoor Recreation Confluence and helped to author the national Confluence accords which was then signed by the eight leading states in the recreation movement, obviously including Oregon!

With that background and professional network in mind, I can say with a great degree of confidence that the outdoor products industry is the iconic and vocal leader in this movement to bring Oregonians together around our love of the outdoors. Companies like Hydroflask, Columbia Sportswear, KEEN Footwear, Yakima Racks, and scores of other smaller companies have not only been contributing to Oregon's economic growth but have helped to fuel the organization and engagement of our outdoor economy as a whole. Here at home, this work has helped us and our community leaders to better understand and promote the intersectoral benefits of outdoor recreation to our people, our communities, our economies, and our environment.

I am writing this letter from the Outdoor Retailer Trade Association show in Denver, Colorado, and it is clear today that the Outdoor Industry, not just statewide, but nationally, is thrilled to see OSU Cascades taking a leadership role in supporting their long-term workforce development and focusing on outdoor products specifically. There are only a handful of similar degree programs in the country and none that we know of that are looking at the core curriculum in such a holistic, systematic, and responsible way.

Specific support for the stated learning outcomes:

The systems overview approach of the proposed curriculum is critically important to student success in our future workforce because our industry, like many others, is facing accelerated complexities and sophistication in how product ideas are developed from concepts to being in the hands of consumers. Additionally, the demand for constant innovation and customization of product lines coupled with significant changes in manufacturing technologies will mean that our future product managers and developers must have a broad understanding of supply chain dynamics, and the fundamentals of business accounting and management.

While many of these issues are faced by other consumer products industries, the outdoor economy workforce needs to be uniquely competent in understanding the cultural values of outdoor recreation and conservation. Graduates from this degree program will quickly become leaders in their companies, and our outdoor industry leaders must authentically understand how their business decisions affect the environment, and the people and communities that they rely on.

From the perspective of the outdoor industry itself, the noted "essential" need for all current and future employees to understand the history, use, management, and protection of America's public lands and waters cannot be overstated. Equitable access for all people to healthy and biodiverse public lands and waters is the foundational asset of the outdoor economy in America. The outdoor industry is keenly aware that if the next generation of American's does not spend time recreating outside, they may not build a bond of care with the outside world, and may not work to protect it in the future.

We believe, like many industries, that the most effective way for future leaders in the outdoor economy to understand these business complexities, the social and environmental impacts of their choices and actions, and our industry's consistent and authentic core values, is through direct exposure, mentorship, and internship with existing outdoor products companies. For all of these reasons I strongly support the intended learning outcomes of this degree program.

Why the Outdoor Recreation economy matters to Oregon's future:

The outdoor economy is currently growing faster than GDP, at a time when our population and cultures are rapidly diversifying, and when the nature of living wage jobs in America is being disrupted and reformed by automation and information technologies.

Across Oregon and the intermountain West, rural counties are actively looking for new and innovative ways to support their communities, municipal services, and infrastructure needs. And we are certain that the most attractive and durable solutions to these problems will be fundamentally rooted in each county's authentic care and understanding of their local geography, their natural resources, and their love of place.

Looking back, and into the future, we know that Oregon's indigenous, rural, and even urban cultures are inexorably tied to our local landscapes and waters through shared experiences in the outdoors. And therefore, we understand that open and equitable access to America's public lands and waters is the *keystone in the arch* which connects our people and cultures to the lands and waters we love.

If we are to have any hope of maintaining what we love most about living here in Oregon in the century ahead, we need to ensure that our future outdoor economy workforce truly understands not just how their jobs, but how their communities and landscapes rely on equitable and sustainable access to public lands. The careful integration of the outdoor recreation economy with our rural and urban communities is one of the most commonly identified and durable paths forward for the future economies of Oregon.

Why OSU Cascades is the right place to launch this degree Program:

Oregon, and Oregon State University in particular, have a proud tradition of being leaders when it comes to supporting the future of natural resource-based jobs across our state. The creation of this Outdoor Products Degree Program with a systematic and holistic basis at OSU Cascades is a strong example of how Oregon can continue to be leaders in the outdoor economy for the 21st century.

Bend itself is a known national case-study for the birth of a *microtropolis* in a rural county in Central Oregon, and Bend's immediate and equitable access to outdoor recreation is no small part of why Bend is succeeding. Bend alone has nearly 100 innovative outdoor product companies and is home to the nation's first business incubator (Bend Outdoor Works) specifically built for this growing sector. For these reasons, I can think of no better location for student to become inspired and exposed to future jobs in managing and/or developing outdoor products.

Thank you for providing the opportunity to comment on your curriculum and I and our team on the Outdoor Economy Initiative are enthusiastically supportive of this proposal.

Sincerely,

Lee Davis Executive Director - Outdoor Economy Initiative University Outreach & Engagement | Oregon State University OSU Portland Center | 555 SW Morrison, Portland, OR 97204 | Mobile: 240-751-0480 lee.davis@oregonstate.edu

Subject: Fwd: OOA Supports OSU Four Year Program

Date: Friday, February 1, 2019 at 10:37:10 AM Mountain Standard Time

From: Steering Committee <oregonoutdooralliance@gmail.com>

To: Kip Barrett <kip@edcoinfo.com>

------ Forwarded message ------From: **Matt Ertle** <<u>mertle@pridestaff.com</u>> Date: Mon, Jan 21, 2019 at 9:54 AM Subject: Re: OOA Supports OSU Four Year Program To: Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>>

I support this!

Thank you,

4.7 Stars - 46 Google Reviews

Matthew Ertle, CSP, Strategic-Partner 2214 NE Division Street, Suite 202 Bend, OR, 97703 Main: 541.797.6941 Cell: 541.331.6869 Fax: 541.797.6945

Our Mission: "Consistently provide client experiences focused on what they value most."

On Mon, Jan 21, 2019 at 9:20 AM Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>> wrote:

Important notice: Thank you to all that responded in suport of this email. We have been notified there was an issue with our email server at the time this notification was sent. Please take the time to resend your support email and/or simply support if you have not done so yet! Looking to forward our support by

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Happy New Year Members,

Welcome 2019! We are looking forward to great year ahead and thank you for your continued participation and support of OOA.

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Please read our attached OOA support letter and reply to this email to show your support. We will collect all email reply's to attach to our <u>OSU Support</u> <u>Letter</u> to show our community support.

We encourage you to spread the news to any and all friends in our outdoor community in support of this program. The more email signatures we can collect, the better.

Look forward to hearing from all of you!

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Add us to your address book

Subject: Fwd: OOA Supports OSU Four Year Program

Date: Friday, February 1, 2019 at 10:37:00 AM Mountain Standard Time

From: Steering Committee <oregonoutdooralliance@gmail.com>

To: Kip Barrett <kip@edcoinfo.com>

------ Forwarded message ------From: **Gary Bracelin** <<u>gbracelin@gmail.com</u>> Date: Mon, Jan 21, 2019 at 9:37 AM Subject: Re: OOA Supports OSU Four Year Program To: Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>>

I Support this letter. My family supports it and all of my businesses are in full support of OSU outdoor programs.

Gary Bracelin

Sent from my space age communication device

On Jan 21, 2019, at 9:20 AM, Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>> wrote:

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Subject: Fwd: OOA Supports OSU Four Year Program

Date: Friday, February 1, 2019 at 10:38:14 AM Mountain Standard Time

From: Steering Committee <oregonoutdooralliance@gmail.com>

To: Kip Barrett <kip@edcoinfo.com>

------ Forwarded message ------From: **Renee Patrick** <<u>renee.patrick@gmail.com</u>> Date: Tue, Jan 22, 2019 at 8:36 AM Subject: Re: OOA Supports OSU Four Year Program To: Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>>

Yes! Please add my name to the member supporters

Renee

On Mon, Jan 21, 2019 at 9:20 AM Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>> wrote:

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Subject: Fwd: OOA Supports OSU Four Year Program

Date: Friday, February 1, 2019 at 10:37:48 AM Mountain Standard Time

From: Steering Committee <oregonoutdooralliance@gmail.com>

To: Kip Barrett <kip@edcoinfo.com>

------ Forwarded message ------From: **Romy Mortensen** <<u>Romy@brooksresources.com</u>> Date: Mon, Jan 21, 2019 at 10:07 AM Subject: RE: OOA Supports OSU Four Year Program To: Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>>

Yes – We agree and support this.

Thank you!

Romy Mortensen

VP Sales and Marketing, Brooks Resources Corporation

From: Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>> Sent: Monday, January 21, 2019 9:21 AM To: Romy Mortensen <<u>Romy@brooksresources.com</u>> Subject: OOA Supports OSU Four Year Program

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Bend, OR 97709-1913

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Subject:Fwd: FW: OOA Supports OSU Four Year ProgramDate:Friday, February 1, 2019 at 10:37:23 AM Mountain Standard TimeFrom:Steering Committee <oregonoutdooralliance@gmail.com>To:Kip Barrett <kip@edcoinfo.com>Attachments:image001.png

------ Forwarded message ------From: **Eric Strobel** <<u>Eric.Strobel@bbsihq.com</u>> Date: Mon, Jan 21, 2019 at 9:50 AM Subject: FW: OOA Supports OSU Four Year Program To: Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>>

Hi OOA,

Being in the business of recruiting in Central Oregon, BBSI can say we desperately need to produce our own pipeline of local talent in the outdoor products industry to fill the multitude of high quality jobs offered by OOA member companies. The future for this industry is bright, but without a consistent supply of candidates, growth will be stunted.

The fairly new computer science degree at OSU Cascades is proof that a degree program links directly to available talent for the tech industry. Albeit, the graduating classes are currently small (8-10), but every graduate has a job waiting for them if not already employed by a local company. Computer science students from Corvallis are transferring to OSU Cascades to take advantage of the hundreds of tech jobs available in Central Oregon.

BBSI supports and urges the creation of a four-year Bachelor of Science degree in a Outdoor Products program.

Thank you for your consideration,

Eric Strobel | BBSI Area Manager – Central Oregon Office: (541) 382-6946 x104 | Cell: (541) 410-8630 | Fax: (541) 388-1984 From: Oregon Outdoor Alliance [mailto:<u>info@oregonoutdooralliance.org</u>]
Sent: Thursday, January 10, 2019 8:45 AM
To: Eric Strobel
Subject: OOA Supports OSU Four Year Program

Happy New Year Members,

Welcome 2019! We are looking forward to great year ahead and thank you for your continued participation and support of OOA.

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Subject: Fwd: OOA Supports OSU Four Year Program

Date: Friday, February 1, 2019 at 10:37:35 AM Mountain Standard Time

From: Steering Committee <oregonoutdooralliance@gmail.com>

To: Kip Barrett <kip@edcoinfo.com>

------ Forwarded message ------From: **Glenn Willard** <<u>glennwillard@quickfeat.com</u>> Date: Mon, Jan 21, 2019 at 9:55 AM Subject: RE: OOA Supports OSU Four Year Program To: Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>>

I certainly support a four year program.

Good luck.

Cheers,

Glenn Willard

Managing Partner

Quick Feat International

19855 4th Street

Suite #106

Bend, OR 97703

Office: 541-388-7525

Cell: 541-350-1615

www.quickfeat.com

From: Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>> Sent: Monday, January 21, 2019 9:21 AM To: <u>glennwillard@quickfeat.com</u> Subject: OOA Supports OSU Four Year Program Important notice: Thank you to all that responded in support of this email. We have been notified there was an issue with our email server at the time this notification was sent. Please take the time to resend your support email and/or simply support if you have not done so yet! Looking to forward our support by Thursday of this week.

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Bend, OR 97709-1913

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Subject: Fwd: OOA Supports OSU Four Year Program

Date: Friday, February 1, 2019 at 10:38:03 AM Mountain Standard Time

From: Steering Committee <oregonoutdooralliance@gmail.com>

To: Kip Barrett <kip@edcoinfo.com>

------ Forwarded message ------From: **Stacey Kiefer** <<u>stacey@teamzealios.com</u>> Date: Mon, Jan 21, 2019 at 10:58 AM Subject: Re: OOA Supports OSU Four Year Program To: Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>>

2 thumbs up for a Bachelor of Science degree in Outdoor Products proposed by Oregon State University!

Stacey Kiefer Director of Sales c - 847.445.8148 www.teamzealios.com

On Mon, Jan 21, 2019 at 9:20 AM Oregon Outdoor Alliance <<u>info@oregonoutdooralliance.org</u>> wrote:

Important notice: Thank you to all that responded in suport of this email. We have been notified there was an issue with our email server at the time this notification was sent. Please take the time to resend your support email and/or simply support if you have not done so yet! Looking to forward our support by Thursday of this week.

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Higher Education Coordinating Commission 255 Capitol Street NE, Third Floor Salem, OR 97310 Re: OSU Cascades Outdoor Products Degree

Dear HECC:

The mission of the Outdoor Products degree program "to educate and inspire future leaders for the opportunities and challenges in the outdoor industry" is timely and it's my belief that Oregon, and Oregon State University are particularly well-positioned to lead this effort.

Nationally, outdoor recreation is undergoing a period of expansion – in terms of the diversity of participants, innovation in products and a deepening understanding of its contribution to the economy as a whole. Collectively there is growing interest in the outdoor industry but very few programs across that nation that help people enter and build careers in our sector.

According to a 2017 report released by the Outdoor Industry Association, outdoor recreation in Oregon contributes \$16.4 billion in consumer spending, \$5.1 billion in wages and salaries, \$749 million in state and local tax revenue and supports 172,000 direct jobs. Additional 2018 research from the Bureau of Economic Analysis revealed that gross output, compensation, and employment are all growing faster in outdoor recreation than for the economy as a whole in recent years.

The Outdoor Recreation Industry Confluence Accords, ratified July 25, 2018 by eight state offices of outdoor recreation, including Oregon's, place education and workforce training among the four core principles for advancing the outdoor recreation economy. Specifically, the Education and Workforce Training principles of the Confluence Accords include:

- "Engage with educators to support environmental and outdoor learning opportunities for early and life-long outdoor activity, career development, and advocacy for outdoor recreation.
- Promote workforce training programs for technical training, skill mastery, and business opportunities across the spectrum of outdoor industry careers.
- Promote interest, participation, and diversity in the outdoors for all, supporting opportunities for early and life-long outdoor learning."

Many of my colleagues feel fortunate that a winding professional path led them here, but few have enjoyed the sort of guidance and training a program like this proposes. While there are myriad job functions within the sector – from sales and marketing, to product design and development, to outdoor guiding and education – there are also some core values that underpin them all. Namely, a focus on sustainability and social justice, as well as a foundation in natural resource management are critical aptitudes we should be nurturing in the future leaders. I'm glad to see those area core learning outcomes identified by the program staff.



From early pioneers in outdoor clothing, knife-making, athletic footwear, drift boat design, year-round skiing and more to the present day where new, and innovative products are routinely being designed, developed and even manufactured an Outdoor Products degree will stand on solid ground here in Oregon. We have the opportunity to be a world-leader in delivering outdoor experiences and launching the amazing products that enable them, and I see this program as a key part of that equation.

Regards,

Cailin O'Brien-Feeney Director Oregon Office of Outdoor Recreation Oregon Parks and Recreation Department



Higher Education Coordinating Commission 255 Capitol Street NE, Third Floor Salem, OR 97310 Re: OSU Cascades Outdoor Products Degree

2/6/19

Dear HECC,

As a lifelong business professional/ executive in the Outdoor Recreation economy, native Oregonian and having worked for KEEN Footwear(10 years), NIKE (28 years) and Columbia Sportswear (3 + years), it excites me to see what is beginning to unfold at Oregon State University – Cascades Campus in Bend, Oregon.

Oregon's business economy is strengthened each year by our own recreation economy directly.

- 172,000 direct jobs
- \$16.4 billion in consumer spending
- \$5.1 billion in Wages
- \$749 million in State and Local tax revenues

The outdoor recreation economy employs 3X the number of people that the wood products industry does in the Beaver State (58,000 jobs).

According to the recent Outdoor Industry Association funded research and report, 69% of all Oregonians are participating in a wide variety of Outdoor Recreation every year in Oregon.

Nationally, outdoor recreation now ranks 4th as an economic sector at \$887 Billion, just behind financial services and just ahead of pharmaceuticals 5th and motor vehicles/parts 6th (\$405 billion annually).

If you are like me and are in love with the outdoors, feel blessed to have grown up here and take full advantage of our mountains, coastline, deserts and rivers to keep my life well-balanced, maintain my fitness emotional health discovering new places and gaining a respite from modern life, then you'll see where I'm coming from.

Oregon State University – Cascades can play an important and sorely needed role in preparing young adults academically and professionally to enter the robust outdoor recreation economy here or elsewhere.



As an employer, KEEN needs not only well-rounded accountants and finance graduates, but also professionally trained graduates with experience in product design, development (engineering by a different name) and consumer products champions who are trained and have instincts to dive deeply into consumer insights. Tapping the passions of your student body, helping them gain world-class skills and experiences that tie to the outdoor recreation economic engine is the trick. It's exactly the point where OSU Cascades Bend can perform a needed educational role in sustainably building this core body of knowledge for Oregon's future workforce.

We need your help. Having met several times with your own Professor Geoff Raynak, I am very confident that Oregon State University Cascades will add tremendously to the emerging demand for bright, energetic, graduates. We know there is a need to build upon the growing and sustainable economic well-being that Oregon and many other states have in the outdoor recreation economy.

I would love to have the chance to speak with any and all of the OSU HECC members to answer any and all questions you may have.

Sincerely,

Kirk Richardson KEEN, Inc./Sr. Director, KEEN Effect 515 NW 13th Ave, Portland, OR 97209

Cc: Prof. Geoffrey Raynak, OSU



ACCESSIBILITY New Program Proposal (Degree or Certificate) Guidelines for Addressing Accessibility

Sections 503 and 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990 (ADA), as amended by the ADA Amendments Act of 2008 prohibits discrimination on the basis of disability. The Rehabilitation Act and the ADA require that no qualified person shall, solely by reason of disability, be denied access to, participation in, or the benefits of, any program or activity operated by the University. Each qualified person shall receive the reasonable accommodations needed to ensure equal access to employment, educational opportunities, programs, and activities in the most integrated setting feasible.

For questions and assistance with addressing access, please contact: the Office of Disability and Access Services (737-4098), or the Office of Affirmative Action and Equal Opportunity (737-3556).

Title of Proposal: Outdoor Products

Date: 12/15/18

School/Department/Program: OSU-Cascades College: College of Engineering

Accessibility (<u>http://oregonstate.edu/accessibility/policies</u>)

Faculty Guidelines (<u>http://ds.oregonstate.edu/facultyguidelines</u>)

✓ Information Technology Guidelines (<u>http://oregonstate.edu/accessibility/ITpolicy</u>)

By signing this form, we affirm that at we have reviewed the listed documents and will apply a good faith effort to ensure accessibility in curricular design, delivery, and supporting information.

Julie Less Yewsone

Sign (School/Department/Program Director/Chair/Head)

Julie Gess-Newsome

12/15/18

Print (School/Department/Program Director/Chair/Head)

Date

Source: Office of Academic Programs, Assessment, and Accreditation (glb/ch; 4-26-16)

OSU Libraries Collection Development

Library Evaluation for OSU Cascades Category I Proposal

Bachelor of Science in Outdoor Products Title of Proposal

OSU Cascades College

The subject librarian responsible for collection development in the pertinent curricular area has assessed whether the existing library collections and services can support the proposal. Based on this review, the subject librarian concludes that present collections and services are:

[] inadequate to support the proposal (see budget needs below) [x] marginally adequate to support the proposal [] adequate to support the proposal

Estimated funding needed to upgrade collections or services to support the proposal (details are attached)

Funding Required: \$325 for monographs; average 1% inflation each year \$507 for share of Sports Marketing Association; average 3% inflation each year

Comments and Recommendations:

Date Received: December 17, 2018

Date Completed: January 11, 2019

Laurel Kristick Collection Assessment Librarian

Kerri Goergen-Doll Head of Collections & Resource Sharing

Faye A. Chadwell Donald and Delpha Campbell University Librarian and **OSU** Press Director

Kaurel Signature

1

Library Support for the Proposed Bachelor of Science in Outdoor Products Program on Cascades Campus

This report is an analysis of the capacity of the OSU Cascades local library collection and services, in combination with access to the resources of the whole of OSU Libraries and Summit, to support the proposed Bachelor of Science in Outdoor Products degree on the Cascades campus.

Print Monographs and E-Books

Due to the size restrictions of the OSU Cascades Library, support for this program will depend on the OSU Valley Library in Corvallis and OSULP e-book collections. The print collection at the Valley Library is available to OSU Cascades students by request and can be received within 3 working days. The print collection is adequate to support the program. OSULP's print monograph collection was compared to four peer institutions and overall has a stronger collection in comparison. The weakest area of the collections was in titles specifically for outdoor products, as opposed to general design, management and marketing subjects. See Table 1 for the full comparison.

OSULP recommends funds to cover the acquisition of new monographs to meet the needs of the proposed program, based on faculty requests and student demand. On average, there are 1-2 books published specifically on the outdoor recreation gear and equipment that have a Research-Recommended classification from YBP Services, the book vendor that OSULP uses to acquire monographs. These titles average \$325 each for the electronic version.

Subject Headings	OSU	Utah State Univ.	Univ. Oregon	Portland State Univ.	Colorado State Univ.	OSU Rank
Athleticsequipment and supplies	13	3	8	4	5	1
Branding (Marketing)	64	63	126	44	199	3
Commercial products	366	79	249	149	94	1
Concurrent engineering	37	23	7	23	32	1
Engineering design	433	253	98	. 206	280	1
Industrial design	833	413	561	192	298	1
Industrial engineering	128	42	34	53	61	1
Manufacturing processes	455	207	124	215	234	1
Marketing	6,194	2,527	3,531	2,261	3,383	1
Marketing research	624	218	386	208	345	1
New products	309	228	310	241	304	2
Outdoor recreationequipment and supplies	5	6	6	6	8	5
Product design	40	51	90	17	24	3
Product life cycle	61	33	54	31	44	1
Product management	120	96	144	108	195	3
Production engineering	270	98	55	81	132	1

Table 1. Monograph Comparison with Peer Institutions

Subject Headings	OSU	Utah State Univ.	Univ. Oregon	Portland State Univ.	Colorado State Univ.	OSU Rank
Production management	424	277	210	307	318	1
Recreationequipment and supplies	7	4	7	15	3	2
Sporting goodsdesign and construction	0	3	5	0	7	4
Sustainable design	24	44	107	16	32	4
Technological innovations	3,406	1,589	3,965	2,366	2,066	2
Total	9,796	5,636	9,242	5,955	7,140	1

The growing availability of e-books makes it possible to expedite access to more information from various locations. This immediate access serves the OSU Cascades students and faculty well. Students at the OSU Cascades campus will have access to the e-books purchased centrally, which includes over 6,050 titles in relevant subject areas, in a collection of almost 400,000 titles. In addition, there are over 1,000 streaming videos on related topics.

OSU is served well by the OSULP investment in the Orbis/Cascades Alliance, whose combined collection is substantial. Students and faculty can order from the collections of all the libraries in the Orbis Cascade Alliance through the Summit catalog. University of Oregon, Portland State University, University of Washington and Washington State University are some of the larger research libraries represented in the Summit catalog. Books requested through Summit are delivered to OSULP within three to five working days.

Serials/Journals

The OSULP maintain an adequate collection of journals in business, marketing, design, and production to support the existing program on the Corvallis campus. The majority of journal subscriptions are for electronic access to the articles, so OSU Cascades students have immediate access to the content. There is concern that with regular price increases to our licenses and a flat budget that access may be eroded over time. The OSULP already have sacrificed timely access to some titles in favor of an embargo period to cut costs.

Indexes and Databases

The core indexes to the relevant information for this program are shown in Table 2. The OSULP maintain access to these databases as they are core to a number of OSU's primary research and teaching areas. One critical database, Sports Market Analysis (SMA), was originally acquired to support business courses. Use has been dropping over the past few years, and the database has been under consideration for cancellation. We recommend that Cascades pay for half of the cost of this resource to ensure that the subscription will continue. SMA currently costs \$985 per year, and averages about 3% annual inflation, so Cascades share would be approximately \$507 for year one.

Databases	Publisher	Full Text Coverage
Hospitality, Tourism and	Cengage	Over 800 journals,
Leisure Collection	Learning	reference titles and
		handbooks on the
		hospitality and
		tourism fields.
Sports Market Analytics	SBRnet	Reports and statistics
(SMA)		on all areas of sports,
		including specific
		sports, sporting
		goods, marketing,
		media, etc.
Business Source Premier	Ebscohost	Full text to nearly
		3,300 scholarly
		business journals and
		trade journals on all
		business subjects
First Research	Mergent	Profiles on over 900
	_	industry segments
NetAdvantage	Standard & Poors	Includes Corporation
		Records, Stock
		Reports and Industry
		Surveys
Mergent Online	Mergent	Information on US
		and international
		companies
Mintel Market Research	Mintel	Research reports
Reports		covering US and
		international
		marketplaces
Wharton Research Data	Wharton School	Financial, economic
Services (WRDS)		and marketing data
Compendex	Elsevier	Index to articles,
		conference
		proceedings and
		other resources
		covering all areas of
		engineering
Material ConneXion	Sandow	Data on over 1,400
		new and innovative
		materials

Table 2: Indexes and Databases for Outdoor Products

Key library services & librarian expertise

Expertise at OSU-Cascades is covered by Sara Fay Phillips, the Cascades Librarian. In that capacity, she provides instruction as requested either in-class or via the web, responds to reference inquiries, and develops materials to assist faculty members and students in their research.

The Library Liaisons for the College of Business (Diana J. Castillo) and the College of Engineering (Lindsay Marlow) support the Cascades Librarian in the relevant subject areas for this program. Library Liaisons serve as the major contact for faculty, staff and students, monitors trends in curriculum and research, attends relevant college, departmental and program events to gain insight, and identifies how OSULP expertise and resources can be most effectively used. The promote OSULP expertise and collaborate with the Expert Leads to integrate and leverage that expertise throughout the OSU Community.

Providing access to items not owned by OSULP is the domain of the Interlibrary Loan and Summit staff both at OSULP and at lending libraries. Print articles located in the OSU Libraries' collections may be requested via the Scan and Deliver service, which provides PDFs of the requested articles.

Summary

OSU Libraries collections are marginally adequate to support the proposed Bachelor of Science in Outdoor Products degree at Cascades campus.

Respectfully submitted,

Laurel Kristick Collection Assessment and Science Librarian January 11, 2019

EXPERIENCE

OSU Cascades Executive Director of Outdoor Products Bend, Oregon

- Develop and Establish a highly regarded Outdoor Product curriculum with strong ties to the profession and industry.
- Work directly with local and regional industry to establish program learning outcomes
- Support the OSU Foundation to establish a strong donor base
- Engage Industry stakeholders to identify internships, course projects, and employment opportunities
- Develop and teach courses in the OSU-Cascades curriculum.
- Participate in curriculum development and assessment, as well as personal professional development.
- Scholarship activities revolving around applied research within the industry resulting in a local or regional reputation.
- University and Professional Services to support the Outdoor Products Program.

LittleStar Principal

- Listen, mentor, challenge and reward client talent pool
- Directly and indirectly manage a cross-cultural team of innovators, developers, designers and manufactures across customer/client base.
- Create, manage and execute on design, development, sourcing and product lifecycle
- Mentor crafting of PRDs (Product Requirement Documents) with concrete research, consumer insight, global market input and product creation specifications
- Guide industrial design ideation or concepts into manufacturable parts
- Deploy DFM/EPC philosophies from R&D into commercialization / production to mitigate supply chain stresses
- Commercialize new product ranging from precision cut-and-sew laminations to carbon fiber composites to injected rubber or foams components
- Inject LEAN principles from end-to-end to ensure on-time, high-quality goods and prevent value stream losses
- Continuously direct vendor/sub-vendor synergy to control materials, MOQ/MPQ, lead-times, capacity and supply planning
- Champion continuous-improvement initiative to manifest uncapitalized opportunities into bottom-line profit
- Sales Meeting Presentations of product exiting Innovation into the Commercialization Pipeline
- Lead strategic planning sessions with Global Marketing to help create and communicate seasonal PRDs and MRDs

Ruffwear Director of Product

- Bend, Oregon Responsible for managing and executing design, development, sourcing and product lifecycle for all of Ruffwear's performance outdoor gear – generating over \$7.3M in sales per year from our company-wide 22 employees
- Create/manage PRDs (Product Requirement Documents) with concrete research, consumer insight, global market input and product creation specifications
- Commercialize new products to account for 12% of product line and 12% of sales seasonally (2 seasons per year)
- Effective Leadership Communication responsibilities in the form of seasonal documents including: MRDs (Manufacturing Requirement Documents), Multilingual Marketing Catalogs, Tradeshow Collateral, Timeline Effectiveness Evaluations and Fiscal Year Reviews
- Own and execute flawlessly on multiple overlapping 18-month EPC development and commercialization calendars
- Deploy DFM philosophies from R&D into commercialization and bulk production to mitigate supply chain stresses
- Inject LEAN principles from end-to-end to ensure on-time, high-quality goods and prevent value stream losses •
- Daily communication, weekly conferences and semi-annual travel to strengthen ties with domestic/international partners
- Continuous direct vendor/sub-vendor synergy to control materials, MOQ/MPQ, lead-times, capacity and supply planning
- Report and evaluate quarterly rolling gross-profit-based ROI per product style to support CEO's P&L reporting.
- Seasonal SKU reduction via PLC analysis to identify and plan product end of life to edit/amplify long-term product map
- Champion continuous-improvement initiative to manifest un-capitalized opportunities into bottom-line profit
- 2011 Objective: Vendor/sub-vendor consolidation maintained gross margin despite input pressure from Manufactures
- 2012 Objective: Asia-side centralization increased gross margin by two-points via \$150K annual COGS reduction
- 2013 Objective: Leverage centralization efforts to lower landed costs and reduce lead-times to all global markets

Bend, Oregon July 2014 -

July 2010 – July 2014

lune 2018 –

Nike Innovation Lead in Innovation Kitchen

- Leadership for executing and managing design, development and commercialization of advanced concepts for Team Sports Equipment (balls, bags, bats, protective gear)
- Primarily accountable for innovating soccer product with \$150M total annual revenue. Product ranges from precision cut-and-sew laminations to carbon fiber composites to injected rubber or foams components
- Directly and indirectly manage a cross-company team of innovators, developers, designers and manufactures
- Listen, mentor, challenge and reward my direct reports as well as strategic development partners
- Quarterly Sales Meeting Presentations of product exiting Innovation into the Commercialization Pipeline
- Lead strategic planning sessions with Global Marketing to help create and communicate seasonal PRDs and MRDs
- Jointly responsible for creating and maintaining a \$2.5M annual budget dedicated to product innovation
- Multiple annual trips to overseas factory partners to ensure quality production practices from Nike's vast factory base.
- Summer 2009, relocated to Shanghai for 4 months to deploy future innovation technology with key factory partners

Norton Motorcycles Mechanical Design Engineer Clackamas, Oregon March 2005 – February 2006

- Design, engineering, manufacturing, documentation for release of a completely new motorcycle
- Responsible for complex assemblies, procedures, mechanical integration, castings, and Class-A surfaces
- Actualized industrial design ideation or concepts into manufacturable parts

<u>i-generator</u> <u>Mechanical Design Engineer</u> Portland, Oregon May 2000 – May 2004

- Product ideation, research interpretation, product visualization, and design for manufacture
- Collaborated with industrial designers and engineers to provide content to contracted clients

BUSINESS SKILLS

- Comfortable and confident to present complex data-sets, thoughtful visual displays of quantitative information, concepts, and product to Peer-Research Groups, Senior Management as well as internal/external partners
- DFM, EPC and PLC proficient: combining engineering, innovation and scientific rigor
- Competent with corporate PDM for documentation management and ERP/NetSuite system for enterprise
 management
- Veteran of Solidworks, Rhino3D, and Labview. Proficient with Adobe Creative and Microsoft Office Suites

EDUCATION

- PhD, Bioengineering, 2000. University of Washington, Seattle, Washington
 - Dissertation: Dynamic spinal canal occlusion during sagittal plane inertial loading
 - Designed and created novel electronic/hydraulic measurement systems to measure neural space deformation
 - Engineered and deployed a closed-loop bench-top electromotor sled to generate between 2 and 20 g's of acceleration
 - Asked and answered real-world questions related to real-world injuries from whiplash and pilot-ejection events
- BS with Honors, Mechanical and Aerospace Engineering, 1994. Cornell University, Ithaca, New York

TEACHING / ADVISING / ASSIGNMENTS

- WI19 Learning Lab Coach MTH111
- WI19 Learning Lab Coach MTH112
- FA18 Learning Lab Coach MTH111
- FA18 Learning Lab Coach MTH251

SERVICE

- 2018- Program Lead Committee
- 2018- Co-Curricular Committee

Ronald J. Reuter

Maybelle Clark MacDonald Professor of Teaching Excellence in Forestry 2012-2015 OSU Elizabeth P. Ritchie Distinguished Professor 2012

> Department of Forest Ecosystems and Society Oregon State University - Cascades 2600 NW College Way Bend, Oregon 97703 541.322.3109 ron.reuter@oregonstate.edu

EDUCATION

University of Minnesota

Degree: Ph.D. in Soil Science (Pedology), Minor in Water Resources, July 1999 Dissertation: Spatial and Temporal Relations between Soil Processes, Morphology, and Hydrology in Minnesota Landscapes

University of Idaho

Degree: MS in Soil Science, December 1995

Thesis: Transport and Flow Characteristics of Perched Water in Loess-Derived Soils Penn State University

Degree: BS in Environmental Resource Management, December 1992

WORK EXPERIENCE

Associate Professor, Natural Resources	July 2008 - Present
Oregon State University, Bend, Oregon	
OSU-Cascades Assistant Dean (interim)	July 2016 – July 2017
Oregon State University, Bend, Oregon	
Assistant Professor, Natural Resources	January 2003 – June 2008
Oregon State University, Bend, Oregon	
Lecturer	September 2000 – December 2002
Humboldt State University, Arcata, Califo	ornia
Landscape Ecologist	September 2000 – December 2002
Stillwater Sciences, Arcata/Berkeley, Cali	fornia
Landscape Ecologist (Post-doc)	August 1999 to August 2000
National Exposure Research Laboratory,	U.S. EPA, Research Triangle Park, NC

PUBLICATIONS

Refereed Publications

- Mamo M., J. Ippolitto, T. Kettler, R. Reuter, D. McCallister, P. Morner, D. Husmann, and E. Blankenship. 2011. Learning Gains and Response to Digital Lessons on Soil Genesis and Development. Journal of Geoscience Education. 59(4): 194-204.
- Miwa, C.T., R. Reuter. 2010. Persistence of Western Juniper (*Juniperus occidentalis*) Resource Islands Following Canopy Removal. Northwest Science 84(4):361-368.
- Reuter, R.J. 2009. Online versus in the classroom: student success in a hands-on lab class. Amer. J. Distance Ed. 23(3):151-162 (*invited manuscript*).
- Reuter, R., M. Mamo, T. Kettler, J. Ippolito, D. McCallister, W. Zanner, C. Geiss, P. Morner, and J. Soester. 2009. Soil Genesis and Development, Lesson 4: Soil Profile Development. J. Nat. Resour. Life Sci. Educ. 38:239.

- Mamo, M., T. Kettler, J. Ippolito, R. Reuter, D. McCallister, W. Zanner, C. Geiss, P. Morner, and J. Soester. 2009. Soil Genesis and Development, Lesson 2: Weathering Processes of Rocks and Minerals. J. Nat. Resour. Life Sci. Educ. 38:238.
- Ippolito, J., M. Mamo, T. Kettler, R. Reuter, D. McCallister, W. Zanner, C. Geiss, P. Morner, and J. Soester. 2009. Soil Genesis and Development, Lesson 3: Soil Forming Factors. J. Nat. Resour. Life Sci. Educ. 38:239.
- Kettler, T., W. Zanner, M. Mamo, J. Ippolito, R. Reuter, D. McCallister, C. Geiss, P. Morner, and J. Soester. 2009. Soil Genesis and Development, Lesson 5: Soil Classification and Geography. J. Nat. Resour. Life Sci. Educ. 38:240.
- McCallister, D., C. Geiss, M. Mamo, T. Kettler, J. Ippolito, R. Reuter, D. McCallister, W. Zanner, P. Morner, and J. Soester. 2009. Soil Genesis and Development, Lesson 1: Rocks, Minerals, and Soils. J. Nat. Resour. Life Sci. Educ. 38:238.
- Reuter, R.J. 2007. Introductory soils online an effective way to get online students in the field. J. Nat. Resour. Life Sci. Educ. 36:139-146.
- Reuter, R.J. and J.C. Bell. 2003. Hillslope hydrology and soil morphology for a wetland basin in south central Minnesota. Soil Sci. Soc. Amer. Jour. 67: 365-372.
- Reuter, R.J. and J.C. Bell. 2001. Soils and Hydrology of a Wet-Sandy Catena in East-Central Minnesota. Soil Sci. Soc. Am. Jour. 65:1559-1569.
- McDaniel, P.A., R.W. Gabehart, A.L. Falen, J.E. Hammel and R.J. Reuter. 2001. Perched Water Tables on Argixeroll and Fragixeralf Hillslopes. Soil Sci. Soc. Am. Jour. 65: 805-810.
- Reuter, R.J., P.A. McDaniel, J.E. Hammel, and A.L. Falen. 1998. Solute transport in seasonal perched water tables in loess-derived soilscapes. Soil Sci. Soc. Am. Jour. 62:977-983.

Book Chapters

- Reuter, R.J. 2016. Online Delivery of Field and Laboratory-based Earth Sciences Curriculum. In D. Kennepohl (ed) *Science Teaching in Distance Education: Lessons from Research and Practice*. Stylus Publishing, Sterling, Virginia. (INVITED)
- Reuter, R.J., L. Dlugolecki, J. Doolittle, and P. Pedone. 2014. Using Remotely-Sensed Soil Conductivity to Monitor Restoration Activities on Vernal Pools, Northern Great Basin, USA. In Shahid, S.A., Abdelfattah, M.A., and Taha, F.K (eds.) Developments in Soil Salinity Assessment and Reclamation. Springer Publishing, Germany.

Book Reviews

• Reuter, R.J. 2007. A review of Restoring the Pacific Northwest: The Art and Science of Ecological Restoration in Cascadia by Dean Apostol and Marcia Sinclair, eds. (2006). Ecological Restoration 25:288-289

Notes

- Zophy, K. and R.J. Reuter. 2006. Using topography and understory plant community characteristics to prioritize the management of western juniper (Juniperus occidentalis). Ecological Restoration. 24:280-281.
- Reuter, R.J. 2005. Learning Ecological Restoration at a Distance (Oregon). Ecological Restoration 23:290.

Other Peer-Reviewed Publications

• Smith, E.R., R. V. O'Neill, J.D. Wickham, K.B., Jones, L. Jackson, J.V. Kilaru, and R. Reuter. 2000. The USEPA's Regional Vulnerability Assessment Program: A Research Strategy for 2001-2006. US Environmental Protection Agency, Office of Research and Development, Research Triangle Park, NC.

PRESENTATIONS

Oral Presentations - INVITED

- Reuter, R.J. Bringing the pits to online learning: At home labs in soil science and other dirty tales. Price Chair in Teaching, Learning, and Advising Symposium: Enhancing the Learning Experience. The Ohio State University, Columbus, OH. August 2017.
- Reuter, R.J. Ecology and Restoration of Western Juniper Invaded Rangelands. Oregon Society of American Foresters, May 2014.
- Reuter, R.J. Patterns of Live Fuel Moisture for Central Oregon. Central Oregon Fire Symposium, Bend, OR, April 2014.
- Reuter, R.J. Perspectives of an Online Educator. Am. Soc. of Agron. Annual International Meeting, San Antonio, TX, Oct 2011.
- Reuter, R.J. A Tale of Two Countries: Unique Differences, Significant Likenesses. Pacific Northwest Economic Development Council Annual Meeting, Sunriver, OR. July 19 2011.
- Reuter, R.J. 2007. Ecology and restoration of western juniper-invaded rangelands. Irrigated Agriculture Research and Extension Center Seminar Series, Washington State University, Prosser, WA. September 26 2007.

Oral Presentations – VOLUNTEERED

- Reuter, R.J. and M. R. Orr. Use of Solarization to Restore Cheatgrass-infested Uplands. Society of Ecological Restoration Pacific Northwest Chapter Meeting, Redmond, OR, Oct 2014
- Reuter, R.J., L. Dlugolecki, J. Doolittle, and P. Pedone. Using Remotely-Sensed Soil Conductivity to Monitor Restoration Activities on Vernal Pools, Northern Great Basin, USA. Amer. Soc. Agron. Annual Meeting, Long Beach, CA, Nov 2010.
- Reuter, R.J., L. Dlugolecki, J. Doolittle, and P. Pedone. Using Remotely-Sensed Soil Conductivity to Monitor Restoration Activities on Vernal Pools, Northern Great Basin, USA. PNW Soc. Wetland Sci. Annual Meeting, Bellingham, WA, April 2010.
- Reuter, R.J. and C. Miwa. 2008. Persistence of Resource Islands Following Juniperus occidentalis (Western Juniper) Canopy Removal. , Houston, TX, October 2008. (Awarded Best Oral Presentation Forest Soils Division)
- Reuter, R.J. 2007. Comparison of student success in face2face versus online soil science labbased courses. Amer. Soc. Agron. Annual Meeting, New Orleans, LA. November 2007.
- Reuter, R.J. 2007. Persistence of western juniper "resource islands" after treatment. 2007 Society for Ecological Restoration Northwest and Pacific Northwest Society of Wetland Scientists Joint Conference, Yakima, WA. September 2007.
- Reuter, R.J. 2005. Going Global: Taking soil science into distance mode. Amer. Soc. Agron. Annual Meeting, Salt Lake City, UT. November 2005.
- Reuter, R.J. 2005. Learning Ecological Restoration at a Distance. Society for Ecological Restoration

- Reuter, R.J., C.W. Zanner, and M.J. Vepraskas. 2000. Effects of catastrophic flooding on hydric soils of eastern North Carolina. Annual North Carolina Water Resources Research Conference, Raleigh. March 2000.
- Reuter, R.J., P.A. McDaniel, J.E. Hammel, and A.L. Falen. 1995. Flow characteristics of perched water in loess-derived soilscapes. Amer. Soc. Agron. Annual Meeting, St. Louis. November 1995.
- Reuter, R.J. and J.C. Bell. 1998. Evaluating hydric soils in northwestern Minnesota using a Soil Temperature Index. Amer. Soc. Agron. Annual Meeting, Baltimore. October 1998.
- Reuter, R.J. 1997. Summary of the Minnesota Wet Soils Monitoring Project. Meeting of the National Technical Committee on Hydric Soils, Corvallis. July, 1997.

Poster Presentations – VOLUNTEERED

- Stucki, D., R.J. Reuter and T. Rodhouse. Assessing the Effects of Traditional Harvest on Common Camas Populations in a Seasonally Wet Prairie. Society for Range Management, Reno, NV. January 2018.
- Reuter, R.J. and K. Hesson. Role of Soilscapes in Restoring Pasture and Cropland in Guanacaste Province, Costa Rica. Society for Range Management, Reno, NV. January 2018.
- Stucki, D. and R.J. Reuter. Evaluating the Effects of Digging and Harvesting Common Camas (*Camassia quamash* [Pursh] Greene) Bulbs in Weippe Prairie, Nez Perce National Historical Park, Idaho. Society of Ecological Restoration Pacific Northwest Chapter Meeting, Redmond, OR Oct 2014
- Wyland, S. and R.J. Reuter. Development of baseline data on Oregon's High Desert Vernal Pools. Society of Wetland Scientists, Pacific Northwest Chapter, Boise, Idaho, 2013.
- Reuter, R.J., L. Dlugolecki, J. Doolittle, and P. Pedone. Using Remotely-Sensed Soil Conductivity to Monitor Restoration Activities on Vernal Pools, Northern Great Basin, USA. International Conference on Soil Classification, Abu Dhabi, UAE, May 2010.
- Miwa, C. and R.J. Reuter. 2007. Persistence of Western Juniper Resource Islands After Treatment. Society for Range Management, Reno, NV. February 2007.
- Reuter, R.J. 2005. Learning Ecological Restoration at a Distance. 2005 Northwest and Pacific Northwest Society of Wetland Scientists Joint Conference, Seattle, WA. July 2005.
- Mamo, M., T. Kettler, J. Ippolito, R.J. Reuter, D. McCallister, P. Hain, C. Geiss, C.W. Zanner. 2006. Development and Assessment of Web-Based Applications and Principles Soil Science Lessons. Amer. Soc. Agron. Annual Meeting, Indianapolis, IN. November 2006. *(contributing author)*
- Zophy, K. and R.J. Reuter. 2006. Spatial and age structure analysis of managed western juniper (*Juniperus occidentalis*) in Central Oregon. Society for Conservation Biology, San Jose, CA. June 2006. (*major advisor*)
- Mamo, M., P. Hain, T. Kettler, J. Ippolito, C. W. Zanner, R.J. Reuter, L. Powell, D. McCallister, C. Geiss, and D. Husmann. 2005. A Multidisciplinary Approach to Applying Soil Science Principles in the Classroom. Amer. Soc. Agron. Annual Meeting, Salt Lake City, UT. November 2005. *(contributing author)*
- Reuter, R.J. 2005. Learning Ecological Restoration at a Distance. Society for Ecological Restoration, NW Branch Annual Meetings, Seattle, WA. April 2005.

- Reuter, R.J., C.W. Zanner, and M.J. Vepraskas. 2000. Effects of catastrophic flooding on hydric soils of eastern North Carolina. Amer. Soc. Agron. Annual Meeting, Minneapolis. November 2000.
- Lindbo, D.L., C.W. Zanner, R.J. Reuter, M.J. Vepraskas, F.E. Rhoton. 2000. Distribution of Hydric Soil Indicators on the Tar River Flood Plain. Amer. Soc. Agron. Annual Meeting, Minneapolis. November 2000. *(contributing author)*
- Reuter, R.J. and J.C. Bell. 1999. Modeling the distribution of hydric soils using terrain attributes. Amer. Soc. Agron. Annual Meeting, Salt Lake City. November 1999.
- Reuter, R.J., W.C. Lynn, J.C. Bell. 1997. Redox-derived spodic chemistry in a wet- sandy catena. Amer. Soc. Agron. Annual Meeting, Anaheim. October 1997.
- Reuter, R.J., J.C. Bell, and J.A. Thompson. 1996. Soil hydrology and morphology in a hydric soil landscape in west-central Minnesota. Amer. Soc. Agron. Annual Meeting, Indianapolis. November 1996.
- Reuter, R.J., P.A. McDaniel, and R.W. Gabehart. 1994. Perched water tables in xeric soils of the eastern Palouse region. Amer. Soc. Agron. Annual Meeting, Seattle. November 1996
- Reuter, R.J. and P.A. McDaniel. 1995. Near surface aquifers in soils of the Palouse region. Poster presentation (1st place poster) - Palouse Water Summit, Moscow, ID. March 1995.Presentations / Abstracts

Grants

Principle Investigator

- \$193,850 (submitted) Beaver Dam Analogs for Restoration of Riparian Woody Vegetation. Oregon Water Enhancement Board. In review. (*Co-PI*)
- \$6,530 Total Station Technology for Experiential Learning and Outreach in Stream Restoration. OSU-Cascades Learning Innovation Grants. 2017. (*Co-PI*)
- \$5,673 Soils and Tropical Forest Reforestation. Oregon State University Research Office Small Grants. 2017. (*PI*)
- \$7,553 Central Oregon Live Fuel Moisture Monitoring (Renewal). 2016. BLM-USFS Central Oregon Fire Management Service. (*PI*)
- \$70,000 A Field Test of Local Adaptation in Bluebunch Wheatgrass (Pseudoroegneria spicata). USFS Rocky Mountain Research Station. 2016. (*Co-PI*)
- \$10,000 Innovations in Technology: Tablets in field-based undergraduate education. 2015. OSU-Cascades. (*PI*)
- \$47,052 Enhanced Monitoring for Improved Management and Restoration Decision Making in the Wetlands Camas Prairies of the Upper Columbia Basin Network. 2013. US Park Service. (*PI*)
- \$24,946 Central Oregon Live Fuel Moisture Monitoring (5-yr Extension). 2011. BLM-USFS Central Oregon Fire Management Service. (*PI*)
- \$7,000 Central Oregon Live Fuel Moisture Monitoring (continuation). 2010. BLM-USFS Central Oregon Fire Management Service.
- \$94,978 Vernal Pool Water Quality. 2009. BLM.
- \$7,000 Central Oregon Live Fuel Moisture Monitoring (continuation). 2009. BLM-USFS Central Oregon Fire Management Service.
- \$14,464 Central Oregon Wilderness Area Monitoring and Assessment. 2009. National Forest Foundation.

- \$7,800 Central Oregon Live Fuel Moisture Monitoring. 2008. BLM-USFS Central Oregon Fire Management Service.
- \$5,000 Comparison of Student Success in F2F Versus Online Science Lab-based Courses. 2007. Oregon State University, Ecampus.
- \$2,500 Invasive Weeds Along the Pacific Crest Trail: Distribution and Analysis of Vectors. 2007. Mazamas Climbing Organization.
- \$92,318 Whychus Creek Watershed Project. 2005. Institute for Waters and Watershed, Upper Deschutes Watershed Council.
- \$17,000 Linking PDA and GPS Technology for Assessment of Field Studies in Distance Education. 2003. Northwest Academic Computing Consortium/OSU Resource Technology Fund.
- \$1250 Development of Permanent Field Instruction Soil Pits. 2002 Humboldt State University Foundation Small Grant Competition.

Collaborator/Co-Principal Investigator

- \$154,643 Numbers in Nature. 2015. 2015-16 Oregon University/School Partnerships. (*collaborator*)
- \$250,000 Increasing Soil Science Educational Opportunities Online for Undergraduate Students and USDA Employees. USDA Higher Education Challenge. Riverside Community College – University of California-Riverside. *(collaborator)*
- \$74,000 Broadening Earth Science Education Through On-line Lessons. 2004. National Science Foundation. (*collaborator*)

University Service

- OSU Research Council (2016-present)
- Vice Provost and Dean for Undergraduate Studies Search Committee member (2014-2015)
- OSU Cascades Healthy Communities Division Rep (2013-2016)
- Advancement of Teaching Committee (2013-2016)
- Faculty Executive Committee Senior Inter-Institutional Faculty Senate Senator (2009-2010)
- Oregon University System Inter-Institutional Faculty Senate (2008-2010)
- Faculty senate (College of Forestry) (2005-2007)
- Tenure and Promotion committee (FOR, 2007, 2011; Cascades 2009-present)
- OSU-Cascades Safety Committee (chair, 2009-2010)
- OSU-Cascades Sustainability Committee (2010-2013)
- OSU-Cascades Zero Waste Committee (chair, 2010)
- OSU Baccalaureate Core Committee (2008)
- OSU-Cascades Natural Resources undergraduate club advisor
- OSU-Cascades Fermentation Club advisor

Professional Service

- Deschutes Forest Collaborative Project, Steering Committee, research representative
- Oregon Land Conservation and Development Commission Soil Classifier Review Panel
- Associate Editor Soil Science Society of America Journal
- Associate Editor Natural Areas Journal

- Reviewer Soil Science Society of America Journal; Soil Science; AREA, Geoderma; Wetlands, Natural Areas Journal, American Journal for Undergraduate Research; The Prairie Naturalist
- Deschutes Forest Collaborative Project Steering Committee (2014 present)

Awards

- Editor's Citation for Excellence for Associate Editors for the Soil Science of America Journal, 2015
- Maybelle Clark Macdonald Professor of Teaching Excellence in Forestry, 2012-2015
- Oregon State University Elizabeth P. Ritchie Distinguished Professor for Undergraduate Teaching, 2012
- Oregon State University LL Stewart Faculty Development Award, 2012
- Oregon State University Global Learning Communities, 2012
- Ping Faculty Development Fellowship, Council on International Educational Exchange, 2012
- Fellow, International Canadian Studies Institute, 2009
- Best Oral Paper, Soil Science Society of America Division S-7, 2008

Memberships and Activities

- ARCPACS Professional Soil Scientist: #03516
- Member, Soil Science Society of America
- Member, National Association of Geoscience Teachers
- Member, Society for Rangeland Management
- Member, Society for Ecological Restoration (past)
- Member, Oregon Society of Soil Scientists (treasurer 2004-2012)
- Commute Options Central Oregon Board member (treasurer 2010-2014)

Graduate Students (major professor)

- Kevin Hesson, Soil Science. MS Project Soils and Restoration on the Pacific Slope of Costa Rica.
- Kathryn Alexander, Forest Ecosystems and Society. MS Project Restoration with Bluebunch Wheatgrass: Soils, Seeds, and Seedlings
- Bruce Moffatt, Soil Science. MS Project Vernal pools and climate change impacts in the Northern Great Basin.
- Devin Stucki, Forest Ecosystems and Society. MS Project Management and Restoration in the Wetlands Camas Prairies of the Upper Columbia Basin Network
- Sara Wyland, Water Resources Science MS Thesis: Development of baseline data on Oregon's high desert vernal pools, 2013
- Lesley Jones, Water Resources Science MS Thesis: Evaluation of Instream Flow Restoration Targets and the Carrying Capacity of Oncorhynchus mykiss according to Temperature, Whychus Creek, Deschutes Basin, Oregon, 2011
- Mike Logan, Water Resources Science. MS Thesis: Water Chemistry of Oregon Cascade Wilderness Lakes: A Comparison to 1985 Data, 2010
- Laura Dlugolecki, Forest Resources. MS Thesis: A characterization of seasonal pools in Central Oregon's high desert, 2009

- Chris Miwa, Forest Resources. MS Thesis: Persistence of western juniper resource islands following canopy removal, 2007
- Kelly Zophy, Forest Resources. MS Thesis: Spatial and age class analysis of managed western juniper (Juniperus occidentalis) woodlands in central Oregon, 2006

	Quarter	
Name	Credits	Notes
Field Methods in Ecological Restoration	4	*,#,@
Forestry Field School	3	
Current Issues in Natural Resources	3	+,@
Costa Rica – Issues in NR	3	#,+,^
Chile – Issues in NR	3	%
Ecological Restoration	4	+,#,@
Wetland and Riparian Ecology	3	+,@
Surface Processes	4	
Geographic Information Systems	4	
Water Science and Policy	3	
Managing Natural Resources for the Future	3	
NR Seminar	2	
Natural Resources Decision Making	4	
Field Instrumentation	2	
Intrduction to Soil Science	3	+,@
Soils Lab	1	+,@ +,@
Ecosystems of Wildland Soils	3	+,*,#,@
World Soil Resources	3	
Soil Genesis and Classification	4	
Soil Judging	1-4	*
	Field Methods in Ecological Restoration Forestry Field School Current Issues in Natural Resources Costa Rica – Issues in NR Chile – Issues in NR Ecological Restoration Wetland and Riparian Ecology Surface Processes Geographic Information Systems Water Science and Policy Managing Natural Resources for the Future NR Seminar Natural Resources Decision Making Field Instrumentation Intrduction to Soil Science Soils Lab Ecosystems of Wildland Soils World Soil Resources Soil Genesis and Classification	NameCreditsField Methods in Ecological Restoration4Forestry Field School3Current Issues in Natural Resources3Costa Rica – Issues in NR3Chile – Issues in NR3Ecological Restoration4Wetland and Riparian Ecology3Surface Processes4Geographic Information Systems4Water Science and Policy3NR Seminar2Natural Resources for the Future3NR Seminar2Intrduction to Soil Science3Soils Lab1Ecosystems of Wildland Soils3World Soil Resources3Soil Genesis and Classification4

Courses Taught at OSU

+ also taught as distance course

* taught simultaneously at Cascades and Corvallis

created course for OSU

@ developed inaugural OSU distance course

^ incorporates a 2-week international experience

% three week course delivered to students in Chile on term-long study abroad

Andrew Hawley andrew.hawley@osucascades.edu

A. EDUCATION AND EMPLOYMENT INFORMATION

- 1. Education
 - M.S. Ohio University, Athens, OH, 2012 Major: Master of Science Degree in Recreation and Sport Sciences
 - B.S. North Carolina State University, Raleigh, NC, 2006 Major: Bachelor of Science Degree in Parks, Recreation and Tourism Management

2. Employment

09/01/2017 – Current	Instructor, OSU-Cascades, Bend, OR
08/01/2012 - 08/05/2017	Outdoor Programs Coordinator, Appalachian State University, Boone, NC
01/01/2013 - 08/05/2017	Recreation Management & Physical Education Department Adjunct Instructor, Appalachian State University, Boone, NC
08/01/2011 - 05/01/2012	Graduate Assistant, Ohio University, Athens, OH

B. TEACHING, ADVISING, AND OTHER ASSIGNMENTS

1. Instructional Summary

OREGON STATE UNIVERSITY-CASCADES (OSU-C)

Academic	Course Number	Course Title	Enrollment
Term			
Fall 2018	TRAL 217	Intermediate Rock Climbing	8
Fall 2018	TRAL 130	Outdoor & Adventure Professions	15
Fall 2018	TRAL 499	Costa Rica: An Immersion in Culture	12
Fall 2018	PAC 110	Intro. to Canoeing	10
Fall 2018	PAC 111	Intro to Whitewater Kayaking	10
Spring 2018	TRAL/PAC	Outdoor Living Skills	21
	115		
Spring 2018	TRAL/PAC	LAB for Outdoor Living Skills	18
	118		
Spring 2018	TRAL 172	Rock Site Management	15
Spring 2018	TRAL 377	Expeditions	4
Spring 2018	TRAL 380	Expeditions – Water	4
Winter 2018	TRAL 406	Projects	2
Winter 2018	TRAL 401	Research and Scholarship	1
Winter 2018	TRAL 132	Foundations & History	35
Winter 2018	PAC 112	Learning Kayak Rolling Basics	9

Fall 2017	PAC 110	Introduction to White Water Kayaking	9
Fall 2017	PAC 111	Introduction to Canoeing	9
Fall 2017	TOL 130	Introduction to Outdoor & Adventure	14
		Professions	

APPALACHIAN STATE UNIVERSITY (ASU)

Academic	Course Number	Course Title	Enrollment
Term			
Summer 2017	RM	Tetons expedition leadership	10
Spring 2017	PE	White water rafting	12
Spring 2017	RM	Swift water rescue	8
Spring 2017	PE	Stand up paddle board expedition	10
Fall 2016	RMPE	Peru multi-element expedition	10
Fall 2016	PE	Rock climbing	10
Fall 2016	PE	Backpacking & orienteering	10
Summer 2016	RM	Tetons expedition leadership	10
Spring 2016	PE	White water rafting	14
Spring 2016	RM	Swift water rescue	10
Spring 2016	PE	Stand up paddle board expedition	9
Fall 2015	RM	Costa Rica experience	10
Fall 2015	PE	White water rafting	12
Fall 2015	PE	Rock climbing	10
Fall 2015	PE	Intro to white water kayaking	8
Fall 2015	PE	Backpacking & orienteering	10
Summer 2015	RM	Tetons expedition leadership	9
Spring 2015	RM	Swift water rescue	10
Spring 2015	PE	White water rafting	15
Spring 2015	RM	Water-based paddlesports	8
Fall 2014	RM	Costa Rica Experience	10
Fall 2014	PE	White water rafting	12
Summer 2014	RM	Leadership and group dynamics	14
Summer 2014	RM	Iceland- Land of fire and ice	14
Spring 2014	RM	Swift water rescue	9
Spring 2014	PE	White water rafting	12
Fall 2013	RM	Costa Rica Experience	9
Fall 2013	PE	Intro to white water kayaking	9
Fall 2013	PE	White water rafting	13
Spring 2013	PE	White water rafting	12
Spring 2013	RM	Swift water rescue	8

Non-credit courses and workshops / OSU-C

- Fall 2018, British Canoeing Core Coach Training
- Fall 2018, British Canoeing Sheltered Water Training

- Fall 2018, American Canoe Association Level 4 whitewater kayak instructor re-certification
- Fall 2017, Oregon Outdoor Summit, Participant
- Fall 2017, British Canoeing Foundation, Safety, Rescue Training, Student
- Fall 2017, British Canoeing 2 star assessment, Student
- Fall 2017, British Canoeing Level 1 coach certificate, Student
- Fall 2017, NOLS Wilderness Medicine Wilderness First Responder, Student
- Fall 2017, NOLS Wilderness Medicine adult/child CPR, AED & Airway Management, Student

Curriculum development / OSU-C

- TRAL four-year program new curriculum development, Fall 2017 Fall 2018
- TRAL / PAC 115, Fall 2017
- TRAL / PAC 118, Fall 2017
- TRAL / PAC 172, Fall 2017
- TRAL 217, Winter 2018
- TRAL 280, Winter 2018
- TRAL 377, Winter 2018
- TRAL 499, Spring 2018
- TRAL 260, Fall 2018

Graduate and Undergraduate Students and Postdoctoral Trainees-OSU-Cascades

- Gabriel McFarlane, undergrad, Layman Fellowship award mentor
- Patrick Dill, undergrad, OSU-Cascades faculty mentor
- Alex Ackerman, undergrad, OSU-Cascades faculty mentor

Team or Collaborative Efforts

- Fall 2018 Co-instructed OSU GO / COF faculty-led program to Costa Rica with Dr. Ron Rueter.
- Fall 2017, Winter 2018, Spring 2018, Layman Fellowship Grant, Dr. Burnett / Kinesiology, Research

International Teaching / OSU-C & ASU

- December 2018 Costa Rica, Co-instructed OSU GO faculty led TRAL/NR course
- December 2016 January 2017, Peru, Instructed ASU program/course with students
- December 2015, Costa Rica, Instructed ASU program/course with students
- December 2014, Costa Rica, Instructed ASU program/course with students
- June 2014, Iceland, Instructed ASU program/course with students
- December 2013, Costa Rica, Instructed ASU program/ course with students

2. Student Evaluation of Teaching

OREGON STATE UNIVERSITY-CASCADES (6 pt scale, 6=highest)

Academic term	Course Number	Q1 Median	Q2 Median	Responses/ Enrolled (i.e: 25/40, 63%)	Departmental Q1 Median	Departmental Q2 Median
Fall 2018	PAC 110	5.8	5.6	5/10	5.2	5.3
Fall 2018	PAC 111	5.5	5.8	6/9	5.2	5.3

Fall 2018	TRAL 130	5.3	5.4	9/15	5.2	5.3
Fall 2018	TRAL 217	5.7	6	3/8	5.2	5.3
Spring 2018	TRAL 115	5.7	5.7	3/20	5.1	5.2
Spring 2018	TRAL 118	5.5	6	2/17	5.1	5.2
Spring 2018	TRAL 172	6	6	1/13	5.1	5.2
Winter 2018	TRAL 132	5.5	5.5	4/32	5.6	5.7
Winter 2018	PAC 112	6	6	1/9	5.8	5.7
Fall 2017	PAC 110	6	6	2/9	5.5	5.6
Fall 2017	PAC 111	6	6	2/9	5.5	5.6
Fall 2017	TOL 130	5.9	5.9	5/14	5.4	5.5

3. Peer Teaching Evaluations

• Peer review date. Included in dossier? Yes/No

4. Advising / OSU-C

- OSU-Cascades faculty mentor, four, six hours
- Layman Fellowship Grant, one, 20 hours
- OSU-Cascades Rock Climbing Club advisor, 70, 10 hours
- OSU-Cascades Rock Climbing Club Sport advisor, 20, 10 hours

5. Other Assignments-OSU-Cascades

• None

C. SCHOLARSHIP AND CREATIVE ACTIVITY / OSU-C

- 1. Refereed Publications = none
 - Journal Articles
 - Book Chapters
 - Abstracts
 - Non-Refereed Publications

1. Professional meetings, symposia, conferences

- **Professional meetings** (use subheadings as make sense)
 - 12/3/18 12/6/18, British Canoeing Core Coach & Sheltered Water course week
 - 10/19/18 10/21/18, ACA L4 Whitewater Kayak re-certification course
 - 9/30/17 10/5/17, Paddlesports North America / British Canoeing week, Portland, OR, British Canoeing paddling certification courses

- o 10/16/17-10/17/17, OR Outdoor Summit, Corvallis, OR
- 10/28/17-10/30/17, NOLS Medicine Wilderness First Responder re-certification course, Bend, OR, Wilderness First Responder re-certification course
- 5/17/18, American Mountain Guides Association (AMGA) Regional Event & Workshop, Redmond, OR

• Non-conference invited presentations

- o None
- 3. Grants (perhaps divide by internal/external awards)
 - Andrew Hawley & Gabriel McFarlane, Winter 2018, Bioenergetics of Rock Climbing, Layman Fellowship Grant, \$1,500

4. Patent awards, cultivar releases, and inventions

None

D. SERVICE / OSU-C

1. University Service

- Campus Culture Committee member, Fall 2017, Winter 2018, Spring 2018, Fall 2018
- Be Kind to the Earth Day organizer, 2/16/2018
- First Year Experience Committee member, Fall 2017, Winter 2018, Spring 2018, Fall 2018
- FYE moon-shoe event organizer, 2/1/2018
- Learning Innovation Grant Committee, Winter 2018
- Faculty call night member, Admissions office, 1/17/2018
- Faculty presentation for Admitted Student Day, 3/17/18
- Faculty presentation for Juntos Day, 5/12/2018
- Steering Committee member for both AB2 & Student Success building, Spring 2018, Fall 2018
- Temporary student life coordinator hiring committee, December 2017 January 2018
- Student Rock Climbing Club advisor, Fall 2017, Winter 2018, Spring 2018, Fall 2018
- Student Rock Climbing Sports Club advisor, Fall 2018
- Deschutes Trails Coalition (DTC) board member representing OSU-Cascades & TRAL, Fall 2018
- Pumice Mine Recreation Use Steering Committee member, Fall 2018

2. Service to the Profession

- American Mountain Guide Association, member
- American Alpine Club, member
- Association of Outdoor Recreation and Education, member
- American Canoe Association, member
- American Whitewater, member
- Paddlesports North America, member
- British Canoeing, member

3. Service to the Public (professionally related)

- Smith Rock State Park Spring Thing Service day, 5/27/2018
- Deschutes Trails Coalition (DTC) member, 10/1/2018
- Active member of Hight Desert Climber Alliance (HDCA)

- 4. Service to the Public (non-professionally related) (optional)
 - None
- 5. If service is a significant percentage of FTE, outcomes or impact should be described.

E. AWARDS

- 1. National and International Awards
 - 01/18/2016, American Institute for Avalanche Research and Education AIARE 1 completion
 - 10/1/2016, American Mountain Guide Association Rock Guide Course completion
 - 9/30/2017, British Canoeing Foundation Safety & Rescue award
 - 10/1/2017, British Canoeing 2 Star award
 - 10/1/2017, British Canoeing Level 1 coaching certificate
 - 05/01/2019 expiration, American Mountain Guide Association Single Pitch Instructor
 - 10/30/2019 expiration, NOLS Wilderness Medicine Wilderness First Responder
 - 10/30/2019 expiration, NOLS Wilderness Medicine adult/child CPR, AED & Airway Management
 - 10/30/2019 expiration, NOLS Wilderness Medicine Epinephrine Auto-Injector
 - 12/31/2021 expiration, American Canoe Association Swift Water Rescue Instructor Level 5
 - 12/31/2022 expiration, American Canoe Association Whitewater Kayaking Instructor Level 4

2. State and Regional Awards

3. University and Community Awards

- 02/05/2021 expiration, CITI program Human Research Biomedical Researchers, 1-Basic Course
- 02/05/2021 expiration, CITI program Human Research Social / Behavioral Investigators and Key Personnel, 1-Basic Course
- 05/01/2016, Appalachian State University Faculty Award for Excellence in General Education Teaching
- 05/01/2014, Appalachian State University Certificate of Achievement for Extraordinary Service 2014

Rebecca Webb rebecca.webb@osucascades.edu

A. EDUCATION AND EMPLOYMENT INFORMATION

- 1. Education
 - Ph.D. Oregon State University, Corvallis, OR, 2005 Major: Mechanical Engineering
 - M.S. Pennsylvania State University, State College, PA, 2000 Major: Mechanical Engineering
 - B.S. University of Rhode Island, Kingston, RI, 1998 Major:

2. Employment

- 2016 present Program Lead and Instructor, Oregon State University, Bend, OR
- 2014 2016 Associate Professor, University of Colorado, Colorado Springs, CO
- 2007 2014 Assistant Professor, University of Colorado, Colorado Springs, CO
- 2006 2007 Senior Engineer, Directed Energy Solutions, Colorado Springs, CO
- 2000 2002 R&D Engineer, Agilent Technologies, Colorado Springs, CO

B. TEACHING, ADVISING, AND OTHER ASSIGNMENTS

1. Instructional Summary

OREGON STATE UNIVERSITY-CASCADES

Academic	Course Number	Course Title	Enrollment
Term			
F18	ENGR 211	Statics	11
F18	ME 311	Intro to Thermal-Fluid Sciences	21
F18	ENGR 407	MECOP Seminar	2
F18	ESE 497	Capstone Design	28
S18	ENGR 212	Dynamics	6
W18	ESE 360	Energy Consumption Analysis	31
W18	ENGR 248	Engineering Graphics and 3-D Modeling	7
W18	ESE 498	MIME Capstone Design	28
F17	ENGR 211	Statics	4
F17	ME 311	Intro to Thermal-Fluid Sciences	26
F17	ENGR 407	MECOP Seminar	6
F17	ESE 497	Capstone Design	28
S17	ESE 360	Energy Consumption Analysis	33

W17	ME 332	Heat Transfer	23
W17	ESE 498	Capstone Design	28
F16	ENGR 211	Statics	3
F16	ME 311	Intro to Thermal-Fluid Sciences	35
F16	ESE 497	Capstone Design	28
S16	PH 211	Physics I	7
W16	ESE 360	Energy Consumption Analysis	36
W16	ME 332	Heat Transfer	32

Curriculum development

- W16, created lecture notes and assignments for ESE 360
- S16, created lecture notes, assignments, and labs for PH 211
- F16, created lecture notes and assignments for ME 311 and ENGR 211
- W18, created lecture notes, assignments, labs, and projects for ENGR 248
- S18, created lecture notes and assignments for ENGR 212

2. Student Evaluation of Teaching

OREGON STATE UNIVERSITY-CASCADES (6 pt scale, 6=highest). Link to eSET explanation

Academic term	Course Number	Course Q1 Median	Course Q2 Median	Responses/ Enrolled (i.e: 25/40, 63%)	Department Q1 Median	Department Q2 Median
F18	ENGR 407	*				
F18	ESE 497	5.7	5.8	10/28, 36%	4.7	4.9
F18	ENGR 211	5.5	5.9	6/11, 55%	5.1	5.3
F18	ME 311	5.5	5.9	10/21, 48%	4.7	4.9
S18	ENGR 212	4.0	5.5	2/6, 33%	4.6	4.6
W18	ESE 360	5.5	5.7	14/31, 45%	4.7	4.9
W18	ENGR 248	5.0	5.0	1/7, 14%	4.6	4.6
W18	ESE 498	5.4	5.0	14/28, 50%	4.7	4.9
F17	ENGR211	*				
F17	ME 311	5.8	5.9	11/27, 41%	4.7	4.9
F17	ENGR 407	5.8	5.8	3/6, 50%	5.1	5.3
F17	ESE 497	4.8	4.8	20/28, 71%	4.7	4.9
S17	ESE 360	4.2	5.0	26/33, 79%	4.8	5.0
W17	ME 332	5.6	5.8	18/23, 78%	4.8	4.9
W17	ESE 498	5.3	5.6	19/28, 68%	4.8	4.9
F16	ENGR 211	*				
F16	ME 311	5.3	5.5	25/35, 71%	4.6	4.8
F16	ESE 497	5.0	5.1	23/28, 82%	4.6	4.8
S16	PH 211	5.3	5.7	5/7, 71%	4.6	4.9
W16	ESE 360	4.5	5.2	29/36, 81%	4.6	4.8
W16	ME 332	5.7	6.0	20/32, 63%	4.6	4.8

3. Peer Teaching Evaluations

• SP18

4. Other Assignments-OSU-Cascades

- Program Lead, September 2016 present, continually assess and improve the curriculum, coordinate the schedule and ensure course coverage, develop and maintain community and industry ties, and grow and nourish a strong feeling a community for our students
- Program Expansion, Spring 2017 present, designed curriculum, wrote proposal, and solicited letters of support for Engineering Science program

C. SCHOLARSHIP AND CREATIVE ACTIVITY

1. Refereed Publications

• Journal Articles

- Amundson, T.R., Webb, K.M., Webb, R.N., Numerical power output predictions for lowbandgap thermophotovoltaic cells coupled with a latent-heat energy storage system, Journal of Energy Storage, Volume 6, May 2016, Pages 204-212, ISSN 2352-152X. Effort: 50%
- Reid, M.R., Saleem, F.M., Scharfe, D. B., and Webb, R.N., 2013, "Preheating a Cold Gas Thruster Flow through a Thermal Energy Storage Conversion System," Journal of Propulsion and Power, 29 (6), pp. 1488 – 1492. Effort: 50%
- Reid, M.R., Scharfe, D.B., and Webb, R.N., 2013, "Computational Evaluation of a Latent Heat Energy Storage System," Solar Energy, 95, pp. 99 – 105. Effort: 50%
- Horvath, J.A. and Webb, R.N., 2013, "Experimental Study of Radiation Absorption by Minichannels of Varying Geometry," Experimental Thermal and Fluid Science, 44, pp. 631 - 636. Effort: 75%
- Horvath, J.A. and Webb, R.N., 2011, "Experimental Study of Radiation Absorption by Microchannels of Varying Aspect Ratios," Solar Energy, 85(5), pp. 1035 - 1040. Effort: 75%
- Cullion*, R., Pence, D., Liburdy, J., and Narayanan, V., 2007, "Void Fraction Variations in a Fractal-Like Branching Microchannel Network," Heat Transfer Engineering, 28(10), pp. 806-816. Effort: 25%
- Alharbi, A.Y., Pence, D.V., Cullion*, R.N., 2004, "Thermal Characteristics of Microscale Fractal-Like Branching Channel Networks, 126(5), pp. 744-752. Effort: 10%
- Alharbi, A.Y., Pence, D.V., Cullion*, R.N., 2003, "Fluid Flow Through Microscale Fractal-Like Branching Channel Networks, 125(6), pp. 1051-1057. Effort: 10%

Non-Refereed Publications

- Amundson, T.R. and Webb, R.N., 2015, "Numerical Radiation Exchange in a Rectangular Microchannel Using the Monte Carlo Method," Proceedings of the ASME Power and Energy Conference in San Diego, CA.
- Gould, D.W., Hoff, B.W., Young, M.P., Webb, R.N., 2013, "Numerical Analysis of a Single Minichannel Within a High-Temperature Hydrogen Heat Exchanger for Beamed Energy Propulsion Applications," Proc. ASME 2013 Summer Heat Transfer Conference in Minneapolis, MN.
- Amundson, T.R., Scharfe, D.B., and Webb, R.N., 2013, "Computational Evaluation of the Effects of Voids on a Thermal Energy Storage System Using Molten Silicon As the Phase Change Material," Proc. ASME 2013 Summer Heat Transfer Conference in Minneapolis, MN.

- Bosworth, R.W., Ventura, A.L., Webb, R.N., Young, M.P., Ketsdever, A.D, Gimelshein, N.E, and Gimelshein, S.F., 2012, "Thermal Modeling and Performance Measurements of Radiometric Arrays for Near Space Propulsion", Proceedings for the 43rd AIAA Thermophysics Conference, New Orleans, LA.
- Ventura, A., Ketsdever, A., Webb, R., Alexeenko, A., Gimelshein, N., and Gimelshein, S., 2012, "Repulsion and Attraction Caused By Radiometric Forces", Proceedings of the 28th International Symposium on Rarified Gas Dynamics, Zaragoza, Spain.
- Horvath, J.A., Boartfield, A.G., and Webb, R.N., 2011, "Enhanced Heat Collection Element Performance Through Surface Geometry", Proceedings of the 5th International Conference on Energy Sustainability, Washington, D.C.
- Webb, R., 2008, "Liquid Nitrogen Flow Boiling in a Parallel Microchannel Array", Proceedings from the ECI International Conference on Heat Transfer and Fluid Flow in Microscale, Whistler, B.C.
- Cullion*, R., Pence, D.V., Liburdy, J.A., Narayanan, V., 2006, "Void Fraction Variations in a Fractal-Like Branching Microchannel Network," Proceedings of the ECI International Conference on Boiling Heat Transfer, Spoleto, Italy.
- Cullion*, R.N., Mouchka, G., Pence, D.V., Liburdy, J.A., and Kanury, A.M., 2004,
 "Ammonia Desorption in Microscale Fractal-Like Branching Flow Networks," ASME Heat Transfer Fluids Engineering Conference, Charlotte, NC.
- Alharbi, A.Y., Pence, D.V., and Cullion*, R.N., 2003, "Temperature Distributions in Microscale Fractal-Like Branching Channel Networks," Proceedings of the 2003 ASME National Heat Transfer Division Summer Meeting, Las Vegas, NV.
- Wang, C.Y., Gu, W., Cullion, R. and Thomas, B., 1999, "Heat and Mass Transfer in Advanced Batteries", Proceedings of the ASME Heat Transfer Conference, Nashville, TN.

D. SERVICE

1. University Service

- 2017 Curriculum Committee
- 2017 Academic Building 2 Steering Committee
- 2016 Program Lead Committee
- 2016 ABET coordinator
- 2017 2018 Search committee chair CS Assistant Professor
- 2017 2018 Search committee Associate Dean
- 2017 2018 Search committee Physics Instructor
- 2016 Energy Systems Engineering Undergraduate Program Committee Chair
- 2016 College of Engineering Curriculum Committee
- 2016 2017 Search committee chair ESE Assistant Professor
- 2016 2017 Search committee Physics Instructor
- 2016 2017 Search committee Computer Science Instructor
- 2016 2017 Program Expansion Committee
- 2016 2017 Campus Culture Committee
- 2016 2017 Purchased all physics equipment and did lab set up for PHY 211, 212, 213

2. Service to the Public (professionally related)

- SU17, Tech Trek, designed and taught a solar oven workshop
- F17, Central Oregon Skilled Trades & Apprenticeship Fair, designed and taught a LEGO robotics workshop
- W18, ChickTech, designed and taught an alternative energy workshop
- W18, Presentation to Bend LaPine High School Job Shadow Program
- S18, PEO Career Fair
- S18, Presentation for Professional Engineers of Oregon
- F18, Discovery Day, designed a STEM activity for primary school students

E. AWARDS

1. University and Community Awards

- 2014 UCCS Million Dollar Club
- 2014 UCCS Outstanding Teacher Award
- 2012 College of Engineering and Applied Science Researcher of the Year
- 2009 College of Engineering and Applied Science Teacher of the Year

Curriculum Vitae Matthew J. Shinderman, PhD Department of Fisheries and Wildlife Science Oregon State University Cascades Bend, OR 541-322-3159 matt.shinderman@osucascades.edu

RESEARCH INTERESTS

Abiotic and biotic characteristics of habitat refugia for American pika in low-elevation lava flows. Distribution and creation of functional habitat patches for conservation target species in human dominated landscapes. Sustainability in small island socio-ecological contexts.

EDUCATION

BS	Environmental Studies/Health Sciences, James Madison University, 1995
MS	Range Ecology, Utah State University, 1999
PhD	Ecosystem Management, Colorado State University, 2003

EMPLOYMENT

2015-Present	PI, National Park Service Upper Columbia Basin Network PNW CESU
2014-Present	Director, Human and Ecosystem Resilience and Sustainability (HERS) Lab
2013-Present	Program Lead, Sustainability Double-Degree
2010-Present	Senior Instructor, OSU-Cascades
2006-Present	Independent Ecological Consultant
2005-Present	Instructor, Natural Resources Program, OSU Cascades
2003-2004	Adjunct Faculty, Natural Resources Program, OSU Cascades

TEACHING

Courses Taught at Oregon State University

FES 444 Ecological Aspects of Park and Protected Area Management, SUS 350 Sustainable Communities, NR 406 Student Projects, FW 350 Endangered Species, RNG 341 Rangeland Ecology and Management, SUS 410 Practicum, NR 499 Special Topics, SUS 304 Sustainability Assessment, SUS 102 Introduction to Environmental Science,

GRADUATE STUDENTS

Jamie Bowles, OSU. Master of Natural Resources. Major advisor. Fall 2017. Sierra Nevada Red Fox Population Monitoring Program, ODFW.

Garrett Turner, OSU. Master of Natural Resources. Major advisor. Winter 2013-December 2016. *Restoration Monitoring Program Evaluation for a Small Non-profit Organization in Washington State.*

Amanda Lawter, OSU. Master of Natural Resources. Major advisor. Fall 2013-Fall 2014. *Evaluating and Predicting Impacts of CO2 and CH4 Intrusion into a Confined Sandstone Aquifer: Fate of As and Cd.*

Jennifer Letz, Prescott College, AZ. Master of Arts Program in Sustainability. Major advisor. *Developing sustainable energy programs in US national parks*. Graduated Summer 2007.

UNDERGRADUATE STUDENT PROJECTS

Fall 2017-Fall 2018

Field and laboratory testing of *Pseudomonas flourescens* as a soil-based treatment for cheatgrass control. Advising two undergraduate students, **Aliphair Bylund** and **Tamara Payton**, for a paired laboratory-field experiment to test the effects of a novel invasive plant treatment for cheatgrass. Project conducted in collaboration with Biology faculty and one biology undergraduate student.

Summer 2017-Present (Multi-year project)

American pika research and monitoring program in U.S. National Parks. Faculty mentor and director of research for two OSU-Cascades students (**Corrinne Oedekerk** and **Emily Zamarripa**) and one Dartmouth College student (**Cara Piske**). Responsible for hiring, training and supervising students as employees of the HERS Lab. Students receive direct, hands-on mentoring in the process of developing research questions, designing and implementing field experiments, conducting appropriate statistical analyses and interpreting scientific data collected in the field. Corrinne Oedekerk is working with the Lab to develop a master's thesis proposal upon completion of her undergraduate degree.

Summer 2017

Deschutes National Forest Human Ecology Mapping Internship-**Katie Stanton**. Served as faculty mentor for a sustainability double-degree student working on a joint PSU/U.S. Forest Service project. Worked with the student to review and summarize literature relevant to the project and develop a conference-style poster.

May 2017-Present (Multi-year project)

Oregon Department of Fish and Wildlife Fisheries Enhancement Project. Faculty supervisor for two OSU-Cascades students (**Danielle Reynolds** and **Landon Hardt**) working with ODFW to address non-native fish management in East and Little Lava Lakes. Responsible for internship development with ODFW, grant submission and administration, student hiring and project completion reports. To date, seven of the eight students to complete this project have achieved long-term employment with ODFW or another agency in their field as a direct result of this experience.

Spring 2017-Present (Multi-year project)

Bat monitoring and research program, HERS Lab. Faculty PI responsible for recruiting, hiring and co-supervising two post-graduate students serving as biological technicians on a state-wide bat acoustic monitoring project.

Spring 2016-December 2016

Project mentor for three students working on a greenhouse gas emissions inventory for the City of Bend.

Spring 2015-Present.

Faculty lead for coordinating a campus-wide native plant landscaping project. Student-related work includes the following:

- Trained and supervised students in SUS 330 Ecological Dimensions of Sustainability to use Web Soil Survey and other tools to identify the ecological site description for the property prior to development, including identification of potential natural vegetation.
- Supervised students during plant species inventory of the site prior to development, and match with appropriate plant community association for the Central Oregon Pumice Ash Zone.
- Led student teams during harvest of 1600 plants from the site and 300 plants from a nearby location for storage and re-use post-construction.
- Led student and landscape crew installation of plants (two week-long sessions).
- Coordinate use of the campus as a natural laboratory for NR and Biology students.

Spring 2016-Summer 2017

Project mentor for two students developing a greenhouse gas emissions inventory for the Bend-LaPine School District.

Fall 2012-Present

Develop and supervise projects for students to fulfill Sustainability Double-Degree practicum requirements.

Collaborative Projects:

Ongoing

Oregon Department of Fisheries and Wildlife, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration expert review panel for FW 350 Endangered Species, Ecology and Society. Each Winter Term FW 350 students are divided into debate teams wherein they must develop science-based arguments in support or opposition of listing candidate species under the Endangered Species Act. Agency officials who work with ESA issues are invited to serve as an expert review panel and provide feedback to students following the debate. Students regularly cite the experience as one of the most impactful events of their education.

Fall 2017-Present

Working with Biology faculty to jointly develop a cross-listed, entry-level biology/environmental science class that combines BI 101/102 with SUS 102. A combined class will serve both programs, ensure consistent enrollment, and capitalize on the strengths of both programs.

Summer 2017

Worked with a new instructor, Michelle Jensen Ericksen, to develop new curricula for SUS 350 Sustainable Communities.

Spring 2015-Present

National Park Service Upper Columbia Basin Network PNW CESU: Principal investigator working in collaboration with NPS ecologists to develop a park studies unit at the Cascades Campus. The partnership has focused on revision of curriculum for FES 444 Ecological Aspects of Park and Protected Area Management, inclusion of NPS staff in delivery of curriculum, and development of an annual NPS-sponsored vegetation monitoring practicum course for students.

Spring 2012-Present

Work with Kreg Lindberg to deliver and evolve the curriculum for SUS 350 Sustainable Communities.

SCHOLARSHIP AND CREATIVE ACTIVITY

Sponsored Projects

- 2019 Oregon Department of Fish and Wildlife, Restoration and Enhancement Program. Fisheries enhancement in the Deschutes High Lakes. \$29,594.00
- 2018 National Park Service CESU, Park Studies Unit. Development of research and monitoring programs for bat species and North American pika. \$846,165.00
- 2018 United States Forest Service, Region 6 Challenge Cost-Share Agreement. Support for Northwestern Bat Hub. \$70,000.00
- 2018 National Park Service CESU, Park Studies Unit. Integrated Fire and Weed Management Planning through a National Parks and Protected Areas Cooperative Studies Program at Oregon State University Cascades Campus. \$55,492.00.
- 2016 City of Bend, Greenhouse Gas Emissions Inventory. \$2,000.00
- 2016 Oregon Department of Fish and Wildlife, Restoration and Enhancement Program. \$13,464.00.
- 2016 LIVE (Low Input Viticulture and Enology) vineyard biodiversity protocol development. \$10,000.00.
- 2015 Roundhouse Foundation—Sustainability studies in American Samoa. \$37,500.00
- 2015 OSU Foundation, OSU-Cascades Net Zero Vision Fundraising. *Primary author of the vision statement.* \$725,000.00
- 2013 Oregon Department of Fish and Wildlife, Restoration and Enhancement Program. \$5000.00.

- 2012 Oregon Department of Fish and Wildlife, Restoration and Enhancement Program. \$9,000.00.
- 2012 Deschutes Brewery, Sustainability Assessment. \$1500.00
- 2009. L.L. Stewart Faculty Development Award. \$2200.00.

Publications

Peer-reviewed

- Rodhouse, T.J, M.R. Jeffress, K.R. Sherrill, S.R. Mohren, N.J. Nordensten, M.L. Magnuson, D. Schwalm, J.A. Castillo, M. Shinderman, and C.W. Epps. 2018. Geographic variation in the influence of habitat and climate on site occupancy turnover in American pika (Ochotona princeps). *Diversity and Distributions* 24(11):1506-1520.
- Shinderman, M. 2015. American pika in a low elevation lava landscape: expanding the known distribution of a temperature sensitive species. *Ecology and Evolution* 5(17):1-24.
- Shinderman, M. 2015. Introduction to sustainability as a distinct worldview with emphasis on the ecological domain. *Earth Systems and Environmental Sciences*, May.
- Rowe, H.I., Shinderman, M., and E.T. Bartlett. 2001. Change on the range: difficult choices for ranchers. *Rangelands* 23(2): 6-9.
- Shinderman, M., and C.A. Call. 2001. Establishment of forbs in cattle dungpats deposited in vegetation gaps in a degraded sagebrush community. *Ecological Restoration*: 19(2):99-106.

Popular Media

- Shinderman, M. 2007. Heating efficiency 101: How to use less and save more. *Bend Living Magazine* June issue.
- Shinderman, M. 2007. Lightness of Being: Ten easy steps to a smaller ecological footprint in 2008. *Bend Living Magazine* October/November issue.
- Shinderman, M. 2007. Think globally, shop locally: Being green starts with buying close to home. *Bend Living Magazine* June/July issue.
- Shinderman, M. 2008. Become a water miser. Bend Living Magazine October issue.
- Shinderman, M. 2008. Lessons from Three Rivers: Living off the grid and on the urban fringe. *Bend Living Magazine* March/April issue.

- Shinderman, M. 2008. Ten tips for a greener holiday season. *Bend Living Magazine* December issue.
- Shinderman, M. 2008. Tapping into the light from above. *Bend Living Magazine* June/July issue.
- Shinderman, M. 2009. Gearing up for sustainability in Bend. Gusto June issue.
- Shinderman, M. 2009. What Oregon should expect from the ARRA stimulus package. *Gusto* June issue.
- Shinderman, M. 2010. Green Transportation Options. *Central Oregon Magazine* and *Southern Oregon Magazine*. Spring 2010 issue.
- Shinderman, M. 2011. Flyfishing Adventure in Coyhaique, Chile. *Central Oregon Magazine* and *Southern Oregon Magazine*. Spring 2011 issue.

Presentations

A tale of two pikas: the fates of alpine versus low-elevation pika in the Western United States. Sunriver Nature Center. Invited speaker. June 2018.

Placed-based environmental education and conservation in the 21st Century. Upper Deschutes Watershed Council Upstream Event. Invited speaker. May 2018.

Sustainability in the context of multiple use and recreation management on the Deschutes National Forest. Deschutes National Forest Sustainable Trails Summit. Keynote speaker. May 2016.

American pika in a low-elevation lava landscape. National Park Service Pacific Northwest CESU Pika Monitoring Group. Presenter. May 2015.

Functional Biodiversity in the Vineyard Context. Invited speaker. LIVE (Low Input Viticulture and Enology). Annual Meeting. April 2015.

Functional Biodiversity in the Vineyard Context. Invited speaker. LIVE (Low Input Viticulture and Enology). Biodiversity panel discussion. February 2015.

OSU-Cascades Campus Expansion Plans. Invited speaker. League of Women Voters and Central Oregon Landwatch. Fall 2013.

OSU-Cascades Campus Expansion Plans—Transportation. Invited speaker. Oregon League of Conservation Voters. Fall 2013.

OSU-Cascades Campus Expansion Plans—Transportation. Invited speaker. Summit West Neighborhood Association. Fall 2013.

Greenhouse Gas Emissions Inventories in the Winery Industry Context. Invited speaker. LIVE (Low Input Viticulture and Enology) Annual Meeting. April 2014.

Spatial distribution and habitat usage of the American Pika. Deschutes National Forest. Invited Speaker. April 2012.

Spatial distribution and habitat usage of the American Pika. National Speliological Society meeting. Bend, Oregon. Spring 2012.

Conservation of sensitive species in the High Desert. High Desert Conservation Conference. Oregon Natural Desert Association. Invited Panelist. September 2012.

The American Pika: standing tall in defiance of climate change. Oregon State University Science Pub. Bend, Oregon. May 2011.

Breaking the Fossil Fuel Addiction. Better Living Expo, Portland, Oregon. Invited Speaker. March 2011.

Oregon Public Broadcasting Salon Series. Conservation and Sustainable Economy in Central Oregon. Invited panelist. October 2009.

Energy and the future of America's Economy. Nancy R. Chandler Visiting Scholar Lecture Series. Central Oregon Community College. Invited lecturer. May 2009.

The Importance of Buying Locally. Bend Chamber of Commerce Panel Discussion. Invited panelist. May 2009.

Ecological Aspects of Green Building. Sustainable Building Advisor Program, Central Oregon Community College. Invited lecturer. May 2009.

Climate Change and Community Development. Large-Scale Managers Workshop, Sunriver Oregon. Keynote speaker. September 2008.

Greening Your Business. Bend Chamber Professional Development Series. Invited panelist. April 2008.

Ecological Considerations for Development: A Case Study at Juniper Ridge, Oregon. Sustainable Building Advisor Program, Central Oregon Community College. Invited lecturer. April 2008.

Global Climate Change: the Complicated Truth. Sunriver Men's Discussion Group, Sunriver, Oregon. Invited lecturer. January 2007.

Potential for ecosystem management with exurban landowners in the southern Rocky Mountains. International Symposia on Society and Resource Management, Sardignia, Italy. Presenter. 2002.

Exurban development in the southern Rocky Mountains. Human Dimensions of Natural Resources in the Western United States, Grand Targhee, Wyoming. Presenter. 2001.

Establishment of forbs in cattle dungpats deposited in vegetation gaps in a degraded sagebrush community. International Conference for the Society for Ecological Restoration, Austin, Texas. Presenter. 1998

SERVICE

University Service

OSU-Cascades Baccalaureate Core committee chair (2018) OSU-Cascades Groundskeeper hiring committee (2018) OSU-Cascades Peer Review of Teaching committee chair (2018) OSU-Cascades Mid-term Instructor Review committee chair (2018) OSU-Corvallis FW Science Senior Instructor Promotion Committee (2017) OSU-Cascades Natural Resources Program Instructor search committee (2017) OSU-Cascades Tourism and Outdoor Leadership Program Instructor search committee (2017) OSU-Cascades Long-Term Development Planning committee (2015-present) OSU-Cascades Campus Landscaping project lead (2015-present) OSU-Cascades Honors College and Bacc Core committee (2016-present) Co-chair, OSU Campus Expansion Advisory Committee (2012-2015) Co-Chair, OSU Sustainability Working Group (2008-2010) OSU Cascades Faculty Representative, Healthy Communities Division (2009) OSU-Cascades Dean's Council, member (2011) OSU College of Forestry Dean Search Committee (2012) OSU Cascades Campus Expansion Advisory Committee—Co-chair (2013) OSU-Cascades Sustainability Task Force—Chair (2013) OSU-Cascades Transportation Task Force—Chair (2013) OSU-Cascades Senior Instructor 3rd Year and Promotion Committees; Chair and member (2014present) OSU-Cascades Campus Expansion Advisory Committee Co-Chair (Winter 2013-present) OSU-Cascades Campus Liaison to Bend Park and Recreation District (Fall 2012-present) OSU-Cascades Renewable Energy Project (Summer 2009) Principal investigator OSU Sustainability Working Group (January 2009-present) Co-chair OSU-COCC Sustainability Program Initiatives (Spring 2008-present) Co-chair OSU-Cascades Deschutes National Forest Partnership (Winter/Spring 2009) OSU-Cascades Faculty Program Development Committee (Fall 2008-present) Member OSU/PSU/UO Master's in Global Development Practice, MacArthur Foundation Grant (Fall 2008) Reviewer OSU-Cascades Faculty Lecture Series "It's in the Bag" (Fall 2007) Co-facilitator OSU-Cascades Scholarship Review Committee (2008-2009) Member OSU-Cascades Recruitment Advising (November 2008) Student Advisor OSU-Cascades Bill Bradbury Special Event (November 2008) Co-host OSU-Cascades Mark Rey Special Presentation (March 2009) Facilitator

OSU Cascades OSU Day Raffle (September 2008, 2009)

OSU-Cascades Tourism and Outdoor Leadership Program Faculty Search Committee (Spring 2007)

Service to the Profession

Manuscript Review. *Peer-review for US National Park Service Inventory and Monitoring Report.* (March 2018).

Deschutes National Forest Collaborative Trails Advisory Group (March 2016-January 2018).

Manuscript review. Plos One (May 2016).

Manuscript review. Internal review for US Geological Survey pub review process. Published in Ecology and Evolution, August 2016.

Mirror Pond Steering Committee (2012-2013)

Oregon Dept of Fish and Wildlife Deschutes River Mitigation and Enhancement Board (January 2008-2016). This board, appointed by the Deschutes County Commissioners, is responsible for directing the use of funds for restoration projects on the upper Deschutes River. *Member*

Deschutes County Greenprint-Trust for Public Land (Spring 2009-present). Stakeholder Advisory Panel. *Member*.

Manuscript Review. *Environmental Conservation* (September 2006). *Reviewer*

Deschutes River Conservancy OWEB Grant Application (Fall 2008). *Proposal review*

Crooked River Ecological Flows Workshop (September 2009) *Facilitator*

Service to the Public (professionally related)

Mirror Pond Steering Committee (2012-2013)

Bend 2030 Board (May 2009-2013). Non-profit community organization authorized by the City of Bend to develop and implement a long-term community development plan. *Member*

Board of Directors, 3EStrategies (November 2005-November 2006). The leading non-profit organization in Central Oregon focused on developing sustainable communities in the Pacific Northwest and beyond. 3EStrategies focuses on three main program areas (Building Green, Energy and Climate, and Sustainable Economic Development) and coordinates the state's largest Tour of Solar Homes. Website: <u>www.3estrategies.org</u>. *President*.

Board of Advisors, 3EStrategies (November 2006-May 2008).

Member

Oregon Trout Healthy Waters Institute (October 2006-2009). Field instruction on macroinvertebrates for middle and high-school students. *Volunteer instructor*

High Lakes Elementary Stream Scholars Program (May 2009). Volunteer instructor.

AWARDS

2018 Inventory and Monitoring Science Partner Award for the Collaborative Pika Monitoring Team. US National Park Service Inventory and Monitoring Division.

2013 Sustainability Award, Oregon State University Cascades Campus Recognizing excellence in sustainability by a faculty member, extending scholarship, demonstrated impact and professional service to the campus and community.

2011 Individual Sustainability Award, Central Oregon Environmental Center *Recognizing individual achievements to embed sustainability into daily life in Central Oregon.*

2010 Outreach Award, Oregon State University Cascades Campus Recognizing excellence in outreach by a faculty member, extending scholarship, demonstrated impact and professional service to the community.

SETH M. GANZHORN, Ph.D.

seth.ganzhorn@osucascades.edu

A. EDUCATION AND EMPLOYMENT INFORMATION

1. Education

- Ph.D. Fordham University and The New York Botanical Garden, Bronx, NY, 2014 Major: Biological Sciences, Ecology and Systematics
- M.S. Fordham University, Bronx, NY, 2010 Major: Biological Sciences, Ecology and Systematics
- **B.S.** University of Oregon, Eugene, OR, 2004 Major: General Science; Minors: Biology and Chemistry
- A.A. Central Oregon Community College, Bend, OR, 2001 Major: Associate of Arts Oregon Transfer

2. Employment

2017 – present	Instructor , Natural Resources, Oregon State University- Cascades, Bend, OR
2014 – 17	Postdoctoral Teaching Fellow , Dept. of Biological Sciences, Fordham University, Bronx, NY
2015 – 16	Instructor , Botany Certificate Program, The New York Botanical Garden, Bronx, NY
2010 – 15	Facilities Assistant , Science Library and Greenhouse Manager , Calder Center Biological Field Station-Fordham University, Armonk, NY
2013	Resident Assistant , NSF REU Calder Summer Undergraduate Research, Calder Center Biological Field Station-Fordham University, Armonk, NY
2007 – 14	Graduate Teaching Fellow, Dept. of Biological Sciences, Fordham University, Bronx, NY
2003 – 07	Biological Technician Ecology , Area 4 Ecology Program, Deschutes National Forest, Bend, OR
2004 - 07	Wildland Firefighter , Bend – Ft. Rock Ranger District, Deschutes National Forest, Bend, OR

2002 - 04	Undergraduate Teaching & Herbarium Assistant, Dept. of Biology, University of Oregon - Cascades Campus, Bend, OR
2002	Biological Technician Range , Paulina Ranger District, Ochoco National Forest, Paulina, OR
2001	Biological Technician Plants , Bend – Ft. Rock Ranger District, Deschutes National Forest, Bend, OR
1998 – 00	Youth Conservation Corps Crew Supervisor , Bend – Ft. Rock Ranger District, Deschutes National Forest, Bend, OR
1997 – 99	AmeriCorps Member, Central Oregon Community College, Bend, OR

B. TEACHING, ADVISING, AND OTHER ASSIGNMENTS

1. Instructional Summary

OREGON STATE UNIVERSITY-CASCADES

Academic Term	Course #	Course Title Enr	<u>ollment</u>
Spring 2018	FES 440	Fire Ecology	19
Spring 2018	SUS 103	Climate Change	31
Winter 2018	ENSC 479	Environmental Case Studies-WI	C 6
Winter 2018	GEOG 360	GIS and Theory	16
Fall 2017	FES 341	Forest Ecology	25
Fall 2017	RNG 353	Wildland Plant Identification	4

FORDHAM UNIVERSITY

Academic Term	Course #	Course Title Enrol	l <u>ment</u>
2015 - 17	BISC 2561	Ecology	100
2015 - 17	BISC 2571	Ecology Laboratory	100
2014 - 17	BISC 1010	Foundations of Biology	240
2015 - 17	BISC 7529	Geographic Information Science I	16
2015	BISC 7530	Geographic Information Science II	10
2014 - 15	BISC 2549	Genetics Laboratory	26
2010	BISC 6525	Ecological Methods	6
2007 – 09, 12 – 14	BISC 1413	Introductory Biology Lab I	100
2007 – 09, 12 – 14	BISC 1414	Introductory Biology Lab II	100

THE NEW YORK BOTANICAL GARDEN

Academic Term	Course #	Course Title	Enrollment
2015 - 16	BOT 315	Plant Structure	16

4

2015	BOT 317	Plant Diversity	
2015	001 317	I fulle Diversity	

CASCADES CAMPUS AND CENTRAL OREGON COMMUNITY COLLEGE

Academic Term	Course #	Course Title
2004	BOT 203	General Botany (undergraduate asst.)
2002 - 03	BIO 212	Biology of Plants II (undergraduate asst.)

Non-credit courses and workshops

• NA

Curriculum development

• NA

Graduate and Undergraduate Students-OSU-Cascades & CSUSM

- Evan Klauer, undergrad, research mentor, 2018
- Amber Lamet, undergrad, research mentor, 2018 (current)
- Jamie Martenson, undergrad, research mentor, 2018

Graduate and Undergraduate Students-Universidade Estadual de Santa Cruz

• Josiane dos Santos Amorim, graduate student, research mentor, 2011

Graduate and Undergraduate Students-Fordham University

- Chelsea Butcher, Ph.D. student, research mentor, 2018
- Rolando Rojas, M.S. student, research mentor, 2016
- Conor Gilligan, undergrad, research mentor, 2017
- Veronica Kot, undergrad, senior thesis committee, 2017
- Magdalena Christoforou, undergrad, research mentor, 2017
- Connor Ready, undergrad, research mentor, 2017
- Olivia Rozanski, undergrad, research mentor, 2017
- Vishall Bhoopsingh, undergrad, research mentor, 2017
- Tasnima Elahi, undergrad, research mentor, 2017
- Hifza Ishtiaq, undergrad, research mentor, 2017
- Joseph Michael, undergrad, research mentor, 2017
- Colleen Biemer, undergrad, research mentor, 2017
- Alexander Lazzaro, undergrad, research mentor, 2016
- Marie Rabadi, undergrad, research mentor, 2016
- Paolina Mazzella, undergrad, research mentor, 2016
- Sandra Zajac, undergrad, research mentor, 2016
- Pronab Adhikary, undergrad, research mentor, 2016

- Smratjit Lehal, undergrad, research mentor, 2016
- Jessica Singh, undergrad, research mentor, 2016
- Alina Gandrabur, undergrad, research mentor, 2016
- Sabrina DiMolfetta, undergrad, research mentor, 2015
- Genna Marcin, undergrad, research mentor, 2015
- Joanna Flores, undergrad, research mentor, 2015

Team or Collaborative Efforts

• Spring 2018, integration of forest data into Ecotone, Yong Bakos

International Teaching

• 2011, Ilhéus, Bahia, Brasil, Atlantic forest seedling identification workshop

2. Student Evaluation of Teaching

OREGON STATE UNIVERSITY-CASCADES (6 pt scale, 6=highest)

Academic term	Course number	Course Q1 Median	Course Q2 Median	Responses/ Enrolled	Department Q1 Median	Department Q2 Median
F 2017	FES 341	5.5	5.8	14/24, 58%	5.4	5.5
W 2018	ENSC 479	5.5	6	2/6,33%	5	5.7
W 2018	GEOG 360	5.5	5.5	8/16,50%	5.1	5.3
S 2018	SUS 103	4.9	5.3	15/31, 48%	5.1	5.3
S 2018	FES 440	5.2	5.7	8/19,42%	5.4	5.5

3. Peer Teaching Evaluations

- NA
- Peer review date. Included in dossier? Yes/No

4. Advising

- NA
- Advising duty, number of students, time spent, evaluation data (if available)

5. Other Assignments-OSU-Cascades

- NA
- Duties, dates, audience, responsibilities/accomplishments/impacts

C. SCHOLARSHIP AND CREATIVE ACTIVITY

1. Refereed Publications (12 citations, Google Scholar)

- **Ganzhorn**, **S.M.**, B. Perez-Sweeney, W.W. Thomas, F.A. Gaiotto, J.D. Lewis. 2015. The effects of fragmentation on density and population genetics of a threatened tree species in a biodiversity hotspot. *Endangered Species Research* 26: 189-199. First author, project development, 100%
- **Ganzhorn**, **S.M.**, W.W. Thomas, F.A. Gaiotto, and J.D. Lewis. 2015. Spatial genetic structure of *Manilkara maxima*, a tree species from the Brazilian Atlantic forest. *Journal of Tropical Ecology* 31: 437-447. First author, project development, 100%

1. Professional meetings, symposia, conferences

- **Ganzhorn**, **S.M.**, M. Zeppel, R. Rojas, J.D. Lewis. 2016. Climate change induced precipitation patterns and genetic mutations of the economically important tree species *Eucalyptus grandis*. Ecological Society of America 101st Annual Meeting, Climate Change Session, Ft. Lauderdale, FL. 2016, poster pres.
- **Ganzhorn**, **S.M.** 2015. Biodiversity in a fragmented world: An ecological story of the Atlantic forest biodiversity hotspot in Bahia, Brazil. Calder Series, North Castle Public Library, Armonk, NY.
- **Ganzhorn**, **S.M.**, W.W. Thomas, F.A. Gaiotto, J.D. Lewis. 2015. Who eats what? Dispersal and distribution patterns of a vulnerable tropical tree species. Ecological Society of America 100th Annual Meeting, Seed Production, Dispersal, and Predation Oral Session, Baltimore, MD. 2015, paper pres.
- **Ganzhorn**, **S.G.**, W.W. Thomas, and J.D. Lewis. 2014. A spatially explicit comparison of sapling distribution and seed fall of a threatened tropical tree species: Testing the Janzen Connell hypothesis. 2nd Annual Bronx Science Consortium Poster Symposium, Bronx Zoo Wildlife Conservation Society, Bronx, NY. 2014, poster pres.
- **Ganzhorn, S.M.**, B. Perez-Sweeney, W.W. Thomas, F.A. Gaiotto, J.D. Lewis. 2014. The effects of fragmentation on density and population genetics of a threatened tree species in a biodiversity hotspot. Annual Meeting of the Association for Tropical Biology and Conservation, Forest Ecology Oral Session, Cairns, Australia. 2014, paper pres.
- **Ganzhorn, S.M.** and J.D. Lewis. 2013. A spatially explicit comparison of sapling distribution and seed fall of a threatened tropical tree species: Testing the Janzen Connell Hypothesis. Ecological Society of America 98th Annual Meeting, Minneapolis, MN. 2013, poster pres.

- **Ganzhorn, S.M.**, W.W. Thomas, F.A. Gaiotto, B. Perez-Sweeney, J.D. Lewis. 2012. Genetic diversity of *Manilkara maxima:* An ecologically and economically important tree species from a biodiversity hotspot. Ecological Society of America 97th Annual Meeting, Portland, OR. 2012, poster pres.
- **Ganzhorn, S.M.**, W.W. Thomas, F.A. Gaiotto, B. Perez-Sweeney, J.D. Lewis. 2012. Genetic diversity of *Manilkara maxima:* An ecologically and economically important tree species from a biodiversity hotspot. Student Conference on Conservation Science, American Museum of Natural History, New York, NY. 2012, poster pres.
- **Ganzhorn, S.M.** 2011. Biology of *Manilkara maxima*: an ecologically and economically important tree species. South America Fulbright Seminar, Buenos Aires, Argentina. 2011, paper pres.
- **Ganzhorn, S.M.**, J.D. Lewis, and W.W. Thomas. 2010. Genetic diversity of an ecologically and economically important tree species. Communitas Graduate Research Exhibition, Fordham University, Bronx, NY. 2010, poster pres.
- Riegel, G., S. Lovtang, M. Busse, M. Ramsey, **S. Ganzhorn**, G. Ardt, J. Lowrie, G. Babb. 2004. Managing an ecological paradox: balancing wildfire risk and mule deer habitat in antelope bitterbrush of central Oregon. Ecological Society of America 89th Annual Meeting, Portland, OR. 2004, paper pres.

3. Grants

External

•	2011	Fulbright Fellowship – Brazil, U.S. Dept. of State \$53,380
•	2011	Fulbright Travel Grant, Fulbright Comm. Brasil \$1000
•	2010	Research Fellowship, Shering-Plough Foundation \$6,000
•	2009 (summer)	Research Grant, <i>The New York Botanical Garden</i> \$2,000

Internal

•	2018 (summer)	Layman Fellowship, OSU-Cascades \$1000
•	2018	Learning Innovation Grant, OSU-Cascades \$7340
•	2007 - 14	Teaching Fellowship, <i>Fordham University \$700,000</i>
•	2014 (summer)	Research Grant. Fordham University \$534
•	2012 (summer)	Travel Grant, <i>Calder Center</i> \$800
•	2010 (fall)	Research Grant. Fordham University \$250
•	2010	Research Fellowship, Biology Alumni of Fordham \$4,973
•	2010 (spring)	Travel Grant, Fordham University \$400
•	2010 (spring)	Research Grant. Fordham University \$200

• 2009 (fall) Travel Grant, Fordham University \$300

•	2009	Summer Fellowship, Fordham University \$4,000
•	2008 (fall)	Travel Grant. <i>Fordham University</i> \$300

 2002 Science Grant, Central Oregon Community College Foundation \$1000

D. SERVICE

1. University Service

Oregon State University – Cascades

•	2017 – present	Ecotone Research Project Planning
	2017	

- 2017 present Experiential Learning Committee
- 2018 Search Committee, Demolition Landfill Remediation Planning and Pumice Mine Reclamation Design
- 2018 Search Committee, Enrollment Specialist
- 2017 18 Research Excellence Committee
- 2017 18 OSU-Cascades URSA Engage Liaison
- 2017 18 1st Year Student Mentor Program

Fordham University

- 2016 17 Calder Center Land Management Committee
- 2013 14 Calder Center Planning Subcommittee on Housing

2. Service to the Profession

- 2018, journal reviewer, *Forests*
- 2017 present, member, Northwest Scientific Association
- 2006 present, member, Ecological Society of America
- 2008 present, member, Association for Tropical Biology and Conservation
- 2017, journal reviewer, *Forests*
- 2015, journal reviewer, Conservation Genetics
- 2012, journal reviewer, *Molecular Biology Reports*
- 2009, journal reviewer, AoB Plants

3. Service to the Public (professionally related)

- 2017 present, Native Plant Society of Oregon: High Desert Chapter
- 2007 17, Connecticut and Westchester Mycological Association (COMA)
- 2005 07, Jewel Elementary School, Mr. Miller's 4th grade class

4. Service to the Public (non-professionally related)

- 2007 17, University of Oregon Alumni Assoc. New York City Chapter
- 2015 17, New York Road Runners
- 2014 17, Fordham University Westchester County Alumni Chapter
- 5. If service is a significant percentage of FTE, outcomes or impact should be described.

E. AWARDS

1. National and International Awards

• 2011, Fulbright Research Fellowship to Brazil

2. State and Regional Awards

- NA
- Date, award

3. University and Community Awards

- 2010 Graduate Research Poster Competition Winner, Fordham University
- 2002 Outstanding Science Student, Central Oregon Community College

F. PROFESSIONAL DEVELOPMENT

- Winter 2018 R Workshop, OSU-Cascades
- Winter 2018 Social Justice Education Initiative, OSU-Cascades
- Fall 2017 Writing Intensive Course Workshop, OSU-Cascades
- Spring 2016 CRISPR/Cas-9 Workshop, NYU and Sigma-Aldrich
- Spring 2014 R Workshop, City University of New York
- Winter 2010 Portuguese, New York University

MICHAEL E. GASSNER VITA

A. EDUCATION AND EMPLOYMENT INFORMATION Education:

Laacacton	
B.S.	Geology, Oregon State University
M.S.	Experiential Education, Minnesota State University-Mankato
Ph.D.	Education (Recreation, Parks, and Leisure Studies), Outdoor Education Emphasis
Minor	International Education, University of Minnesota-Twin Cities

Employment/Previous Experience

2014-Present	Senior Instructor I and Program Lead, Tourism and Outdoor Leadership Program,
	OSU-Cascades
2012-Present	Honorary Assistant Professor, University of Hong Kong School of Professional
	and Continuing Education (SPACE), Hong Kong
2008-2013	Instructor and Program Lead, Tourism and Outdoor Leadership Program, OSU
	Cascades
2006-2008	Assistant Professor, Department of Health, Physical Education, Recreation, and
	Sports Science, St. Cloud State University
2003-2004	Instructor, Division of Recreation and Sports Studies, University of Minnesota-
	Twin Cities
2004	Instructor, The University of Hong Kong School of Professional and Continuing
	Education (SPACE)
1997-1998	Instructor, Department of Educational Leadership, Minnesota State-University
	Mankato

B. TEACHING, ADVISING AND OTHER ASSIGNMENTS

Academic Term	Course Title	Enrollment
Fall 2008	FOR 376 Tourism and Outdoor Recreation for Special Pops.	27
Winter 2008	**FOR 375 Principles and Methods of Experiential Education	8
Spring 2009	FOR 373 Outdoor and Adventure Education	9
Spring 2009	FOR 476 Risk Management for Outdoor Recreation	9
Fall 2009	FOR 499 Expeditions I	8
Fall 2009	FOR 371 Eco and Adventure Tourism	18
Winter 2010	FOR 499 Ethics in Adventure Leadership	15
Winter 2010	**FOR 375 Principles and Methods of Experiential Education	13
Spring 2010	FOR 476 Risk Management for Outdoor Recreation	13
Spring 2010	FOR 373 Outdoor and Adventure Education	23
Fall 2010	FOR 372 Ethics in Adventure Leadership	19
Winter 2011	**FOR 375 Experiential Education	18
Winter 2011	FOR 476 Risk Management in Tourism and Outdoor Leadership	14
Winter 2011	*FOR 479 Nature and the Human Experience	11
Spring 2011	FOR 377 Expeditions I	5
Spring 2011	FOR 379 Expeditions II	5
Fall 2011	FOR 373 Wilderness and Adventure Education	13
Winter 2012	**FOR 375 Experiential Education	23
Winter 2012	FOR 476 Risk Management for Tourism and Outdoor Leadership	12
Spring 2012	FOR 377 Expeditions I	7
Spring 2012	FOR 379 Expeditions II	7

Academic Term	Course Title	Enrollment		
Fall 2012	**FOR 375 Experiential Education	19		
Winter 2013	FOR 372 Ethics in Adventure Leadership	14		
Winter 2013	FOR 476 Risk Management for Tourism and Outdoor Leadership	21		
Spring 2013	*FOR 479 Nature and the Human Experience	19		
Spring 2013	FOR 377 Expeditions I (co-instructor)	7		
Spring 2013	FOR 379 Expeditions II – Land	7		
Fall 2013	**FOR 375 Experiential Education	7		
Winter 2014	*FOR 479 Nature and the Human Experience	27		
Winter 2014	FOR 476 Risk Management for Tourism and Outdoor Leadership	15		
Spring 2014	Course release for 10 year Program Review	-		
Spring 2014	Course release for 10 year Program Review	-		
Fall 2014	TOL 372 Ethics in Adventure Leadership	9		
Fall 2014	**TOL 375 Experiential Education	13		
Winter 2015	TOL 476 Risk Management for Tourism and Outdoor Leadership	14		
Winter 2015	*TOL 479 Nature and the Human Experience	22		
Spring 2015	TOL 377 Expeditions I (co-instructor)	7		
Spring 2015	TOL 379 Expeditions II – Land	7		
Spring 2015	TOL 380 Expeditions II – Water	7		
Fall 2015	**TOL 375 Experiential Education	16		
Fall 2015	TOL 373 Wilderness and Adventure Education	7		
Winter 2016	TOL 476 Risk Management for Tourism and Outdoor Leadership	16		
Winter 2016	*TOL 479 Nature and the Human Experience	22		
Spring 2016	TOL 377 Expeditions I (co-instructor)	7		
Spring 2016	TOL 379 Expeditions II – Land	7		
Fall 2016	**TOL 375 Experiential Education	13		
Fall 2016	TOL 372 Ethics in Adventure Leadership	7		
Winter 2017	TOL 476 Risk Management for Tourism and Outdoor Leadership	11		
Winter 2017	*TOL 479 Nature and the Human Experience	19		
Spring 2017	Course release – CAT II work	-		
Fall 2017	TOL 130 Intro. to Outdoor and Adventure Professions	14		
Fall 2017	TOL 373 Wilderness and Adventure Education	8		
Winter 2018	*TRAL 132 Foundations and History of Outdoor and Adventure	35		
	Professions			
Winter 2018	TRAL 476 Risk Management for TOL	15		
Winter 2018	*TRAL 479 Nature and the Human Experience	31		
Spring 2018	TRAL 379 Expeditions II – Land	4		
Bacc Core **WIC	· •	1		

*Bacc Core **WIC

All terms 2012-2018 TRAL 410 Internship. About 100 student credit hours ongoing instruction

• Non-Credit Courses and Workshops

None

• Curriculum Development

- Fall 2009 FOR 499 Expeditions I. Developed curriculum and taught as 499 Special Topics
- Winter 2010 Re-named Outdoor and Experiential Education option to Adventure Leadership and Education for Category II proposal.
- Winter 2010 Re-named Principles and Methods of Experiential Education to Experiential Education for Category II proposal to better reflect direction of TOL program.
- Winter 2010 FOR 499 Ethics in Adventure Leadership. Developed curriculum and taught as special topics.
- Winter 2010 FOR 372 Ethics in Adventure Leadership. Developed curriculum for Category II proposal.
- Winter 2010 FOR 373 Wilderness and Adventure Education. Re-designed curriculum for Category II proposal including name change, credit increase, and inclusion of international content to better reflect direction of TOL program.
- Winter 2010 FOR 377 Expeditions I. Developed curriculum for Category II proposal.
- Winter 2010 FOR 379 Expeditions II. Developed curriculum for Category II proposal.
 Winter 2010 FOR 479 Nature and the Human Experience. Developed curriculum for Category II proposal.
- Spring 2010 FOR 476 Risk Management in Tourism and Outdoor Leadership. Redesigned curriculum for Category II proposal.
- Spring 2010 FOR 478 Legal Issues in Tourism and Outdoor Leadership. Re-designed curriculum with David Brown for Category II proposal.
- Fall 2010 FOR 410 Internship. Submitted abbreviated Category II. Proposal changed FOR 410 Internship to be able to be repeated multiple times for up to 16 total credits. Submission was approved.
- 2011-202 Hired a distinguished service professor from State University of New York, Cortland to teach as an adjunct for the TOL program *Adjunct hire* Acquired two Bureau of Land Management (BLM) special recreation permits for the Deschutes River and the Grande Ronde River so the TOL program could run academic courses on both of these rivers. The Deschutes permit took over 9 months of negotiations to acquire *Permit acquisition*.

- 2012 Negotiated and acquired multiple professional purchase deals with large companies for the discounted purchase of equipment for the TOL program and OSU-Cascades.
- Spring 2012 Category II to separate Expeditions II into two separate courses. The new courses will be a 2 credits Expeditions-Water and a 6 credit Expeditions-Land course.
- Winter 2013 Contemporary Global Issues (CGI). Reworked FOR 479 Nature and the Human Experience to align with CGI requirements. Passed CAT II process.
- Winter 2013 Global Learning Community. Infused FOR 373 Wilderness and Adventure Education and FOR 479 Nature and the Human Experience with global content per guidelines from global learning community faculty workshops on the main campus.
- Spring 2013 Category II process initiated to further adapt the TOL curricula to changes being made at COCC and changes required of our program based on student needs. Multiple revisions.

Fall 2015-

Spring 2016 Numerous meetings during this academic year in Corvallis with home department to develop many of the recommendations contained in the TOL 10-year program review. This included working through a merger of the RRM program in Corvallis with the TOL program at Cascades to create a Tourism, Recreation, and Adventure Leadership (TRAL) program via an abbreviated Category I process. I was heavily involved in the design and development of new program outcomes, assessments, and courses. More specifically, we developed a common core of approximately 29 credits that students could take on either campus, and cut the options at Cascades and Corvallis to two while expanding these options in credits loads.

In the further design and development of new classes later in the academic year I reached out to industry locally, regionally, and internationally to get feedback on what type of curriculum would best benefit students in the job market upon graduation. Before the summer the ground work was laid for specific course development in 2015-2016.

Fall 2016-

Spring 2017 The main focus of this academic year was to design and <u>develop a four</u> <u>year degree program</u>, cut ties with COCC, create and develop all new freshman and sophomore level classes and, redo some junior and senior classes for the TRAL degree. The TRAL degree, with COCC classes still a part of the curriculum, was approved in spring 2017 and is moving forward. I am currently developing up to 15 new classes for the new TRAL options here at Cascades. Some of these courses will be cross listed as TRAL/PAC classes. Some of these classes include:

TRAL 130 Introduction to Outdoor and Adventure Professions
*TRAL 132 Foundations and History of Outdoor and Adventure Professions
*This is a Bacc. Core Western Culture class
PAC 110 Introduction to White Water Kayaking
PAC 111 Introduction to Canoeing
PAC 112 Learning Kayak Rolling Basics (2)
TRAL 115/PAC 115 Outdoor Living Skills (2)
TRAL 118/PAC 118 Laboratory for Outdoor Living Skills (1)
TRAL 171/PAC 171 Rock Site Management (2)
TRAL 215 Land and Aquatic Group Facilitation (4)
TRAL 217 Intermediate Rock (2)
TRAL 270 Pre-Internship (1)
TRAL 280 Outdoor Leadership Fundamentals – (5)
TRAL 374 Outdoor Adventure Education – (3)
TRAL 377 Expeditions I – Water (5)

All course content will reflect a focus on outcomes of knowledge, skills, and dispositions that are individually linked to course assignments and in turn linked to assessment rubrics.

Fall 2017-

Spring 2018 In October 2017 I successfully turned <u>a 6 day</u> Bureau of Land Management (BLM) Special Recreation Permit (SRP) for the Deschutes River to a probationary <u>2 year</u>, unlimited use permit. After these initial two years the permit will turn into a <u>10</u> <u>year</u>, <u>unlimited user day permit</u> for the Deschutes from Warm Springs to the Columbia River (all 4 Deschutes river segments).

<u>Finalized design and put through curriculum</u>, all needed freshman, sophomore, and junior classes for the new TRAL degree so that TRAL can be a stand along 4-year degree starting in fall 2018.

Most courses designed in 2016-2017 were approved by the end of winter term, 2018. One course, a TRAL minor, and one option are nearing CAT II approval as of April 1, 2018.

Mentored Andrew Hawely, TRAL's new faculty member. This involved the following but not limited to, sharing the vision for the TRAL program, co-teaching new classes so each faculty could teach the class in the future, showing how to navigate the CAT II system, developing syllabi, and over all navigation of administrative tasks and where to get pertinent resources to accomplish a variety of tasks.

Started work on a complete <u>risk management plan</u> for all new field courses in the TRAL program at Cascades. To date, a basic local emergency response plan (LERP) has been created. This will be a small part of a larger risk management plan that will hopefully include a medical advisor for the TRAL program who will advise during on the spot trauma situations if needed.

• Graduate Students

None, as the TOL program does not have a graduate program.

• Undergraduate Students

Hired a student worker to coordinate the logistics of the TOL program's expedition courses.

An important part of my relationship with TOL students has been taking over academic supervision of their internships. I have updated the internship manual and continue to do so on an on-going basis. I have also placed more structure to the internship registration process making sure internships are agreed to and signed off by the internship host before allowing students to register. I have also started to implement a procedure which will require internees to complete a SET before receiving a final grade for the internship.

I continue to supervise all the TOL internships. As of summer 2012 this amounted to 168 student credit hours. As of the end of winter term 2013 I supervise 84 student credit hours and growing. As of April, 2018 I currently supervise over 100 student credits hours of TRAL internship.

Collaborative Projects

2011-2013

- Worked with the Deschutes National Forest to acquire a special use permit for the Three Sisters Wilderness area for OSU-Cascades' TOL program. This permit resulted in a larger collaborative effort between the Forest Service and Oregon State University-Cascades aimed at providing sustainable access to recreation opportunities. The permit was acquired in May 2011 for the east side of the Three Sisters Wilderness area and in 2015 was acquired for the entire Wilderness area.
- Worked extensively with the Bureau of Land Management (BLM) in Central and Eastern Oregon in order to negotiate the acquisition of two special recreation permits for TOL academic classes.
- Worked with Cynthia Engel, IE3 and Daniel Stroud, Clinical Mental Health Counselor Education, as part of a longitudinal study looking at levels of acculturation for Cascades students participating in work-study abroad programs.
- Worked collaboratively with Sandy Chen in the College of Business on research projects. In 2012 we published one article and plan on publishing another one collaboratively later in 2012.

• Developed a working relationship with the Oregon Program Director for Outward Bound. This has resulted in OSU-Cascades contracting Outward Bound to run the first week of FOR 379 Expeditions II which will be a seven day river journey down the lower Deschutes River. Outward Bound will provide staff, equipment, and other resources to make this part of Expeditions II possible. Outward Bound will also allow students in FOR 377 Expeditions I and FOR 379 Expeditions II full access to their food room which will allow us to pack supplies for the entire month back country expedition.

2014-2015

• Began collaborating with Chris Wolsko, assistant professor of psychology at OSU-Cascades and the United World College of Southeast Asia (UWCSEA) on 7 year longitudinal study of outdoor education at the UWCSEA.

2015-2018 and beyond

Worked with Chris Wolsko on a 7-year longitudinal study of an outdoor education program at the UWCSEA in Singapore. We are examining the overall impact of the UWCSEA outdoor education program on the UWCSEA student profile. Specifically, we are looking at quantitative measures of grit, flourishing, and connectedness to nature in grade 6 through grade 11 students (minus grade 10). Qualitatively, every year we conduct one to one in person interviews of two cohorts of approximately 20 students in person in Singapore and via Skype. Data is starting to come in in large numbers via a quantitative and qualitative on-line survey, in person focus group interviews, and Skype interviews. This project has involved one or more trips to Singapore during the academic year for meetings, updates, and student interviews. Recent study reports are available upon request.

1. Student Evaluations of Teaching

Student evaluation of teaching data each trimester are centered on the following two questions. Q1= The course as a whole was?

 Q^2 = The instructor's contribution to the course was?

Course Number	Term	Q1 Median	Q2 Median	Responses/Enrolled	Cascades Q1 Median	Cascades Q2 Median
		6 poin	t scale		6 poin	t scale
FOR 376	F 08	4.5	4.8	18/27	5.3	5.6
FOR 375	W 09	4.6	4.2	7/8	5.0	5.2
FOR 375	W 10	5.6	5.5	12/13	5.3	5.6
FOR 373	S 09	4.8	5.2	6/10	5.3	5.5
FOR 373	S 10	5.4	5.7	20/23	5.4	5.6
FOR 476	S 09	4.3	4.2	8/9	5.0	5.5
FOR 476	S 10	4.6	4.9	11/13	5.5	5.6
FOR 499	F 09	5.6	5.2	7/8	5.3	5.6
FOR 499	W 10	5.5	5.8	12/15	5.2	5.5
FOR371*	F 09	5.0	5.4	18/18	5.2	5.5
FOR 410	S 10	5.3	4.5	3/6		
FOR 372	F 10	5.1	5.3	14/14	5.3	5.6
FOR 375	W 11	4.1	4.5	8/18	5.0	5.4
FOR 476	W 11	4.7	5.2	11/14	5.3	5.7
FOR 479	W 11	5.6	5.8	9/11	5.3	5.7
FOR 410	W 11	6.0	6.0	2/2	5.3	5.7
FOR 377	S 11	4.0	4.0	5/5	5.4	5.7
FOR 379	S 11	4.3	4.0	5/5	5.4	5.7
FOR 373	F 11	4.3	4.8	14/16	N/A	N/A
FOR 375	W 12	4.4	5.1	18/23	5.1	5.4
FOR 476	W 12	4.3	4.3	10/12	4.9	5.3
FOR 377	S 12	5.9	5.7	5/7	5.1	5.4
FOR 379	S 12	6.0	5.8	5/7	5.1	5.4
FOR 375	F 12	5.6	5.6	7/19	4.9	4.9
FOR 372	W 13	5.2	5.5	4/14	4.9	5.1
FOR 476	W 13	4.4	5.0	11/21	4.9	5.1
FOR 377	S 13	N/A	N/A	/5	N/A	N/A
FOR 379	S 13	N/A	N/A	/5	N/A	5.00
FOR 479	S 13	4.40	4.70	7/19	4.80	5.10
FOR 375	F 13	4.30	4.50	12/20	4.80	5.10
FOR 476	W 14	4.50	4.70	6/15	4.80	5.10
FOR 479	W 14	5.80	5.80	10/27	4.80	5.10
Prg assmt	S 14	-	-	-	-	-
Prg assmt	S 14	-	-	-	-	-
TOL 372	F 14	5.5	5.5	4/9 44%	4.7	4.9
TOL 375	F 14	4.3	5.0	3/13 23%	4.7	4.9

TOL 476	W 15	4.5	4.8	7/14 50%	5.0	5.2
TOL 479	W 15	4.1	4.1	8/22 36%	5.0	5.2
TOL 377	S 15	6.0	6.0	1/7 14%	5.4	5.6
TOL 379	S 15	6.0	6.0	1/7 14%	5.4	5.6
TOL 380	S 15	6.0	6.0	1/7 14%	5.4	5.6
TOL 373	F 15	5.0	5.0	3/7 42%	4.8	5.2
TOL 375	F 15	5.0	5.2	8/16 50%	4.8	5.2
TOL 476	W 16	5.5	5.9	7/16 44%	5.3	5.6
TOL 479	W 16	5.7	5.5	9/22 41%	5.3	5.6
TOL 377	S 16	5.5	6.0	5/7 71%	5.3	5.6
TOL 379	S 16	5.5	5.5	5/7 71%	5.3	5.6
TOL 372	F 16	5.5	5.5	2/7 29%	5.0	5.3
TOL 375	F 16	4.3	4.3	6/13 46%	5.3	5.6
TOL 476	W 17	5.9	5.9	6/11 55%	5.1	5.2
TOL 479	W 17	4.8	5.7	9/21 43%	5.1	5.2
XXX	S 17	-	-	Admin/CAT II's	-	-
TOL 130	F 17	5.7	5.3	5/14 36%	5.1	5.3
TOL 373	F 17	N/A	N/A	0/7 0%	-	-
TRAL 476	W 18	6.0	6.0	1/15 7%	5.0	5.4
TRAL 479	W 18	5.5	5.5	6/31 19%	5.0	5.4

*This course was co-taught with Kreg Lindberg who was listed as the instructor of record **Between 80-110 hours of FOR 410 student internship supervision on an ongoing basis

2. Advising

2008-2011

Student advising responsibilities were currently split between Kreg Lindberg and myself. Dianna Raschio took over most TOL advising duties at this point in time. I still advised students on a regular basis with career guidance, especially outdoor and experiential education option students.

2012-current

As OSU-Cascades has gone to central advising this is not a role I currently and officially partake in. However, I continually advise students on an ad-hoc basis.

3. Other Assignments

I coordinate and supervise the academic components of <u>all</u> TOL students as they enter, partake, and finish their required internships. This amounts to approximately 80-110 student credits hours on an ongoing basis.

C. SCHOLARSHIP AND CREATIVE ACTIVITY

1. Publications

Books

Gassner, M. (2009). The long-term impact of outdoor adventure education: A retrospective analysis of Outward Bound Singapore's Classic 21-Day Challenge course. Saarbrücken, Germany. LAMBERT Academic Publishing AG & Co. KG. ISBN 978-3- 8383-2126-4

Book chapters and vignettes

- Gassner, M. & Kahlid, A. (2015). Adventure programming in Asia: The case of Singapore. In Black, R. and Bricker, K. (Eds.), (pp. 19-26), *Adventure programming and travel for the 21st century*. Venture. State College, PA.
- Gassner, M. (2012). Permits required for all: It's the right thing to do. In Martin, B. and Wagstaff, M. (Eds.), (pp. 185-190), *Controversial issues in adventure programming*. Human Kinetics. Champaign, IL.

Books unpublished

Gassner, M. (1996). *Outward Bound Sabah: Instructor's Handbook*. For: Outward Bound Sabah, Malaysia, 350 pgs.

Research project reports

- Gassner, M. & Wolsko, C. (2017, October). A collaborative investigation into the Contributions of the Outdoor Education Program to the Student Learning Profile at UWCSEA: A Seven-Year Longitudinal Study. Project Update.
- Gassner, M. & Wolsko, C. (2016, October). A collaborative investigation into the Contributions of the Outdoor Education Program to the Student Learning Profile at UWCSEA: A Seven-Year Longitudinal Study. Project Update.
- Gassner, M. & Wolsko, C. (2015, October). A collaborative investigation into the Contributions of the Outdoor Education Program to the Student Learning Profile at UWCSEA: A Seven-Year Longitudinal Study. Project Update.

Research/Manuscripts in progress

Gassner, M. From T-shirts, bandannas, and character to collars, caps, and human development: The early history of outdoor adventure education in Hong Kong 1970 – 1992. To be submitted to the *Journal of Adventure Education and Outdoor Learning*.

Peer-reviewed

- Chen, S. & Gassner, M. (2012). An Investigation of the Demographic, Psychological, Psychographic, and Behavioral Characteristics of Mainland Chinese Senior Leisure Travelers. *Journal of China Tourism Research* (8)2, 123-155.
- Gassner, M., & Russell, K. (2008). Relative impact of course components at Outward Bound Singapore: A retrospective study of long-term outcomes. *Journal of*

Adventure Education and Outdoor Learning, (8)2, 133-156.

- Gassner, M., Kahlid, A., and & Russell, K. (2007). Investigating the long-term impact of adventure education: A retrospective study of Outward Bound Singapore's classic 21- day challenge course. In, Paisley, K., McAvoy, L., Young, A.B. & Bloom, K. (Eds.). *Research in Outdoor Education*, (8), 75-93. Coalition for Education in the Outdoors. Cortland, N.Y.
- Gassner, M. (1998). Adventure education review analysis: Taking questions out, putting adventure in. *Journal of Adventure Education and Outdoor Leadership*, 15(1), 14-16.

Refereed abstracts

- Gassner, M. & Shearer, A. (2012). *The Historical Influence of Outdoor Education on Singapore*. Proceedings of the 2012 Hawaii International Conference on Education. Honolulu, HI. p. 1006
- Gassner, M. (2008). A closer look at course components at Outward Bound Singapore: The solo and final expedition. *Research in Outdoor Education*, (9), 80-82. Cortland, NY: Coalition for Education in the Outdoors. http://www.outdooredcoalition.org/RS-08-abstracts.pdf
- Gassner, M. (2006). Investigating the long-term impact of adventure education: A retrospective study of Outward Bound Singapore's classic 21-day challenge course. In, Paisley, K., McAvoy, L., Young, A.B. & Bloom, K. (Eds.). *Research in Outdoor Education, (Vol. 8)*. Cortland, NY: Coalition for Education in the Outdoors.

Other published articles

- Gassner, M. (2005). Contemplating research in Singapore. *Taproot Journal 15*(2), 17-18. Coalition for Education in the Outdoors. Cortland, N.Y.
- Gassner, M. (2002). *Evolution of a profession: The importance of education and good practice within Outward Bound*. Horizons 20, (Autumn), 22-24.
- Gassner, M., & Lo, M. K. (1999). Cambodia: A Country at War With Itself. In Miriam Lo, Carol Gersmehl and Martin Mitchell. Location Patterns and Regions: An Introduction to Geography. WCB/McGraw Hill Custom Publishing, Dubuque, Iowa. Funded by US Department of Education FIPSE Grant #P116B40440-95 and National Science Foundation DUE Grants #9555091 and 9751308.
- Gassner, M., & Lo, M. K. (1999). *Himalayas*. In: Miriam Lo, Carol Gersmehl and Martin Mitchell. Locations, Pattern and Regions: An Introduction to Geography.
 WCB/McGraw Hill Custom Publishing, Dubuque, Iowa. Funded by US Department of Education FIPSE Grant #P116B40440-95 and National Science Foundation DUE Grants #9555091 and 9751308.

Gassner, M. (1998). Take the Questions Out - Put Adventure In: An Analysis of Adventure Education Reviews. *Outward Bound International Newsletter. Vol.* 6, No. 3.

2. Presentations

- Gassner, M. & Shearer, A. (2013, January). *The historical influence of Outdoor Education on Singapore*. Presentation at the 2013 Hawaii International Conference on Education, Honolulu, HI.
- Gassner, M. (2008, January). A closer look at course components at Outward Bound Singapore: The solo and final expedition. Poster presentation at the biennial meeting of the Coalition for Education in the Outdoors Research Symposium, Martinsville, IN.
- Gassner, M. & Kahlid, A. (2006, January). *Investigating the long-term impact of adventure education: A retrospective study of Outward Bound Singapore's classic 21-day challenge course.* Paper presented at the biennial meeting of the Coalition for Education in the Outdoors Research Symposium, Martinsville, IN.
- Gassner, M. (2007). *Fear, loathing, fun, and growth on the interview trail*. Invited presentation, University of Minnesota, Minneapolis, MN., January 31.

3. Grants

- 2014-2020, \$327,932 over 7 years. The United World College of Southeast Asia Fund for OSU-Cascades Tourism and Outdoor Leadership Program. Funded by the United World College of Southeast Asia, Singapore.
- **2013**, **\$2,000** from the **OSU-Cascades Circle of Excellence** for two \$1,000 student scholarships. Funded.
- 2012, \$255,000 (\$85,000 per year for three years), **Henry Luce Foundation** for "The Historical, Current, and Future Influence of Outdoor Education in Singapore." (not funded).
- 2012, \$3,000 from the OSU-Cascades Circle of Excellence for teaching assistant and logistical support of Tourism and Outdoor Leadership Program Expedition course. Funded.
- **2012, \$2,000** from the **OSU-Cascades Circle of Excellence** for two \$1,000 student scholarships. Funded.
- **2011, \$2,000** from the **OSU-Cascades Circle of Excellence** for two \$1,000 student scholarships. Funded.
- 2011, \$5000.00, from the OSU-Cascades Circle of Excellence with Chen, S. For research on senior travelers in China. Dr. Chen is the principle investigator. Funded.

4. Patent Awards, Cultivar Releases, and Inventions

N/A

D. SERVICE

1. University Service

2008-09

Transfer fair November 18, 2009 - Faculty attendee

OSU-Cascades New Program Criteria Committee (Winter 2010-present) – *Member* Assisted in hiring process of new Instructor faculty for Energy Engineering Management program by casually interviewing candidate over dinner and providing feedback Responsible for having the Cascades library acquire an electronic subscription to the *Journal of Outdoor Recreation, Education, and Leadership – Journal acquisition*

2011-12

Creation of Tourism and Outdoor Leadership (TOL) Program Expeditions II scholarship. \$2000.00. Two students each year will be eligible for \$1000.00 each. It's in the bag lecture series. Special use permits: Are they required for all – *Presenter* College 101 mini class presentation. March 10, 2011. Outdoor leadership: What's ethics got to do with it? *Presenter* Campus pre-view day. Mini teaching session. April 2, 2011 – *Presenter* College 101 mini class presentation. March 16, 2012. Outdoor leadership: What's ethics got to do with it? *Presenter* College 101 mini class presentation. March 16, 2012. Outdoor leadership: What's ethics got to do with it? *Presenter* OSUL Created as Descent and SETS committee 2011/12 – March

OSU-Cascades Beyond SETS committee, 2011/12 – Member

OSU-Cascades Faculty awards committee, 2011/12 – Member

Student Evaluation of Teaching (SET) Committee – Chair

Hospitality Management Search Committee – Member

2014-15

OSU-Cascades New Program Planning Committee – *member* OSU-Cascades Long Range Planning Committee – *member* OSU College of Forestry TOL/RRM Merger Task Force – member

2015-16

Peer Review of Teaching (PROT) Committee for Todd Montgomery – *chair* Peer Review of Teaching (PROT) Committee for Susan McMahon – *chair* OSU-Cascades New Program Planning Committee – *member* OSU-Cascades Academic Curriculum Council – *member* OSU-Cascades Long Range Planning Committee – *member* Tourism and Outdoor Leadership Program Instructor Search Committee – *Chair* Associate Academic Dean Search Committee – *member*

2016-17

Program Expansion Committee – *member* Program Lead Committee – *member* PROT Committee – *Chair* Chemistry Lab Manager search Committee – *Search Advocate* 2017-18

Program Expansion Committee – *member* Program Lead Committee – *member* Academic Curriculum Committee – *member* PROT Committee – *Chair* Promotion/3rd Year Review Committee – *Chair*

2. Service to the Profession

(September 2010). Manuscript Review. *Ecopsychology – Invited Reviewer*(May 2010). Manuscript Review. *Ecopsychology – Invited Reviewer*2012-Present University of Hong Kong School of Professional and Continuing
Education (SPACE), Outdoor Adventure Program – *Honorary Assistant Professor*2013, January to present. Invited reviewer for *Tourism Management*.
2013, October to present. Invited reviewer for *Journal of Experiential Education*2013, April to present. Mount Hood Community College (MHCC) Wilderness Leadership and
Experiential Education (WLEE) program. *Advisory Committee member*2016, November. Invited external review member for new Masters program at Southern
Oregon University
2017, Invited Reviewer, Journal of Experiential Education

2017, October. Invited external reviewer for faculty promotion at Thompson Rivers University, Canada

3. Service to the Public (professionally related)

September 2010 to June 2013.

Highland Elementary School site council. Site council is concerned with long-term strategic planning of the school. Members included principal, teachers and staff, and parents – *Member Highland Elementary School Site Council.*

Ongoing

I am continually developing relationships with community organizations through my role at TOL internship coordinator. As internship coordinator this allows me to stay in touch with the community on a professional basis. As examples of these efforts two of our students now work full time at Brasada Ranch, another student will soon be working with Hydro Flask, another with REI, and another recently finished with the Oxford Hotel.

Ongoing

Provide informal advising to the University of Hong Kong's School of Continuing and Professional Education (HKUSPACE) for their Outdoor and Adventure Education Program – *Honorary Assistant Professor HKUSPACE*

2018, June to present. Children's Cancer Socciety (CCA), Nature Rx Outdoor & Medical Expedition Council Inform program development, provide medical expertise to advise youth participation, aid in program assessment and research, and share industry standards. They will collaborate with CCA team members leading and designing programming. Invited member.

E. AWARDS

2010. Made alternate list for 6-month Fulbright research award to Hong Kong – *Fulbright faculty scholarship*.

2013. Oregon State University, Global Learning Community course enhancement award through the Center for Teaching and Learning, \$2,000.00

2014, October. British Canoeing (BC) Coastal Navigation and Tidal Planning endorsement course.

2014, October. British Canoeing (BC) 2 Star Award.

2014, October. British Canoeing (BC) 3 Star Award.

2015, October. British Canoeing (BC) UKCC Level 1 Coach Certificate in Coaching Paddlesport.

2015, October. British Canoeing (BC) Foundation Coaching the Mind, endorsement course.

2015, October. British Canoeing (BC) Foundation Safety and Rescue endorsement course. 2016, October. British Canoeing (BC) 4 Star Sea Kayak Leader Award (training coure only).

2017, April. Wilderness First Responder (WFR). The Wilderness Medicine Training Center (WMTC). Current through April, 2020.



Oregon State University - Cascades 1500 SW Chandler Ave. Bend, Oregon 97702

P 541-322-3100 OSUcascades.edu

December 26, 2018

Dr. Geoffrey Raynak Executive Director in Residence, Outdoor Products Oregon State University–Cascades 1500 SW Chandler Ave Bend, OR 97702

Dear Geoff,

Thank-you for the opportunity to review the proposal to offer an Outdoor Products Degree at Oregon State University-Cascades. After reviewing the information in your proposal, I am able to offer this endorsement concerning the facility requirements. Within OSU's process for CAT1 proposals, my review and endorsement fulfill the same process requirement that Capital Planning and Design provides for programs proposed on the Corvallis campus.

The proposal describes a need for traditional classrooms to support 13 new classes, 200 sf of storage for gear and testing equipment and product creation and fabrication space. OSU-Cascades will meet these requirements with a combination of existing space and new space in Academic Building 2, which will be built in 2020-2021. Spaces in Academic Building 2 specifically noted for shared use by the Outdoor Products program include the following:

- Flex Lab 1,200 sf
- Capstone Project Area 900 sf
- Makerspace 700 sf
- Makerspace w/ Art Storage 800 sf
- Blackbox recording studio 250 sf
- Storage 500 sf

I am pleased to endorse your proposal and I look forward to working with you on the details as we design and construct Academic Building 2.

Sincerely,

Steve Pitman, PE Director of Facilities and Operations



College of Engineering

Oregon State University 101 Covell Hall Corvallis, Oregon 97331-2409

P 541-737-5232 or 877-257-5182 **F** 541-737-1805 www.engr.oregonstate.edu

November 30, 2018

The College of Engineering supports the CAT 1 that adds the course designators for Outdoor Products and Engineering Sciences.

Sincerely,

Scott A. Ashford, Ph.D. Kearney Professor and Dean

OSU BUDGET NARRATIVE - BS in Outdoor Products

Personnel:

Faculty, Tenured/tenure-track:

• No incremental hires dedicated to this program

Faculty, Fixed-term:

Full-time Instructors:

- One existing 1.0 instructor at \$84,873 in Year 1, escalated at 3% per year *Part-time Instructors*:
 - Pay rate for 9-month part-time instructors is \$43,002
 - Year 1 = 0.0 FTE = \$0
 - Year 2 = 0.086 FTE = \$3,686
 - Year 3 = 0.743 FTE = \$31,944
 - Year 4 = 0.743 FTE = \$31,944

Graduate Assistants: No new graduate assistants

Support Staff: No new support staff

<u>OPE</u>:

Tenured/tenure-track faculty:

• None

Full-time Instructors:

- Fixed OPE (health benefits) for 1.0 instructor = \$16,909 for year 1, escalated at 3% per year
- Variable OPE (retirement and other benefits) = 34.06%, escalated at 3% per year plus 2% for potential additional State PERS liability passed on to the institution
- Total OPE:
 - Year 1 = \$48,154
 - Year 2 = \$52,313
 - Year 3 = \$56,762
 - Year 4 = \$61,519

Part-time Instructors:

- Variable OPE (other benefits only) = 9.83%, escalated at 3% per year
 - Year 1 = \$0
 - Year 2 = \$373
 - Year 3 = \$3,331
 - Year 4 = \$3,431

Other Expenses:

Library:

- Printed \$328 per year with 1% inflation each year
- Electronic \$522 per year with 3% inflation each year

Services and Supplies:

Recurring:

- Department operating expense
 - Office supplies = \$50 per year
 - Postage = \$100 per year
 - Professional Development = \$2,400 per year
- Student workers
 - Year 1 = \$1,265
 - Year 2 = \$1,293
 - Year 3 = \$1,320
 - Year 4 = \$1,348

One-Time:

• Refresh computer equipment in Year 1 = \$2,000

Capital Equipment: None

Facilities Renovation: None

Resources:

Current Budget: None required

Tuition: Tuition generated from students enrolled in major (net of 10% Fee Remission)

- Year 1 = 6.5 FTE for academic year = \$54,953
- Year 2 = 13.0 FTE for academic year = \$113,202
- Year 3 = 19.5 FTE for academic year = \$174,898
- Year 4 = 19.5 FTE for academic year = \$180,144

Foundation: Use of gift funds held in Foundation Account 4100-863730

- Year 1 = \$84,740
- Year 2 = \$35,301
- Year 3 = \$11,939
- Year 4 = \$14,299

Column 1 (Level of Student Outcome Learning at Conclusion of Course): 1=Emerging; 2=Developing; 3=Proficient Column 2 (Level of Student Outcome Learning upon Course Entry): I=Introduce; R=Reinforce; E=Emphasize Column 3 (Intentional Correlation with Co-curricular Activities): C=Co-Curriculum

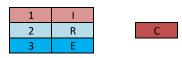
Learning Outcomes:

1: Demonstrate and apply a systems overview approach toward product commercialization

2: Describe the value of minimizing negative environmental impact, increased access, and the importance of promoting social justice during a product's lifecycle.

3: Situate knowledge of iconic historical figures and their companies, and the history, use, management, and protection of public lands and ethical business practices as an essential competency for work in the outdoor product industry. 4: Apply key elements of their coursework to experiential learning opportunities that include internships and integrated cross-disciplinary projects.

Outcome # ⇔		1. Systems Approach Towards Commercialization		2. Impacts, Access, Social Justice				story and E		4. Experiential Learning			
Course prefix	Course ID		1.2	1.3	2.1	2.2	2.3	3.1	3.2	3.3	3.1	3.2	3.3
OP	101	1	I		1	I		1	I				
OP	307	1	1		1	1		1	1		1	I	
OP	310	2	R		2	R		2	R		2	R	
OP	410	3	E		3	E		3	E		3	E	С
DSGN	341	2	R										
BA	260	2	R										
OP	231	1	1								1	1	
OP	232	1	1								1	1	
OP	233	1	1								1	1	
OP	301	1	1		2	R		2	R				
BA	357	2	R										
OP	351	3	E		2	R					2	R	ļ
OP	352	3	E		2	R					2	R	
OP	353	3	E					1	I.		2	R	ļ
OP	360	2	R		2	R		2	R				L
OP	450	3	E		3	E		3	E		3	E	С
OP	451	3	E		3	E		3	E		3	E	C
TRAL	132				1	1		1	1				<u> </u>
TRAL	251				2	R		2	R				<u> </u>
TRAL	352				2	R		2	R				<u> </u>
BA	101	1	1										<u> </u>
BA	390	2	R		2	R							
SUS	304				2	R							ļ
AEC	352				3	E							
GEO	309				3	E							<u> </u>
SUS	102				1	1							



This assessment plan and report template has multiple tabs. Be sure to open your window wide enough to see the tab

What this assessment plan and report are asking for:

>>> This report is asking for a clear, succinct accounting of full-cycle assessment activities for each degree program. This means the program needs to engage in and report the following:

- >> Each degree program must have clear, measurable student learning outcomes that represent the knowledge, skills, and values a graduating student will possess.
 - > The outcomes need to be meaningful to the faculty and other professionals in the field and represent what OSU students need to succeed and be valued in the field.
 - > The outcomes will likely have sub-components that help further define the outcome. If you develop sub-components, those can be submitted as an attachment to the report. For this report you can just list the primary outcome.

>> Each year one or more of the program outcomes must be in some stage of the assessment cycle (data collection, review/consideration of the data, implementation of changes as a result of the data) such that ALL outcomes have been assessed and reported in a period of 5 years.

> A plan must be in place to measure all outcomes within 5 years. A plan is built into this annual assessment report under questions 3.c. and 5. Separate, detailed plans are encouraged.

- > A cycle of fewer than 5 years is fine. If the program has fewer than 5 outcomes, it will be on a shorter cycle (e.g. 4 outcomes = 4 or fewer years).
- > If the program has >10 different outcomes and needs a longer cycle, please contact the APAA to develop an alternative plan. We are glad to work with you.

> If programs are in the developmental phases for program-level assessment and/or have new learning outcomes, start with assessing FEWER outcomes and ASSESS THEM WELL! Please communicate with the APAA if this is the case or if you want some help with designing an efficient assessment plan.

- >> Each outcome must have at least one direct measure identified and aligned to it, but more than one measure is best practice and far more reliable.
 - > Indirect measures can be used to support or triangulate the data from the direct measures.
 - > In some cases indirect measures are the primary means of data collection. This is the exception rather than the rule. If indirect measures are the sole source of data, then please provide an explanation for its selection.
- >> Use the student learning data to inform programmatic decision-making to maximize student learning and improve the strength, effectiveness, and efficiency of the program.
 - > You will be asked to describe the process your unit uses/d to reflect upon the data, how results of assessment efforts relate to strategic planning, and plans for any course, curricular, or unit level changes based upon the data.

Why are we asking for this?

>>> The number one reason we are asking for this information is to ensure the use of evidence and data to inform curricula and pedagogy.

- >> Just as in our scholarly and creative work, evidence and data are essential supplements to the professional competence and commitment that we dedicate to our students.
- >> Additional reasons, which should be compelling to educators and members of the academic community, are that we owe it to the the students and we must demonstrate genuine,
- full cycle assessment to our accrediting body, the NWCCU. Remember, accreditation is voluntary but necessary.

How the annual report submission and the associated tracking and submission process works:

>>> By switching to an Excel spreadsheet format your program can report multiple years of data in one document. Just use a new tab for a new year and label the tab.

>>>> Submit reports to the APAA Sharepoint website: https://sharepoint.oregonstate.edu/sites/APAA/assessment/default.aspx



>> Instructions can be found at: http://oregonstate.edu/admin/aa/apaa/assessment-resources

Template was updated by Tam Belknap, 3/13/2018. Developed by Stefani Dawn, PhD, Assistant Director of Assessment, 2013-15 Feel free to send question, comments, or suggestion to tamara.belknap@oregonstateuniversity.edu, 541-737-2171

Program Information						
Program:	Outdoor Products	Associated Minors: N/A				
College or Administrative Division	College of Engineering					
Subunit(s):	Outdoor Products					

How will you communicate program level student learning outcomes to the students and the public? (include web link)

The Program-Level Student Learning Outcomes will be openly communicated on the Outdoor Products' OSU-Cascades homepage (link TBD). The narrative will be consistent with the CAT I, the Executive Summary, and the recruitment literature. Data assessing these SLOs will be collected at various transitions throughout the program: Admissions, Courses, Student Teaching, and Exit from Program. Student performance is also reviewed continuously by faculty using our LMS systems. The Executive Director of the Outdoor Product team will oversee the tracking of student observations and evaluation data. These data will be mapped against metrics set forth by the Outdoor Products Advisory Board. These metrics will be shared quarterly as a report listed on the Outdoor Products homepage.

Program Learning Outcomes, Benchmarks and Measures								
<i>Outcomes:</i> List your program level student learning (SLO) outcome(s). (Please indicate if outcome is for specific minor only)	1: Demonstrate and apply a systems overview approach toward product commercialization	2: Describe the value of minimizing negative environmental impact, increased access, and the importance of promoting social justice during a product's lifecycle.	3: Situate knowledge of iconic historical figures and their companies, and the history, use, management, and protection of public lands and ethical business practices as an essential competency for work in the outdoor product industry.	4: Apply key elements of their coursework to experiential learning opportunities that include internships and integrated cross- disciplinary projects.				
changed?	2019	2019	2019	2019				
Next year will you be reporting on this outcome?	Annually with each graduating	Annually with each graduating	Annually with each graduating	Annually with each graduating				
Assessment Method: List the measures/methods /instruments used to assess the outcome. How do students demonstrate their attainment of this outcome and how is their learning evaluated?	This SLO will be assessed within the OP 352 : Outdoor Products Design and Development II course. This course aligns with over 80% of the expanded aspects of this SLO (as stated on the CAT I). Students will be supported throughout the course with per-assignment feedback and reporting. The FINAL in this class will include five questions directly related to SLO above.	assignment dedicated to The Role of Brand as Consumer Ambassador / Role Model / Advocate will directly assess the student's mastery of this SLO. The content- based component of this	The ability to situate historical figures and brands will be addressed directly in OP 301 : Outdoor Products Ecosystem Connections. A written assignment dedicated to a customized Brand Case Study will directly assess the student's mastery of this SLO. The content-based component of this assignment will be assessed for the above SLO. Grammar and organization will also be part of the assignment's grade, but will be accounted for separately to allow for the content-based grade to be assessed directly.	Critical to the future success for Outdoor Products Graduates is the ability to personalize their experience with meaningful internships. The OP 410 : Outdoor Products Internship will be use to assess the above SLO. All aspects of this SLOs expanded goals (as stated on the CAT I) are included in this Internship course. Aggregation of the 'Final Project' and 'Supervisor's final evaluation' assignment will combine for the direct assessment.				
Assessment Method: Are the measures/methods/instruments direct (D) or indirect (I)?	Direct	Direct	Direct	Direct/Indirect				
Assessment Method: What benchmarks or indicators of success are you using to determine if the outcome has been satisfactorily met by the students?	Greater than 85% receiving a C or better on the aggregate score of the five Final Exam questions.		Greater than 85% receiving a C or better on assessment. This is 'draft and revise' written assignment. The content-based component of this assignment will be assessed for the above SLO.	-				
Process								
How will your unit reflect on the data you are reporting and who was involved? How are the results of your assessment efforts related to strategic planning and overall program review?	nd who was involved? How are the results of your ssessment efforts related to strategic planning and incomparison of the program wide metrics to support the overall SLOs. These metrics and their effectiveness will be reviewed and advisory Board on by an appropriate cohort							
What data are you archiving? Where and how? How long do you expect to archive the data?	Α	ssessment Data will be captured and	stored securely for at least seven yea	rs				

Program Information						
Program:	Outdoor Product	ts			*Please only include the outcomes that have new results or actions in this reporting year for clarity	
College or Administrative Division:	College of Engine	eering				
Subunit(s)	Outdoor Product				-	
Report Submitted By:		Director of Outdoor Products			-	
APAA Submission Cycle Due Date:	4/15/2018					
Program Outcomes Matched wit	h Measures a	ind Results				
Outcomes: List your program level student lea	arning (SLO)	1. Program level student learning	2. Program level student learning	3. Program level student learning	4. Program level student learning	5. Program level student learning
outcome(s). *		outcome	outcome	outcome	outcome	outcome
Results: What do the data that result from you	u assessment					
methods or processes show about student lea						
this outcome? Describe any patterns or trends						
identified as meaningful or that highlight areas	s of concern or					
success.						
Actions: Describe any course-level (content, p						
structural, etc.) changes that will result /have r						
current year's assessment of this outcome. Inc	clude timelines.					
Actions: Describe any program/degree level (6	a curricular					
process, structural, etc.) changes related to thi						
have resulted/will result from this year's asses						
from other sources (i.e. external accreditors)	,					
Full-Cycle impact: If this learning outcome has	s been assessed					
previously and is being reported on again this	year, what impact					
have the changes incorporated (if any) had on						
If you have not yet assessed the results of the						
based on previous results, please indicate the	year you will					
revisit this outcome						
Process		1				
How did your unit reflect on the data you are r						
was involved? Were there any challenges or co						
the results of your assessment efforts related to planning and overall program review?	to strategic					
	outcomo(a)					
Are there specific data archiving notes for the are reporting on in this report?	outcome(s) you					
Plans						
Describe the unit's (or sub-units) assessment p	plans for the					
upcoming year.						

Copy and paste the template from the previous year. Doing "select all" does not always work with merged field

Is, so highlight the rows (arrow to the far left hold down mouse button), copy, click in this upper left cell and pas

ste.

Outdoor Products Sample 4 Year Plan

Year 1				Tot	tal CR
Summer	Fall	Winter	Spring		
	BA 101 (6) Business Now	TRAL 132 (3) Hst Outdoor Advent. Prof*	COMM 111 (3) Public Speaking*		
	OP 101 (4) Intro Outdoor Prod inds.	ST 201 (4) Principles of Stats	WR 327 (3) Tech Writing*		
	MTH 111 (4) College Alg. or higher*	Bacc Core: Lit/Arts (3-4)*	HHS 231 + PAC (3) BC: Fitness*		
	WR 121 (3) English Comp*	Bacc Core: Cultural Diversity (3-4)*	ST 202 (4) Principles of Stats		
		Elective (3)			
		17 16	5-18	13	
Year 2					46
Summer	Fall	Winter	Spring		
	ECON 201 (4) Micro Econ*	ENG 248 (3) Engr Graphics 3-D model	Bacc Core: Phy Sci (4-5)*		
	OP 231 (2) Exp. OP Designs Water	OP 232 (2) Exp. OP Designs Winter	OP 233 (2) Exp. OP Designs Land		
	CH 121 (5) Gen Chem	Bacc Core: Bio or Phy Sci (4-5)*	OP 307 (1) Pre-Practicum Seminar		
	SUS 102 (4) Intro Env Sci Sustainability*	TRAL 251 (4) Rec Resource Mgmt	Elective (4)		
		Elective (3)	Elective (4)		
		15 16	5-17	15-16	
Year 3					46
Summer	Fall	Winter	Spring		
	BA 260 (4) Entrepreneurship	DSGN 341 (3) Design Thinking	GEO 309 (3) Enviornmental Justice*		
	OP 301 (4) OP Commercialization	OP 351 (4) OP Development 1	OP 352 (4) OP Development 2		
	OP 310 (3) Practicum	AEC 352 (3) Envr. Econ and Policy*	Elective (4)		
	OP 360 (4) OP Branding, Merch, Sales	BA 357 (4) Operations Mgmt	Elective (4)		
		15	14	15	
Year 4					
Summer	Fall	Winter	Spring		
	BA 390 (4) Marketing	SUS 304 (4) Sustainability Assessment*	Elective (4)		
	OP 410 (4) Internship	TRAL 352 (3) Wilderness Mgmt	Elective (4)		
		OP 451 (4) Senior Capstone OP	Elective (4)		
	OP 450 (4) Senior Capstone OP	OF 451 (4) Senior Capstone OF			
	OP 450 (4) Senior Capstone OP OP 353 (4) Outdoor Products Failure	Elective (1)	Elective (0-4 to complete 180)		
	OP 353 (4) Outdoor Products Failure			12-16	

Electives: Courses students may select, either for general knowledge or for fulfilling specific degree requirements. They are generally chosen and used by students to supplement or enrich the required curriculum.

TOTAL Credits 180 Baccalaureate Core: 24-28 Major Credits: 117 Elective Credits: 35-39

* Bacc Core classes

Transfer Plan AAOT sample (assumption no major courses completed in AAOT, plan adjusted for pre-planned major transfer work) Transfer year 1

Summer	Fall	Winter	Spring
	BA 101 (6) Business Now	TRAL 132 (3) Hst Outdoor Advent. Prof	TRAL 251 (4) Rec Resource Mgmt
	OP 101 (4) Intro Outdoor Prod inds.	ST 201 (4) Principles of Stats	WR 327 (3) Tech Writing
	OP 231 (2) Exp. OP Designs Water	OP 232 (2) Exp. OP Designs Winter	OP 233 (2) Exp. OP Designs Land
	SUS 102 (4) Intro Env Sci Sustainability	ENG 248 (3) Engr Graphics 3-D model	COMM 111 (3) Public Speaking
			ST 202 (4) ???? Pre-req BA 357
	or move Summer MTH/CH		
	1	16	12 12 to 16
Transfer year 2			
Summer	Fall	Winter	Spring
MTH 111 (4)	ECON 201 (4) Micro (mth111 prereq)	SUS 304 (4) Sustainability Assessment	OP 352 (4) OP Development 2
CH 121 (5)	OP 301 (4) OP Commercialization	DSGN 341 (3) Design Thinking	OP 307 (1) Pre-Practicum Seminar
OP 310 (3) Practic	cum OP 360 (4) OP Branding, Merch, Sales	OP 351 (4) OP Development 1	GEO 309 (3) Enviornmental Justice
	BA 260 (4) Entrepreneurship	AEC 352 (3) Envr. Econ and Policy	BA 357 (4) Operations Mgmt
	9	15	14 12
Transfer year 3			
Summer	Fall	Winter	Spring
	BA 390 (4) Marketing (ECON201 pre-req)		
	OP 410 (4) Internship (any term YR 4)	TRAL 352 (3) Wilderness Mgmt	
	OP 450 (4) Senior Capstone OP	OP 451 (4) Senior Capstone OP	
	1	12	7

NOTES:

Students who plan ahead can take the following courses in AAOT with appropriate transfer courses:

COMM 111, MTH 111, ST 201, CH 121, ECON 201, WR 327

This would condence the program to 2 years at full time as a transfer student



Notice of Intent

Submission of a New Degree Program; New Location; or Substantive Change Proposal Maximum of 2 pages; Arial 10, 11 or 12 pt; normal font

Program Degree Type and Title: <u>BS in Outdoor Products</u>						
College: College of Engineering						
Department or School: Interdisciplinary Programs						
Contact(s): <u>Geoff Raynak 5413223163</u>						
Date:11 June 2019						

1. Provide a brief description of the anticipated program:

Oregon State University - Cascades is proposing a four-year Bachelor of Science degree in Outdoor Products. The program will have a systems approach to product innovation, design, testing, and management; a curriculum that includes elements of sustainability throughout; and an understanding of natural resources and public lands, in total, fulfilling an important and unmet educational need in the global outdoor industry. In addition to key courses developed for Outdoor Products, existing courses from other programs and colleges, such as business, marketing, natural resources, tourism, recreation and adventure leadership, and engineering, will be leveraged to make up the core of this learning. Students will specialize their program through selection of experiences in the internship and practicum courses.

- 2. Indicate the program location(s) and modality (i.e., face-to-face, online, and/or hybrid): Outdoor Products is a program founded and unique to OSU-Cascades, designed in partnership and consultation with industry leaders and innovators, many located in Central Oregon. The degree will be an on-campus program, with traditional face-to-face weekday course scheduling, combined with some extended-period, field-based learning. Anticipated enrollment is approximately 10 students in the first year growing to a headcount of approximately 50 students in year five and beyond.
- 3. What is the anticipated start date (effective term):

The anticipated start date for courses in this degree is Fall 2019. Full course development will roll term-by-term as the official degree program is approved.

4. What is the anticipated enrollment (Fall Term headcount) at the launch of the program and the planned goals for 5 and 10 years out:

1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year	10 th Year
13	20	20	26	33	100

5. Provide an abbreviated description of how the program will contribute to addressing statewide needs and goals, and alignment with the University's mission and strategic plan: OSU-Cascades is a critical player in the social and economic development of Central Oregon and cannot serve the needs of the students and employers of the region without further expansion of academic programs and degrees. Outdoor Products graduates represent an important contribution to meeting Central Oregon's needs. The program promotes OSU's goals of providing a transformative education that is accessible to all learners and will have a significant the visible impact in Oregon and beyond. The mission of the Outdoor Products degree program is to educate and inspire future leaders for the opportunities and challenges in the outdoor industry. This mission is achieved through a rigorous curriculum combining product commercialization, lands stewardship and experiential learning. Graduates of the program will lead the outdoor industry in balancing product, profits, people, and the planet.

As part of the proposed degree, we conducted over 100 interviews with industry leaders in Oregon, Washington, California, Utah, and Colorado to determine the need for an Outdoor Products degree. Specifically, we asked about skill-sets they would like to see in candidates for positions in their company, skills in outdoor industry leaders and, in retrospect, the skills they wished they had acquired when first beginning their careers in the outdoor industry. We have designed our curriculum and learning outcomes around these findings.

6. Provide an abbreviated description of how the proposed program will align with, or potentially will compete with, other existing or planned OSU programs:

There are currently no Oregon institutions (public or private) that offer a bachelor's degree in Outdoor Products. The University of Oregon's master's program in Sports Product Management and Portland State's Athletic and Outdoor Product Planning certificate are the only programs in Oregon with some similarities to the proposed degree program; each having different target audiences and learning outcomes.

Within the OSU system, there is a minimal potential for conflict in contrast to a great potential for alignment. At Cascades, the is a possibility that some students from Tourism, Recreation and Adventure Leadership or Natural Resources may be tempted to move into Outdoor Products. But the real benefit is that students dedicated to their existing majors will be able to explore OP courses to help provide a broader perspective in their course of study. In addition, the OP Minor will support students who choose to stay within their existing major but have affinities for the outdoors by broadening the pathways to employment.

⁻⁻⁻⁻⁻

Contact the Office of Academic Programs and Assessment should questions arise completing this form.

Source: Office of Undergraduate Education and the Office of Academic Programs and Assessment (5-29-19)

Janice,

Can you upload this email to the Outdoor Products proposal (https://secure.oregonstate.edu/ap/cps/proposals/view/102419)?

Thanks! Michele

From: Ketsdever, Andrew <andrew.ketsdever@osucascades.edu>
Sent: Friday, January 3, 2020 12:39 PM
To: Swift, Michele - COB <michele.swift@bus.oregonstate.edu>; Raynak, Geoffrey
<geoff.raynak@osucascades.edu>
Cc: Nunnemaker, Vickie <vickie.nunnemaker@oregonstate.edu>; Takata, Yumie
<Yumie.Takata@oregonstate.edu>
Subject: RE: Outdoor Products proposal

Hi Michele and Yumie,

Thank you for your review especially over break. We greatly appreciate your efforts.

- 1. There is significant interest from the student perspective. We have 6 or 7 right now in courses that have no approved degree program. That is 6 or 7 that have not been advertised to nor specifically recruited in any way so there is definitely going to be demand once we have the degree fully approved. We have just submitted an Academic Program Plan to the Provost's Office that included the information on jobs and enrollment below.
- 2. We will work with Troy to get approval to teach TRAL 352 face-to-face in Bend. However, there is no issue with our students taking ECampus courses or otherwise being required to do so. We try to avoid it with F2F offerings, but it is not unheard of here. Troy has been supportive and we are working this into a larger construct of helping each other out in our respective programs.

I don't know the best way to approach this, but perhaps putting these questions formally in CPS and we can respond formally in the CPS is the best approach. We can make sure this is all done this afternoon or first thing Monday to keep this on track for a possible Wednesday discussion.

Best,

Andrew

Workforce Potential

There are projected to be 3,100 annual openings for jobs in Oregon requiring a degree in outdoor products over the next 10 years.

Enrollment Potential

Targeted enrollment at maturity is 87 students; break-even student enrollment is 75 students. Given that this will be the first Outdoor Products degree in Oregon enrollments were compared to the existing energy systems engineering program. Current enrollment is 107.

From: Swift, Michele - COB <<u>michele.swift@bus.oregonstate.edu</u>>
Sent: Friday, January 3, 2020 12:25 PM
To: Ketsdever, Andrew <<u>andrew.ketsdever@osucascades.edu</u>>
Cc: Nunnemaker, Vickie <<u>vickie.nunnemaker@oregonstate.edu</u>>; Takata, Yumie
<<u>Yumie.Takata@oregonstate.edu</u>>
Subject: Outdoor Products proposal

Hi Andrew,

Yumie Takata and I reviewed the proposal over the break and are very supportive. We did have a couple questions though.

- While there is strong industry interest in the major, no information was provided on student interest. We noticed the OP courses offered so far had less than 10 students enrolled. However, in looking at your enrollment projections, I'm guessing you do anticipate sufficient student interest?
- We also didn't find a response to the concern raised by Troy Hall about TRAL 352. TRAL 352 is currently only offered online and Troy questioned whether Cascades allows an online course to be a required course in a degree program.

If you can address those questions, I think we're good.

Thanks, Michele

Michele Swift, Ph.D., SPHR, SHRM-SCP (she/her/hers)

Senior Instructor of Management | Professional Development Coordinator Assistant School Head – Management, Entrepreneurship, & Supply Chain Oregon State University | College of Business <u>LinkedIn | Website</u>
364 Austin Hall | Corvallis, OR 97331
541-737-4110 | michele.swift@bus.oregonstate.edu

Integrity | Respect | Responsibility



Subject: RE: Outdoor Products Liaison Support - College of Forestry

Date: Friday, January 11, 2019 at 4:10:50 PM Pacific Standard Time

From: Hall, Troy <Troy.Hall@oregonstate.edu>

To: Raynak, Geoffrey <geoff.raynak@osucascades.edu>

Hi Geoff,

We (here at Corvallis) are not permitted to include an Ecampus class as a required course in our degrees (because of the extra costs for students). So you may want to check whether you can actually have it as a required course. Down the road, if the program grows, we'll need to monitor enrollments, as that class tends to fill regularly. But for now, I don't see a problem.

We just revised the NR minor (it's in the Cat II process now), but I can share it with you – it has a lot of room for students to choose classes, so it could indeed be useful for the 'environmental impact' component of the degree.

It doesn't appear that I was listed officially as a liaison (at least I can't find any way to enter comments directly, as usually happens). So if you want to add comments, you can say that I (as program lead for the TRAL degree) support the program and look forward to working in partnership with your program.

Cheers, Troy

Troy Hall Professor & Department Head Forest Ecosystems & Society Oregon State University 541-737-1306

From: Raynak, Geoffrey <geoff.raynak@osucascades.edu>
Sent: Thursday, January 10, 2019 11:45 AM
To: Hall, Troy <Troy.Hall@oregonstate.edu>
Subject: Re: Outdoor Products Liaison Support - College of Forestry

Thanks for the quick reply, Troy.

Your comments and feedback are well received.

To help clarify:

1: noted that TRAL 352 is currently only offered online ... Michael and I have discussed this and he is confident that the content is supportive and relevant.

2: NR201 was also 'on the table' but is we hope to cover complementary content via the SUS course that we are offering

3: We are anticipating including SUS 102 and SUS 304.

The hope is that we can use all the above course to provide a truly broad view of the importance of the planet and our assets ... and how to respectfully introduce 'gear' into our amazing places.

And your thought of an NR minor is interesting ... for sure.

I'm personally envisioning three main sectors of the degree: design & development / business & operations / environmental impact

These are my own predictions based on my time architypes I've seen in the industry and here in Bend. But of course, time will tell ... and the option of an NR minor (as it relates to my 'environmental impact' sector) may be very motivating for a portion of the students. Thank you for sharing that thought.

Finally, please let me know next steps on the liaison reply. If you can include your notes into the Outdoor Products CAT I ... please do. If it is easier for you to send to me ... I'm happy to upload it form here as well.

Regards Geoff

Geoff Raynak, PhD | Executive Director OSU-Cascades | Outdoor Products O: 5413223163 | M:9712277972

From: "Hall, Troy" <<u>Troy.Hall@oregonstate.edu</u>>
Date: Thursday, January 10, 2019 at 11:10 AM
To: "Raynak, Geoffrey" <<u>geoff.raynak@osucascades.edu</u>>
Subject: RE: Outdoor Products Liaison Support - College of Forestry

Hi Geoff,

Apologies for the delay (and thanks for the reminder). We are excited about the complementarity between this program and TRAL. I have just a couple comments:

- TRAL 352 is only offered on-line now. This may be a problem as a requirement? You might have an "or" with other FES courses offered at Cascades.
- Have you thought about including NR 201 as a broad introduction to natural resources? It's about natural resource management, but given the goals of the program (e.g., training in "land stewardship"; theme of "understanding history, use, management and protection of public lands), it might be appropriate.
- Was it intentional to exclude classes in SUS? There are a few offered at Cascades.

Additionally – just a thought – there might be possibilities to have OP students get a minor in Natural Resources (seems like a natural pairing).

Let me know if you want me to enter these into CPS (where they will require formal response), or if you want to discuss further before I submit my liaison response.

Cheers, Troy

Troy Hall Professor & Department Head Forest Ecosystems & Society Oregon State University

541-737-1306

From: Raynak, Geoffrey <geoff.raynak@osucascades.edu>
Sent: Thursday, January 10, 2019 10:08 AM
To: Hall, Troy <<u>Troy.Hall@oregonstate.edu</u>>
Cc: Ketsdever, Andrew <<u>andrew.ketsdever@osucascades.edu</u>>
Subject: Re: Outdoor Products Liaison Support - College of Forestry

Hello Troy, Geoff here again.

Can you please confirm receipt of this note? As a liaison College, we are still seeing your formal review and official response on this so we can proceed with our CAT I. Can you please provide this by JAN 18 2019.

Many thanks

Regards Geoff

Geoff Raynak, PhD | Executive Director OSU-Cascades | Outdoor Products O: 5413223163 | M:9712277972

From: "Raynak, Geoffrey" <<u>geoff.raynak@osucascades.edu</u>>
Date: Thursday, December 13, 2018 at 4:47 PM
To: "Hall, Troy" <<u>Troy.Hall@oregonstate.edu</u>>
Cc: "Ketsdever, Andrew" <<u>andrew.ketsdever@osucascades.edu</u>>
Subject: FW: Outdoor Products Liaison Support - College of Forestry

Greetings Troy.

Geoff Raynak here. I am the Executive Director of the proposed Outdoor Products degree here at Cascades.

After talking with Michael Gassner, he recommended I reach out to you as an additional step. You can see the email chain below ... but in summary: I am hoping to require a few TRAL courses in our program.. As such, we are seeking liaison comments/concerns/support related to the CAT I proposal (<u>Proposal # 102419</u>).

I would appreciate your review and response on the topics. I know we are heading into the latter half of the Holidays, but I would appreciate feedback before the end of December.

Feel free to call me at any time to discuss.

Regards Geoff Geoff Raynak, PhD | Executive Director OSU-Cascades | Outdoor Products O: 5413223163 | M:9712277972

From: "Gassner, Michael E" <<u>michael.gassner@osucascades.edu</u>>
Date: Thursday, December 13, 2018 at 10:24 AM
To: "Raynak, Geoffrey" <<u>geoff.raynak@osucascades.edu</u>>
Cc: "Ketsdever, Andrew" <<u>andrew.ketsdever@osucascades.edu</u>>, "Lindberg, Kreg"
<<u>Kreg.Lindberg@osucascades.edu</u>>
Subject: Re: Outdoor Products Liaison Support - College of Forestry

Hi Geoff,

TRAL 132 we already spoke about. The updated syllabus for next term is nearly done and should be this week. Let me know if it will work for your students when you get the syllabus.

I will pass it to you when finished. Like to have that small panel next term we spoke about to attend student presentations.

Look forward to having your students in the class.

TRAL 251 Recreation Resource Management - I think the best person to contact about this would be Troy Hall, FES Chair in Corvallis.

If she is not able to help you, she will point you in the right direction. This course is a bit out of my expertise area.

TRAL 352 Wilderness Management - At the moment, we don't have another option unless Kreg can work it in at some point.

In general, Troy Hall is the best first contact in the College of Forestry in Corvallis (department of FES). Aside from that Julie Barlow in the CoF is tasked with assisting CAT II concerns and can put things through if you are strapped for time.

She is a very worthwhile contact as well.

Let me know when if you need further information and want to meet about any of this.

Cheers,

Michael

Michael Gassner Ph.D. Program Lead - Tourism Recreation and Adventure Leadership Oregon State University Cascades Honorary Assistant Professor, University of Hong Kong 327 Tykeson Hall 1500 SW Chandler Avenue Bend, Oregon 97702 541-322-3131 http://www.osucascades.edu/academics/orlt/gassner United World College of Southeast Asia (UWCSEA) evaluative research project http://osucascades.edu/academics/tral On Wed, Dec 12, 2018 at 1:44 PM Raynak, Geoffrey <<u>geoff.raynak@osucascades.edu</u>> wrote:

Hi Michael

Hope all is going well as we move into a bit of a winter gap.

Before Winter Term actually start, I am hoping to get some help from you... I am currently planning to require the following College of Forestry classes for the Outdoor Products Degree.

- TRAL 132 FOUNDATIONS & HISTORY OF OUTDOOR & ADVENTURE PROFESSIONS
- TRAL 251 RECREATION RESOURCE MANAGEMENT
- TRAL 352 WILDERNESS MANAGEMENT

I'm sure you can tell from this list that we have three different items to tend to.

- TRAL 132 should not require much, if any, work to be available to the Outdoor Products students.
- TRAL 251 is a course that is currently only offered online or in Corvallis. Ideally, having it part of the Outdoor Products degree would bolster the case for adding the course to our on-campus offerings.
- I believe the same thought process can be applied to TRAL 352; which is currently only offered online. I'm hoping, for everyone's benefit, that we can bring this class on-campus as well.

I will also personally initiate the CAT II for TRAL 251 and 352 based on the above situations once liaison communication has been established ... and then the owner of that course can hopefully finish the process.

I am not fully aware of the decisions/ownership/perils/pitfalls that may lay in front of me ... any advice on these will be greatly appreciated!

And finally: to ensure (or at least help) this whole coordination goes smoothly, I've been advised to solicit liaison input directly from the College in Corvallis. Would you be able to point me in the right direction / introduce me to the proper contact to begin this

Would you be able to point me in the right direction / introduce me to the proper contact to begin this process?

I've attached the Executive Summary for the proposed program if that helps create some context for

yourself and/or your colleagues in Corvallis.

Many thanks and Happy Holidays!

Geoff

Geoff Raynak, PhD | Executive Director OSU-Cascades | Outdoor Products O: 5413223163 | M:9712277972 Subject: RE: Outdoor Products Liaison Support - College of Business

- Date: Tuesday, January 15, 2019 at 1:02:21 PM Pacific Standard Time
- From: Coakley, James COB < Jim.Coakley@bus.oregonstate.edu>
- To: Raynak, Geoffrey <geoff.raynak@osucascades.edu>
- CC: Ketsdever, Andrew <andrew.ketsdever@osucascades.edu>, Jensen, Carlos <Carlos.Jensen@oregonstate.edu>, Sweeney, James <Jim.Sweeney@oregonstate.edu>

Geoff,

No issues with the business courses you have included in the proposal so far. Here are some additional courses from the college of business that you may want to consider incorporating into this degree program.

BA 458. INNOVATION AND NEW PRODUCT DEVELOPMENT DSGN 121. COMPUTER AIDED DESIGN I DSGN 244: Color Innovation DSGN 281. DRAWING AND SKETCHING DSGN 341: Design Thinking and Process Innovation DSGN 343. Idea Visualization MGMT 364. Project Management.

Jim

From: Raynak, Geoffrey <geoff.raynak@osucascades.edu>
Sent: Tuesday, January 15, 2019 11:40 AM
To: Coakley, James - COB <Jim.Coakley@bus.oregonstate.edu>
Cc: Ketsdever, Andrew <andrew.ketsdever@osucascades.edu>
Subject: Re: Outdoor Products Liaison Support - College of Business

Hi Jim Checking in again to confirm receipt of this request.

Looking forward to your feedback.

Regards Geoff

From: "Raynak, Geoffrey" <<u>geoff.raynak@osucascades.edu</u>> Date: Thursday, January 10, 2019 at 10:34 AM To: "Coakley, James - COB" <<u>Jim.Coakley@bus.oregonstate.edu</u>> Cc: "Ketsdever, Andrew" <<u>andrew.ketsdever@osucascades.edu</u>> Subject: FW: Outdoor Products Liaison Support - College of Business

Hi Jim

Geoff Raynak here.

We emailed earlier this summer as part our my exploration of courses for the Outdoor Products here at Cascades.

As you can see from the thread below, we are seeking liaison feedback from the College of Business.

After talking with Tori Howes, she recommended I reach out to you as an additional step. You can see the email chain below ... but in summary, because we hope to require a few College of Business courses in our program, we are seeking liaison comments/concerns/support related to my CAT I proposal (Proposal # 102419). I would appreciate your review and response on the topics

We would like to have the College's response by JAN 18 2019. Please confirm receipt of this note ... and that the above response date is acceptable.

Many thanks

Regards Geoff

Geoff Raynak, PhD | Executive Director OSU-Cascades | Outdoor Products O: 5413223163 | M:9712277972

From: "Howes, Satoris S" <<u>satoris.howes@osucascades.edu</u>>
Date: Thursday, January 10, 2019 at 10:26 AM
To: "Raynak, Geoffrey" <<u>geoff.raynak@osucascades.edu</u>>
Cc: "Ketsdever, Andrew" <<u>andrew.ketsdever@osucascades.edu</u>>
Subject: RE: Outdoor Products Liaison Support - College of Business

Hi Geoff,

Sorry for my delay. I thought I had replied but I think I did so in my head.

I see no problem with what you have planned. Once you're up and running we'll likely need to offer another section of BA 260, which is likely needed in the future anyway. If you've already been in touch with Jim Coakley, then you have the person I would have pointed you to for this. He's my main contact there for things like this.

Let me know if you need more from me. Again, sorry for my delayed response and thanks for checking back in with this.

Tori

Sent: Thursday, January 10, 2019 10:09 AM
To: Howes, Satoris S <<u>satoris.howes@osucascades.edu</u>>
Cc: Ketsdever, Andrew <<u>andrew.ketsdever@osucascades.edu</u>>
Subject: Re: Outdoor Products Liaison Support - College of Business

Hi Tori. Geoff here again.

Can you please confirm receipt of this note? As a liaison College, we are still seeing your formal review and official response on this so we can proceed with our CAT I.

To support this whole coordination progressing smoothly, I've been advised to solicit liaison input directly from the College in Corvallis.

Would you be able to point me in the right direction / introduce me to the proper contact to begin this process?

We would like to have the College's response by JAN 18 2019.

Many thanks

Regards Geoff

Geoff Raynak, PhD | Executive Director OSU-Cascades | Outdoor Products O: 5413223163 | M:9712277972

From: "Raynak, Geoffrey" <geoff.raynak@osucascades.edu>
Date: Wednesday, December 12, 2018 at 1:44 PM
To: "Howes, Satoris S" <<u>satoris.howes@osucascades.edu</u>>
Cc: "Ketsdever, Andrew" <<u>andrew.ketsdever@osucascades.edu</u>>
Subject: Outdoor Products Liaison Support - College of Business

Hi Tori Hope the move is going well ... Looking forward to bringing the crew by this weekend.

In the meantime, I am hoping to get some help from you... I am currently planning to require the following College of Business classes for the Outdoor Products Degree.

- BA 101 BUSINESS NOW
- BA 260 INTRO TO ENTREPRENEURSHIP
- DSGN 341 DESIGN THINKING AND PROCESS INNOVATION
- BA 357 OPERATIONS MANAGEMENT
- BA 390 MARKETING

With these requirements, I believe I will need to have the College aware of my decision and ensure we have

liaison input.

All of these courses (except 101) will need a CAT II to allow Outdoor Products' students to enroll. We would also need a CAT II for DSGN 341 to be taught here at OSU-C I've been in touch with Jim Coakley, Marilyn Read and Andrea Marks regarding DSGN 341. They have given approval for us to include DSGN 341 ... pending standard instructor and content assurances.

I believe I will also personally initiate the CAT II for all the above situations once liaison communication has been established ... and then the owner of that course can just finish the process.

To support this whole coordination progressing smoothly, I've been advised to solicit liaison input directly from the College in Corvallis.

Would you be able to point me in the right direction / introduce me to the proper contact to begin this process?

I've attached the Executive Summary for the proposed program if that helps create some context for yourself and/or your colleagues in Corvallis.

Many thanks and Happy Holidays!

Geoff

Subject: RE: Outdoor Products Liaison Support - College of Business

Date: Thursday, January 17, 2019 at 11:43:11 AM Pacific Standard Time

From: Howes, Satoris S <satoris.howes@osucascades.edu>

To: Raynak, Geoffrey <geoff.raynak@osucascades.edu>

I see no problem with what you have planned. Once you're up and running we'll likely need to offer another section of BA 260, which is likely needed in the future anyway. Please just keep me posted as your enrollment grows so we can manage this process together.

Thanks,

Tori

From: Raynak, Geoffrey
Sent: Thursday, January 17, 2019 11:28 AM
To: Howes, Satoris S <satoris.howes@osucascades.edu>
Cc: Ketsdever, Andrew <andrew.ketsdever@osucascades.edu>
Subject: Re: Outdoor Products Liaison Support - College of Business

Hi Tori Geoff here again.

In the spirit of soliciting full engagement from peers in Corvallis and here at Cascades, I would also now like to receive your liaison input on the inclusion of the below courses in the Outdoor Products degree.

Can you please provide this feedback before Friday the 25th?

Thanks again, Tori.

Regards Geoff

Geoff Raynak, PhD | Executive Director OSU-Cascades | Outdoor Products O: 5413223163 | M:9712277972

From: "Raynak, Geoffrey" <<u>geoff.raynak@osucascades.edu</u>> Date: Wednesday, December 12, 2018 at 1:44 PM To: "Howes, Satoris S" <<u>satoris.howes@osucascades.edu</u>> Cc: "Ketsdever, Andrew" <<u>andrew.ketsdever@osucascades.edu</u>> Subject: Outdoor Products Liaison Support - College of Business

Hi Tori Hope the move is going well ... Looking forward to bringing the crew by this weekend.

In the meantime, I am hoping to get some help from you... I am currently planning to require the following College of Business classes for the Outdoor Products Degree.

- BA 101 BUSINESS NOW
- BA 260 INTRO TO ENTREPRENEURSHIP
- DSGN 341 DESIGN THINKING AND PROCESS INNOVATION
- BA 357 OPERATIONS MANAGEMENT
- BA 390 MARKETING

With these requirements, I believe I will need to have the College aware of my decision and ensure we have liaison input.

All of these courses (except 101) will need a CAT II to allow Outdoor Products' students to enroll. We would also need a CAT II for DSGN 341 to be taught here at OSU-C I've been in touch with Jim Coakley, Marilyn Read and Andrea Marks regarding DSGN 341. They have given approval for us to include DSGN 341 ... pending standard instructor and content assurances.

I believe I will also personally initiate the CAT II for all the above situations once liaison communication has been established ... and then the owner of that course can just finish the process.

To support this whole coordination progressing smoothly, I've been advised to solicit liaison input directly from the College in Corvallis.

Would you be able to point me in the right direction / introduce me to the proper contact to begin this process?

I've attached the Executive Summary for the proposed program if that helps create some context for yourself and/or your colleagues in Corvallis.

Many thanks and Happy Holidays!

Geoff

Subject: RE: Outdoor Products Liaison Support - College of Agricultural Sciences

Date: Friday, January 18, 2019 at 9:24:51 AM Pacific Standard Time

From: Shinderman, Matthew <Matt.Shinderman@osucascades.edu>

To: Raynak, Geoffrey <geoff.raynak@osucascades.edu>

CC: Ketsdever, Andrew <andrew.ketsdever@osucascades.edu>

Good morning Geoff,

I support the idea of including SUS 102, SUS 304 and AEC 352 in the proposed Outdoor Products degree. SUS 304 is a good starting point for assessment of product/service sustainability, but you might consider adding WSE 385 Evaluating Sustainability Through Life Cycle Analysis to the curriculum. You might also consider working with the College of Business to identify opportunities for students in the program to enroll in BA 314 Sustainable Business Operations.

Regards,

matt

Matt Shinderman, PhD Director-Human and Ecosystem Resilience and Sustainability Lab Program Lead-Sustainability Double-Degree Department of Fisheries and Wildlife Science Oregon State University Cascades Campus 541-322-3159 matt.shinderman@osucascades.edu

From: Raynak, Geoffrey <geoff.raynak@osucascades.edu>
Sent: Thursday, January 17, 2019 11:28 AM
To: Shinderman, Matthew <Matt.Shinderman@osucascades.edu>
Cc: Ketsdever, Andrew <andrew.ketsdever@osucascades.edu>
Subject: Re: Outdoor Products Liaison Support - College of Agricultural Sciences

Hi Matt Geoff here again.

In the spirit of soliciting full engagement from peers in Corvallis and here at Cascades, I would also now like to receive your liaison input on the inclusion of the below courses in the Outdoor Products degree.

Can you please provide this feedback before Friday the 25th?

Thanks again, Matt.

Regards Geoff

From: "Raynak, Geoffrey" <<u>geoff.raynak@osucascades.edu</u>> Date: Wednesday, December 12, 2018 at 1:44 PM To: "Shinderman, Matthew" <<u>Matt.Shinderman@osucascades.edu</u>> Cc: "Ketsdever, Andrew" <<u>andrew.ketsdever@osucascades.edu</u>> Subject: Outdoor Products Liaison Support - College of Agricultural Sciences

Hi Matt

Geoff here.

Hope all is going well as we slide into the Holiday break.

First off ... I wanted to let you know that Quinn got 'second place' in her science project that you helped with. Thank you again for that help!!

And speaking of help, I am hoping to get some help from you for the Outdoor Products program. I am currently planning to require the following College of Agricultural Sciences classes for the Outdoor Products Degree.

- SUS 102 INTRODUCTION TO ENVIRONMENTAL SCIENCE AND SUSTAINABILITY
- SUS 304 SUSTAINABILITY ASSESSMENT
- AEC 352 ENVIRONMENTAL ECONOMICS AND POLICY

I believe all these courses are open for all students, including future Outdoor Products' students, to enroll. Please let me know if I am mistaken and need to initiate any CAT II work to 'open up' the courses.

Regardless of the CAT II work, I believe I will need to have the College aware of my decision to make these courses part of my degree and ensure we have liaison input.

To support this whole coordination progressing smoothly, I've been advised to solicit liaison input directly from the College in Corvallis.

Would you be able to point me in the right direction / introduce me to the proper contact to begin this process?

I've attached the Executive Summary for the proposed program if that helps create some context for yourself and/or your colleagues in Corvallis.

Many thanks and Happy Holidays!

Geoff

Subject: Re: Outdoor Products Liaison Support - College of Forestry

- Date: Friday, January 18, 2019 at 4:39:31 PM Pacific Standard Time
- From: Raynak, Geoffrey <geoff.raynak@osucascades.edu>
- To: Raynak, Geoffrey <geoff.raynak@osucascades.edu>

From: "Gassner, Michael E" <michael.gassner@osucascades.edu>
Date: Friday, January 18, 2019 at 4:25 PM
To: "Raynak, Geoffrey" <geoff.raynak@osucascades.edu>
Subject: Re: Outdoor Products Liaison Support - College of Forestry

Hi Geoff,

TRAL 132 we already spoke about. The updated syllabus for next term is nearly done and should be this week. Let me know if it will work for your students when you get the syllabus.

I will pass it to you when finished. Like to have that small panel next term we spoke about to attend student presentations.

Look forward to having your students in the class.

TRAL 251 Recreation Resource Management - I think the best person to contact about this would be Troy Hall, FES Chair in Corvallis.

If she is not able to help you, she will point you in the right direction. This course is a bit out of my expertise area.

TRAL 352 Wilderness Management - someone who has heaps of experience in this area will be retiring to Bend soon and has expressed interest in teaching this course on campus.

Let me know when if you need further information and want to meet about any of this.

Cheers,

Michael

Michael Gassner Ph.D. Program Lead - Tourism Recreation and Adventure Leadership Oregon State University Cascades Honorary Assistant Professor, University of Hong Kong 327 Tykeson Hall 1500 SW Chandler Avenue Bend, Oregon 97702 541-322-3131 http://www.osucascades.edu/academics/orlt/gassner United World College of Southeast Asia (UWCSEA) evaluative research project http://osucascades.edu/academics/tral On Thu, Jan 17, 2019 at 11:27 AM Raynak, Geoffrey <<u>geoff.raynak@osucascades.edu</u>> wrote:

Hi Michael Geoff here again.

In the spirit of soliciting full engagement from peers in Corvallis and here at Cascades, I would also now like to receive your liaison input on the inclusion of the below courses in the Outdoor Products degree.

Can you please provide this feedback before Friday the 25th?

Thanks again, Michael.

Regards Geoff

Geoff Raynak, PhD | Executive Director OSU-Cascades | Outdoor Products O: 5413223163 | M:9712277972

From: "Raynak, Geoffrey" <<u>geoff.raynak@osucascades.edu</u>> Date: Wednesday, December 12, 2018 at 1:44 PM To: "Gassner, Michael" <<u>Michael.Gassner@osucascades.edu</u>> Cc: "Ketsdever, Andrew" <<u>andrew.ketsdever@osucascades.edu</u>> Subject: Outdoor Products Liaison Support - College of Forestry

Hi Michael Hope all is going well as we move into a bit of a winter gap.

Before Winter Term actually start, I am hoping to get some help from you... I am currently planning to require the following College of Forestry classes for the Outdoor Products Degree.

- TRAL 132 FOUNDATIONS & HISTORY OF OUTDOOR & ADVENTURE PROFESSIONS
- TRAL 251 RECREATION RESOURCE MANAGEMENT
- TRAL 352 WILDERNESS MANAGEMENT

I'm sure you can tell from this list that we have three different items to tend to.

- TRAL 132 should not require much, if any, work to be available to the Outdoor Products students.
- TRAL 251 is a course that is currently only offered online or in Corvallis. Ideally, having it part of the Outdoor Products degree would bolster the case for adding the course to our on-campus offerings.
- I believe the same thought process can be applied to TRAL 352; which is currently only offered online. I'm hoping, for everyone's benefit, that we can bring this class on-campus as well.

I will also personally initiate the CAT II for TRAL 251 and 352 based on the above situations once liaison communication has been established ... and then the owner of that course can hopefully finish the process.

I am not fully aware of the decisions/ownership/perils/pitfalls that may lay in front of me ... any advice on

Subject: RE: Outdoor Products Liaison Support - CEOAS

- Date: Friday, January 25, 2019 at 1:32:19 PM Pacific Standard Time
- From: Marino, Elizabeth <Elizabeth.Marino@osucascades.edu>
- To: Raynak, Geoffrey <geoff.raynak@osucascades.edu>
- CC: Ketsdever, Andrew <andrew.ketsdever@osucascades.edu>

I see no problem with adding GEO 309 to the Outdoor Products Degree; the curricula for GEO 309 is a good fit for this new degree.

Sorry so late!

Elizabeth Marino, PhD Assistant Professor of Anthropology Social Science and Sustainability Programs OSU - Cascades T/ 541-322-2055 http://www.osucascades.edu/elizabeth-marino

From: Raynak, Geoffrey Sent: Thursday, January 17, 2019 11:42 AM To: Marino, Elizabeth Cc: Ketsdever, Andrew Subject: Re: Outdoor Products Liaison Support - CEOAS

Exactly

Some notes are just 'I see no problem' and some are 'this fits great' and some are 'if it gets toooo big we need to add more sections' Can be short and to the point

Thanks again!

Geoff

From: "Marino, Elizabeth" <Elizabeth.Marino@osucascades.edu>
Date: Thursday, January 17, 2019 at 11:38 AM
To: "Raynak, Geoffrey" <geoff.raynak@osucascades.edu>
Cc: "Ketsdever, Andrew" <andrew.ketsdever@osucascades.edu>
Subject: RE: Outdoor Products Liaison Support - CEOAS

Hi Geoff,

I'm happy to provide liaison feedback; could you let me know how you want that structured and about how long it should be? I'm guessing the feedback will be centered on how a class on enviro. justice fits into the overall mission of the degree, correct?

Thanks! Beth

Elizabeth Marino, PhD Assistant Professor of Anthropology Social Science and Sustainability Programs OSU - Cascades T/ 541-322-2055 http://www.osucascades.edu/elizabeth-marino

From: Raynak, Geoffrey
Sent: Thursday, January 17, 2019 10:59 AM
To: Marino, Elizabeth
Cc: Ketsdever, Andrew
Subject: Re: Outdoor Products Liaison Support - CEOAS

Hi Beth Geoff here again.

In the spirit of soliciting full engagement from peers in Corvallis and here at Cascades, I would also now like to receive your liaison input on the inclusion of the below course in the Outdoor Products degree.

Can you please provide this feedback before Friday the 25th?

Thanks again, Beth.

Regards Geoff

Geoff Raynak, PhD | Executive Director OSU-Cascades | Outdoor Products O: 5413223163 | M:9712277972

From: "Raynak, Geoffrey" <geoff.raynak@osucascades.edu>
Date: Wednesday, December 12, 2018 at 1:44 PM
To: "Marino, Elizabeth" <Elizabeth.Marino@osucascades.edu>
Cc: "Ketsdever, Andrew" <andrew.ketsdever@osucascades.edu>
Subject: Outdoor Products Liaison Support - CEOAS

Hi Elizabeth

Geoff here. We've meet a few times ... including a classroom engagement seminar a few months ago.

I'm looking for some help...

I am currently planning to require GEO 309 as part of the Outdoor Products Degree. With this requirement, I believe I will need to have the College aware of my decision and ensure we have liaison input.

To support this whole coordination progressing smoothly, I've been advised to solicit liaison input directly from the College in Corvallis.

Would you be able to point me in the right direction / introduce me to the proper contact to begin this process?

I've attached the Executive Summary for the proposed program if that helps create some context for yourself and/or your colleagues in Corvallis.

Many thanks and Happy Holidays!

Geoff

Subject: Re: Outdoor Products Liaison Support - CEOAS

- Date: Tuesday, February 5, 2019 at 10:37:15 AM Pacific Standard Time
- From: Kirby, Eric < Eric.Kirby@oregonstate.edu>
- To: Raynak, Geoffrey <geoff.raynak@osucascades.edu>

Hi Geoff,

Sorry for the delay in getting back to you. In principle, we don't see any reason not to include this course in your curriculum. We do have two concerns that we would like to raise for consideration.

Our first concern regards scheduling. We offer this class on both the Corvallis campus, and through Ecampus. In our recent experience, when Cascades offers a course that is also offered through Ecampus, we typically see a decline in online enrollment. We would like to avoid competition between the Ecampus version of Geo 309 and Cascades version, and so some coordination of scheduling would be appropriate.

The second concern is one that is broader. It would be good if there were some way for us to develop a mechanism that insures that course content and learning outcomes remain aligned among all three versions of the course. We have developed an internal mechanism to do this between our on-campus and Ecampus courses, but I am not aware of similar mechanisms across our campuses. In the development of the Environmental Sciences options that Ron has been leading, our faculty and advisors have met several times to discuss these issues. Perhaps there is a way to arrange a similar discussion during the initial development of Geo 309, and at some reasonable frequency thereafter?

I look forward to your thoughts on how we might accomplish these.

Cheers, Eric

Eric Kirby, Professor Associate Dean for Academic Programs R.S. Yeats Chair of Earthquake Geology and Active Tectonics College of Earth, Ocean and Atmospheric Sciences Oregon State University eric.kirby@oregonstate.edu 541-737-5169 (research office) 541-737-5189 (dean office)

> From: "Raynak, Geoffrey" <geoff.raynak@osucascades.edu> Date: Wednesday, January 23, 2019 at 3:07 PM To: "Kirby, Eric" <Eric.Kirby@oregonstate.edu> Subject: Re: Outdoor Products Liaison Support - CEOAS

Hi Eric Geoff Raynak here. Checking in again on any liaison feedback for the one CEOAS course we would like to include in our OP curriculum.

Thanks Geoff Geoff Raynak, PhD | Executive Director OSU-Cascades | Outdoor Products O: 5413223163 | M:9712277972

From: "Raynak, Geoffrey" <geoff.raynak@osucascades.edu>
Date: Friday, January 11, 2019 at 3:56 PM
To: "Kirby, Eric" <Eric.Kirby@oregonstate.edu>
Subject: Re: Outdoor Products Liaison Support - CEOAS

Thank you Eric Understood on timing ...

Regards Geoff

From: "Kirby, Eric" <Eric.Kirby@oregonstate.edu>
Date: Friday, January 11, 2019 at 7:06 AM
To: "Raynak, Geoffrey" <geoff.raynak@osucascades.edu>
Subject: Re: Outdoor Products Liaison Support - CEOAS

Hi Geoff,

Thanks for the heads-up. Let me speak with our faculty and get back to you. I am out in the field next week largely without cell service, so it will likely take me until after the 21st to get to this.

Cheers, Eric

Eric Kirby, Professor Associate Dean for Academic Programs R.S. Yeats Chair of Earthquake Geology and Active Tectonics College of Earth, Ocean and Atmospheric Sciences Oregon State University eric.kirby@oregonstate.edu 541-737-5169 (research office) 541-737-5189 (dean office)

From: "Raynak, Geoffrey" <geoff.raynak@osucascades.edu>
Date: Thursday, January 10, 2019 at 1:44 PM
To: "Kirby, Eric" <Eric.Kirby@oregonstate.edu>
Subject: FW: Outdoor Products Liaison Support - CEOAS

Hi Eric

Geoff Raynak here.

As you can see from the thread below, we are seeking liaison feedback from the CEOAS. After talking with Beth and Ron, they recommended I reach out to you as an additional step. You can see the email chain below ... but in summary, because we hope to require GEO 309 as part of the Outdoor Products Degree, we are seeking liaison comments/concerns/support related to my CAT I proposal (<u>Proposal # 102419</u>). I would appreciate your review and response on the topics We would like to have the College's response by JAN 18 2019. Please confirm receipt of this note ... and that the above response date is acceptable. Many thanks Regards Geoff

Geoff Raynak, PhD | Executive Director OSU-Cascades | Outdoor Products O: 5413223163 | M:9712277972

From: "Reuter, Ronald" <Ron.Reuter@oregonstate.edu>
Date: Thursday, January 10, 2019 at 1:27 PM
To: "Marino, Elizabeth" <Elizabeth.Marino@osucascades.edu>
Cc: "Raynak, Geoffrey" <geoff.raynak@osucascades.edu>
Subject: Re: Outdoor Products Liaison Support - CEOAS

Beth and Geoff,

I would start with Associate Dean Eric Kirby – he is the guy overseeing academic programs. From there he can direct within the college if need be. I have worked with him on getting the Environmental Sciences program into the system.

Ron

Ron Reuter OSU Cascades Natural Resources

From: "Marino, Elizabeth" <Elizabeth.Marino@osucascades.edu>
Date: Wednesday, January 9, 2019 at 2:06 PM
To: "Reuter, Ronald" <Ron.Reuter@oregonstate.edu>
Cc: "Raynak, Geoffrey" <geoff.raynak@osucascades.edu>
Subject: FW: Outdoor Products Liaison Support - CEOAS

Hi Ron,

Geoff sent me this email (below) about GEO 309 being part of their outdoor Products Degree. I really support this idea. As you'll see, to add the course, he needs liaison input. Do you know who he should reach out to?

Thanks! Beth Elizabeth Marino, PhD Assistant Professor of Anthropology Social Science and Sustainability Programs OSU - Cascades T/ 541-322-2055 http://www.osucascades.edu/elizabeth-marino

From: Raynak, Geoffrey
Sent: Wednesday, December 12, 2018 1:44 PM
To: Marino, Elizabeth
Cc: Ketsdever, Andrew
Subject: Outdoor Products Liaison Support - CEOAS

Hi Elizabeth

Geoff here. We've meet a few times ... including a classroom engagement seminar a few months ago.

I'm looking for some help...

I am currently planning to require GEO 309 as part of the Outdoor Products Degree. With this requirement, I believe I will need to have the College aware of my decision and ensure we have liaison input.

To support this whole coordination progressing smoothly, I've been advised to solicit liaison input directly from the College in Corvallis.

Would you be able to point me in the right direction / introduce me to the proper contact to begin this process?

I've attached the Executive Summary for the proposed program if that helps create some context for yourself and/or your colleagues in Corvallis.

Many thanks and Happy Holidays!

Geoff

OSU Internal Budget Outline Form

Estimated Costs and Sources of Funds for Proposed Program

Total new resources allocated to the Proposed Program, if any. If no change in resources is required, the budgetary impact should be reported as zero.

PROGRAM TITLE: Bachelor of Science in Outdoor Products

BUDGET PERIOD: 20 From FY to FY 23

Business Center

12/28/2018

CCBO Terri Libert, Director of Business

Name and Title of Reviewer Services and Analytics

Signature of Reviewer

Date

	Total			
	Fiscal Year 1	Fiscal Year 2	Fiscal Year 3	Fiscal Year 4
Personnel				
Faculty, Tenured/Tenure-track	-	-	-	-
Faculty, fixed-term	84,873	91,105	121,986	124,687
Sub-total, Faculty	84,873	91,105	121,986	124,687
Graduate Assistants	-	-	-	-
Support Staff	-	-	-	-
Fellowship/Scholarship	-	-	-	-
OPE	48,154	52,686	60,093	64,950
Personnel Subtotal	133,028	143,791	182,079	189,638
Other Expenses				
Library, Printed	328	331	334	337
Library, Electronic	522	538	554	571
Services & Supplies	5,815	3,843	3,870	3,898
Capital Equipment	-	-	-	-
Other Resources Subtotal	6,665	4,712	4,758	4,806
Physical Facilities	-	-	-	-
Construction	-	-	-	-
Major Renovation	-	-	-	-
Other Expenses	-	-	-	-
Physical Facilities Subtotal	-	-	-	-
Check math	-	-	-	-
Total Cost of Program	139,693	148,503	186,837	194,443
Resources				
Current Budget, unit	-	-	-	-
Tuition (e campus, differential)	54,953	113,202	174,898	180,144
Institutional Reallocation from other b	-	-	-	-
Special State Appropriation	-	-	-	-
Federal Funds and other Grants	-	-	-	-
Fees/Sales	-	-	-	-
Foundation Endowment	84,740	35,301	11,939	14,299
Tuition remission (GA support)	-	-	-	-
Other, describe:				
Total Resources	139,693	148,503	186,837	194,443
check math	139,693	148,503	186,837	194,443

Note: Please include budget narrative describing items listed above.

OSU Internal Budget Outline Form

Estimated Costs and Sources of Funds for Proposed Program

Total new resources allocated to the Proposed Program, if any. If no change in resources is required, the budgetary impact should be reported as zero.

PROGRAM TITLE: **Bachelor of Science in Outdoor Products**

BUDGET PERIOD:

From FY 20

23

12/28/2018

to FY

Business Center

ССВО Date Name and Title of Reviewer Terri Libert, Director of Business Services and Analytics

	One-Time			
	Fiscal Year 1	Fiscal Year 2	Fiscal Year 3	Fiscal Year 4
Personnel				
Faculty, Tenured/Tenure-track	-	-	-	-
Faculty, fixed-term	84,873	91,105	121,986	124,687
Sub-total, Faculty	84,873	91,105	121,986	124,687
Graduate Assistants				
Support Staff				
Fellowship/Scholarship				
OPE	48,154	52,686	60,093	64,950
Personnel Subtotal	133,028	143,791	182,079	189,638
Other Expenses				
Library, Printed	328	331	334	337
Library, Electronic	522	538	554	571
Services & Supplies	3,815	3,843	3,870	3,898
Capital Equipment				
Other Resources Subtotal	4,665	4,712	4,758	4,806
Physical Facilities				
Construction				
Major Renovation				
Other Expenses				
Physical Facilities Subtotal	-	-	-	-
Total Cost of Program	137,693	148,503	186,837	194,443
Resources				
Current Budget, unit				
Tuition (e campus, differential)	54,953	113,202	174,898	180,144
Institutional Reallocation from other b	udgetary units			
Special State Appropriation				
Federal Funds and other Grants				
Fees/Sales				
Foundation Endowment	82,740	35,301	11,939	14,299
Tuition remission (GA support)				
Other, describe:				
Total Resources	137,693	148,503	186,837	194,443

Note: Please include budget narrative describing items listed above.

OSU Internal Budget Outline Form

Estimated Costs and Sources of Funds for Proposed Program

Total new resources allocated to the Proposed Program, if any. If no change in resources is required, the budgetary impact should be reported as zero.

PROGRAM TITLE: **Bachelor of Science in Outdoor Products**

ССВО

BUDGET PERIOD:

From FY 20 to FY 23

Business Center

Date 12/28/2018 Name and Title of Reviewer Terri Libert, Director of Business Services and Analytics

	Recurring			
	Fiscal Year 1	Fiscal Year 2	Fiscal Year 3	Fiscal Year 4
Personnel				
Faculty, Tenured/Tenure-track				
Faculty, fixed-term				
Sub-total, Faculty	-	-	-	-
Graduate Assistants				
Support Staff				
Fellowship/Scholarship				
OPE				
Personnel Subtotal	-	-	-	-
Other Expenses				
Library, Printed				
Library, Electronic				
Services & Supplies	2,000			
Capital Equipment				
Other Resources Subtotal	2,000	-	-	-
Physical Facilities				
Construction				
Major Renovation				
Other Expenses				
Physical Facilities Subtotal	-	-	-	-
Total Cost of Program	2,000	-	-	-
Resources				
Current Budget, unit				
Tuition (e campus, differential)				
Institutional Reallocation from other b	udgetary units			
Special State Appropriation				
Federal Funds and other Grants				
Fees/Sales				
Foundation Endowment	2,000			
Tuition remission (GA support)				
Other, describe:				
Total Resources	2,000	-	-	-

Note: Please include budget narrative describing items listed above.

New Degree Program Proposal Outdoor Products

Status: Pending Review - Curriculum Council Chair (Previous Version)

Hide All Reviews 🔽

1. Review - College Approver - Engineering

Sent Back by Brian Bay Associate Professor / Sch of Mech/Ind/Mfg Engr, October 28, 2019 1:32pm

Comments

Brian Bay (College Approver - Engineering) October 28, 2019 1:32pm

Please explain the agreement with the College of Engineering concerning the Department/School listing of the program (No Department), and the associated categorization as an Interdisciplinary Program. Suggest placing this in the Comments section of the Proposal block so that it is immediately accessible, as opposed to creating an additional attachment.

2. Originator Response

Geoffrey Raynak Academic Wage Appt - Salaried / Acad Prog / Student Aff, October 28, 2019 1:43pm

Comments

Geoffrey Raynak October 28, 2019 1:43pm

To ensure coordination and broad participation, the College of Engineering has an Interdisciplinary Curriculum Committee that will oversee this program. This committee has representation from each school in COE. This is the model COE will use for all interdisciplinary programs moving forward

3. Review - College Approver - Engineering

Approved by Brian Bay Associate Professor / Sch of Mech/Ind/Mfg Engr, October 28, 2019 3:39pm

Comments

Brian Bay (College Approver - Engineering) October 28, 2019 3:39pm Comments addressed.

4. Review - Curriculum Coordinator

Approved by <u>Janice Nave-Abele</u> Curriculum Coordinator / Acad Progms & Assessment, *October 30, 2019 2:35pm*

5. Review - Graduate School

Approved by <u>Janice Nave-Abele</u> Curriculum Coordinator / Acad Progms & Assessment, October 30, 2019 2:35pm

Comments

Janice Nave-Abele (Graduate School) October 30, 2019 2:35pm GRAD COUNCIL CPS GLITCH. REVIEW - NOT NECESSARY: This proposal is being pushed. It does not require Grad Council review.

Ok - per John Becker-Blease

6. Review - Budgets and Fiscal Planning Committee

Sent Back by <u>Andrew Ibarra</u> Dir-Physical Activity Program / Sch of Bio/Pop Hlth Sci, *November 21, 2019 2:43pm*

Comments

Andrew Ibarra (Budgets and Fiscal Planning Committee) November 21, 2019 2:43pm

There are inconsistency between the budget narrative and spreadsheet. How much FTE is committed to the delivery of the program?

1) Committee did not see a .33 FTE allotment for an advisor-clarify if this is done differently

2) A number of course are being developed but FTE is not identified or discussed, how will these be covered?

3) The number of faculty and identified assistant professor is referenced in the proposal but it is not reflected in the narrative.

4) There are 14 courses being developed – who is developing them? They need at least 5 dedicated faculty for accreditation, but it's not clear who they are or if they've been selected.

5) No costs are listed for marketing.

Overall the narrative is a bit brief and if expanded may provide more context for the above questions.

7. Originator Response

Geoffrey Raynak Academic Wage Appt - Salaried / Acad Prog / Student Aff, November 22, 2019 12:51pm

Comments

Geoffrey Raynak November 22, 2019 12:51pm Replying comment-by-comment:

1: The 0.33 FTE advisory role is allotted from OSU Cascades central advising pool. This will remain in effect until the 275:1 student:advisor ratio is exceeded. We do not expect to exceed this ratio in the first 4 years, therefore additional hiring costs are not included in the budget.

2. This comment is addressed more specifically in #3 and #4 below.

3. As the course-load is rolled out, instruction will be provided by existing full-time staff as well as parttime instructors. As we become established, we plan to hire an Assistant Professor in FY26. FY26 is beyond the four-year window of the budget narrative. The CAT I wording has been updated to reflect the timing and intention (REV20191122).

4: Course development is part of faculty workload this year (year negative 1) (as we are not teaching many OP courses this year) and would be considered for possible summer load this summer. In addition, the budget shows 3 course buy-outs (10 workload units) in year +1, and two course buy-outs (7 workload units) in years +2 and +3. These course buy-outs are intended for additional course development. As noted in the CAT I Proposal Summary Table, this degree program is not planned to be accredited.

5: Marketing and outreach costs are part of the larger Cascades budget. The marketing budget includes line items for new programs, so these costs are not

8. Review - Budgets and Fiscal Planning Committee

Approved by <u>Andrew Ibarra</u> Dir-Physical Activity Program / Sch of Bio/Pop Hlth Sci, *December 4, 2019* 2:40pm

Comments

Andrew Ibarra (Budgets and Fiscal Planning Committee) December 4, 2019 2:40pm With the above clarifications the BFP Committee approves.

9. Review - Graduate Council Chair

Approved by <u>John Becker-Blease</u> Associate Dean / College of Business Dept, *December 8, 2019* 9:36am

Comments

John Becker-Blease (Graduate Council Chair) December 8, 2019 9:36am As above.

10. Review - Curriculum Council Chair

Pending Review

More Queued Reviews (5)

Faculty Senate Exec Committee; Faculty Senate; Provost /Academic Affairs; Academic Programs; Catalog Coordinator

Proposal

Proposal ID:102419 Type:New Degree Program Submission Date:November 22, 2019 12:51pm Comments:

The mission of the Outdoor Products degree program is to educate and inspire future leaders for the opportunities and challenges in the outdoor industry. This mission is achieved through a rigorous curriculum combining product commercialization, lands stewardship and experiential learning. Graduates of the program will lead the outdoor industry in balancing product, profits, people, and the planet.

Addendum added 20191028:

To ensure coordination and broad participation, the College of Engineering has an Interdisciplinary Curriculum Committee that will oversee this program. This committee has representation from each school in COE. This is the model COE will use for all interdisciplinary programs moving forward.

The program will be delivered at the OSU-Cascades campus.

History

Active Version - Submitted November 22, 2019 12:51pm

Version 2 - Submitted October 28, 2019 1:43pm

Version 1 - Submitted September 11, 2019 12:10pm

Originators

NAME	TITLE	DEPARTMENT/SCHOOL
Geoffrey Raynak	Academic Wage Appt - Salaried	Acad Prog / Student Aff
Andrew Ketsdever	Associate Dean	Acad Prog / Student Aff

Contacts

NAME	TITLE	DEPARTMENT/SCHOOL
M Jane Reynolds	Dir-Enrollment Services	Acad Prog / Student Aff
Julie Gess-Newsome	Dean of Academic Affairs	Acad Prog / Student Aff
Brian Palmer	Assoc Director/Enrollment Svcs	Acad Prog / Student Aff

Proposal Details

College:College of Engineering Department/School:No Department Program Type:Undergraduate Major New Degree Name:Outdoor Products

Supporting Documents

DOCUMENTS

* Signed Transmittal Sheet 🧕

OutdoorProductsTransmittal.pdf (734.64 Kb added Nov 21, 2019 2:43 pm)

* Executive Summary 💿

OP EXECUTIVE SUMMARY.pdf (75.42 Kb added Nov 21, 2019 2:43 pm)

* Proposal 💿

<u>OUTDOOR_PRODUCTS CAT I 20191122.pdf</u> (978.38 Kb added Nov 22, 2019 12:50 pm)

updated in response to 20191121 feedback

* Letters of Support 🧕

Adrienne Moser <u>Outdoor Products Letter _ AM.pdf</u> (52.32 Kb added Nov 21, 2019 2:43 pm)

Oregon Outdoor Alliance <u>OOA_LETTER_OF_SUPPORT.pdf</u> (358.73 Kb added Nov 21, 2019 2:43 pm)

EntrePrises EntrePrises OSU_Letter.pdf (158.19 Kb added Nov 21, 2019 2:43 pm)

Hydroflask OSU Outdoo_Hydroflask.pdf (54.52 Kb added Nov 21, 2019 2:43 pm)

Outdoor Economy Initiative <u>OSU Cascades Letter of Support_OEI.pdf</u> (134.12 Kb added Nov 21, 2019 2:43 pm)

OOA_MEMBERS <u>OOA_MEMBER_SUPPORT.pdf</u> (654.25 Kb added Nov 21, 2019 2:43 pm)

Oregon Parks and Recreation Department <u>OSU Cascades - OPRD.pdf</u> (89.60 Kb added Nov 21, 2019 2:43 pm)

KEEN <u>HECC - OSU Cascade OP - KEEN.pdf</u> (252.66 Kb added Nov 21, 2019 2:43 pm)

* Accessibility Form 🔞

<u>OP-accessibility_form16.426.pdf</u> (156.06 Kb added Nov 21, 2019 2:43 pm)

* Library Evaluation 💿

20190116160217471_OP_Library.pdf (182.23 Kb added Nov 21, 2019 2:43 pm)

* Faculty CVs 🧕

<u>2019_RAYNAK.pdf</u> (136.63 Kb added Nov 21, 2019 2:43 pm)

<u>vitae_reuter_2019.pdf</u> (145.91 Kb added Nov 21, 2019 2:43 pm)

<u>2019_Hawley.docx</u> (43.08 Kb added Nov 21, 2019 2:43 pm)

<u>RWebb_CV_2018.docx</u> (38.62 Kb added Nov 21, 2019 2:43 pm)

<u>Shinderman_2019.docx</u> (27.11 Kb added Nov 21, 2019 2:43 pm)

Ganzhorn OSU-C CV format.pdf (144.22 Kb added Nov 21, 2019 2:43 pm)

<u>Gassner_Vita_April_2018.pdf</u> (588.77 Kb added Nov 21, 2019 2:43 pm)

Other Attachments 😣

Outdoor Products CAT1 facilities letter.pdf (318.01 Kb added Nov 21, 2019 2:43 pm)

CAT 1 support for OutProd.pdf (116.32 Kb added Nov 21, 2019 2:43 pm)

OutdoorProducts Budget Narrative-011719 Rev 1.docx (18.09 Kb added Nov 21, 2019 2:43 pm)

<u>OP-ASSESSMENT PLAN 20190418.xlsx</u> (45.31 Kb added Nov 21, 2019 2:43 pm)

<u>OP_4_Year_Plan_20190418.xlsx</u> (15.48 Kb added Nov 21, 2019 2:43 pm)

<u>NOTICE_OF_INTENT_OUTDOOR_PRODUCTS.pdf</u> (57.95 Kb added Nov 21, 2019 2:43 pm)

EmailThread_Outdoor Products proposal.pdf (144.99 Kb added Jan 03, 2020 2:05 pm)

LIAISONS

* Liaisons 🔘

Troy Hall

Request: None

Response: <u>FES Liaison Feedback.pdf</u> (93.33 Kb added Nov 21, 2019 2:43 pm)

James Coakley

Request: *None* Response: <u>College_of_Business_Liaison.pdf</u> (70.43 Kb added Nov 21, 2019 2:43 pm)

Satori Howes

Request: None

Response: CoB_Cascades_Liaison.pdf (56.88 Kb added Nov 21, 2019 2:43 pm)

Matt Shinderman

Request: None

Response: CoAS_Cascades_Liaison.pdf (58.68 Kb added Nov 21, 2019 2:43 pm)

Michael Gassner

Request: *None* Response: <u>CoF_Cascades_Liaison.pdf</u> (61.09 Kb added Nov 21, 2019 2:43 pm)

Elizabeth Marino

Request: None

Response: <u>CEOAS_CASCADES_LIAISON.pdf</u> (83.22 Kb added Nov 21, 2019 2:43 pm)

Eric Kirby

Request: None

Response: <u>CEOAS_LIAISON.pdf</u> (109.48 Kb added Nov 21, 2019 2:43 pm)

BUDGET INFORMATION

* Budget Year 1 🧕

<u>OutdoorProducts_osubudget_worksheet_011719.xlsx</u> (25.28 Kb added Nov 21, 2019 2:43 pm)

* Budget Year 2 🔞

<u>OutdoorProducts_osubudget_worksheet_011719.xlsx</u> (25.28 Kb added Nov 21, 2019 2:43 pm)

* Budget Year 3 💿

<u>OutdoorProducts_osubudget_worksheet_011719.xlsx</u> (25.28 Kb added Nov 21, 2019 2:43 pm)

* Budget Year 4 🙆

<u>OutdoorProducts_osubudget_worksheet_011719.xlsx</u> (25.28 Kb added Nov 21, 2019 2:43 pm)