

PROPOSAL FOR A NEW GRADUATE PROGRAM

Institution: University of Oregon

College/School: Architecture and Allied Arts

Department/Program: Product Design

Proposed Degree and Title: Master of Science in Sports Product Design

1. Program Description

a. Proposed Classification of Instructional Programs (CIP) number.

500404 (Design and Applied Arts)

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.

The Master of Science in Sports Product Design (SPD) is a new graduate degree program, proposed by the Product Design (PD) Program in the School of Architecture and Allied Arts (A&AA), at the University of Oregon (UO). This program has been created to develop graduates proficient in using theories and creative problem solving methods to design products that push the boundaries in the field of sports. Those boundaries may pertain to the usability of the product including fitness, training and competitive success, to the material and manufacturing of the product including concerns about procurement and sustainable supply chains, and to the conceptualization of these products including how ideas are generated, prototyped and tested. This program's focus and the new knowledge generated will result in helping the field reduce injuries and extend athletes' careers, improve athletic performance, address issues related to gender and diverse body types including athletes with disabilities, and develop and apply new materials and product design technologies to address these concerns. The field includes over 700 sports product companies in the state of Oregon alone, and this would be the only degree program of its kind in the United States.

The program combines specialized courses from multiple areas of study including Human Physiology, Journalism, Business and Management, and PD, to give designers the necessary education to successfully excel as sports product innovators. Before this program, graduate study in this field required that students obtain multiple degrees in diverse disciplines of study such as Product/Industrial Design, Apparel/Fashion Design, Ergonomics, Marketing and Management, and Human Physiology/Kinesiology, in order to learn the content. This program is intended for students who have completed a Bachelor's Degree in a Design or Engineering related discipline; individuals working in the sports product industry who want to pursue a Master's Degree in SPD; or individuals working in the design industry who want to shift direction and focus on a sports product specialization.

c. Course of study – proposed curriculum, including course numbers, titles, and credit hours.

The course of study for the MS in SPD is two years long, comprising 58 credits total. The credit load is based on the NASAD (National Association of Schools of Art and Design) requirement for the Master of Science degree in design (40 credit minimum) and the UO credit minimum of 45 credits.

Overview of Program

The new MS in Sports Product Design will offer graduate students the opportunity to learn product design theories and research methodologies, innovative product development processes, sustainability, user-centered design principles and consumer-focused marketing strategies in order to innovate new product in the field of sports. Courses will be executed through studio practice and lecture (seminar) format.

58 credits are required for the Master's in SPD. **It is a 2-year program.**

42 required credits are under the SPD subject code; **10 required credits** are from collaborating programs; **6 credits minimum** are electives.

MS in Sports Product Design: Proposed Curriculum GREEN = new courses

1 st YEAR		
	SPD Courses	Courses From Other Programs
Fall	*SPD 684: Sports Product Design Research Methodology and Innovation Process Studio (6 credits)	SBUS 645: Sports Product (3 credits)
		HPHY 610: Human Performance and Sport Products (3 credits) Offered Fall 2015 in Portland, CRN 17220 (HPHY 631 - the official course # for above is being submitted to UOCC for regularization processing)
Winter	*SPD 685: Product Design Studio I (6 credits)	
	*SPD 650: Sports Product Materials and Manufacturing (3 credits)	
Spring	*SPD 686: Product Design Studio II (6 credits)	Elective (2-4 credits)

2 nd YEAR		
	SPD Courses	Courses From Other Programs
Fall	*SPD 687: Product Design Studio III (6 credits)	Elective (2-4 credits)
Winter	*SPD 688: Sports Product Design Innovative Project Strategy Development Studio (6 credits)	J626: Strategic Marketing Communication (4 credits)

Spring	*SPD 689: Collaborative Sports Product Design Creation and Launch Studio (9 credits)	
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ELECTIVES		
Journalism and Sports Product Management		
Fall	J 621: Foundations of Strategic Communication (4 Credits) J 624: Strategic Communication: [Topic] (2 Credits) MGMT 641: Industrial Ecology (3 Credits) MGMT 625: New Venture Planning (3 Credits)	
Winter	J 624: Strategic Communication: [Topic] (2 Credits) ACTG 662: Strategic Cost Management (4 Credits) HPHY 632: Advanced Athletic Biomechanics (3 credits)	
Spring	J 616: Introduction to Strategic Communication Marketing (4 Credits) J 624: Strategic Communication: [Topic] (2 Credits) MGMT 614: Strategic Management (3 Credits)	

*These new courses were approved by the A&AA Academic Affairs Committee in Fall 2015 and will advance to UOCC review in Winter 2016. All new course syllabi have been attached to this program proposal.

There are no pre-requisites for J 616, J 621, J 624, J 626, SBUS 645, MGMT 614, MGMT 625, MGMT 641, ACTG 662, HPHY 631 and HPHY 632. These courses were chosen together with the School of Journalism and Communication, the Lundquist College of Business and Department of Human Physiology specifically for their relevance to the SPD curriculum.

HPHY 631 is a new human physiology course, developed for the program, which focuses on the particular physiology and motion of the human body in athletic contexts, and the interface of the human body and sports products.

See the letters of support and UO 2015-16 catalog (in the appendices) for course listings and additional confirmation.

Curricular structure

The required coursework described above is structured as follows:

Foundational Coursework (19 credits)

The foundational courses for all SPD graduate students are:

SPD 684: Sports Product Design Research Methodology and Innovation Process Studio (6 credits)

SPD 650: Sports Product Materials and Manufacturing (3 credits)

SBUS 645: Sports Product (3 credits)

HPHY 631: Human Performance and Sport Products (3 credits)

J 626: Strategic Marketing Communication (4 credits)

Theoretical and Studio Practice Coursework (18 credits)

These studio courses focus on the design theories and methodologies used to design innovative sport products:

SPD 685: Product Design Studio I (6 credits)

SPD 686: Product Design Studio II (6 credits)
SPD 687: Product Design Studio III (6 credits)

Capstone Coursework (15 credits)

The capstone project in SPD is a two-term graduate level design studio that critically looks at the alignment of design, materials, sciences, and sustainability, research and business theories to create an innovative sports product design opportunity. Courses include:

SPD 688: Sports Product Design Innovative Project Strategy Development Studio (6 credits)

SPD 689: Collaborative Sports Product Design Creation and Launch Studio (9 credits)

Elective Coursework (6 credits minimum)

Students are required to take a minimum of 6 credits as electives. Options include:

J 616: Introduction to Strategic Communication Marketing (4 Credits)

J 621: Foundations of Strategic Communication (4 Credits)

J 624: Strategic Communication: [Topic] (2 Credits)

MGMT 614: Strategic Management (3 Credits)

MGMT 625: New Venture Planning (3 Credits)

MGMT 641: Industrial Ecology (3 Credits)

ACT G662: Strategic Cost Management (4 Credits)

HPHY 632: Advanced Athletic Biomechanics (3 credits)

Advising

Students in the SPD MS program will be assigned a faculty advisor who will mentor and oversee their progress during their enrollment. Upon their first fall term, students will meet with their advisor to devise a program plan and review their goals upon graduation. Subsequently, students will meet with their advisor at the beginning of each year to make sure they are tracking to their plan and to revise plans if needed along the way. Students will have the option to schedule other meetings with their advisor if the need arises. Based on the number of projected students and full time faculty for SPD, the student to advisor ratio will be 20:1. This ratio is the same as the advising ratio in Eugene for the Product Design Program and has been proven to work well.

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).

The SPD Program will be located on the 4th floor at the White Stag Building in Portland, adjacent to other programs within A&AA. Courses will be taught on-site, in lectures and design studios, during normal academic hours. All courses will be on-site, but will take advantage of the web-based UO Canvas system for course coordination.

e. Adequacy and quality of faculty delivering the program.

The full-time tenure track faculty in PD are highly recognized for their written and physical research and design. They also exhibit a wide range of research concentrations that will provide a diverse and comprehensive instructional experience for prospective students. This diversity stems from their academic backgrounds as well

as professional practice experience. This program will be delivered by 2 full-time tenure track SPD faculty in Portland, 6 rotating PD faculty from the Eugene campus, and 1 non-tenure track faculty member from Portland. Each course has a minimum of 3 PD faculty that are qualified and prepared to teach. See syllabi for detailed list of instructors for each course. The PD director will also travel regularly between both campuses and all PD faculty will participate in final review/presentations of student projects at the end of each term. Regular faculty meetings will be held jointly in person or through teleconferencing or video conferencing. The PD Program has supported tenure track faculty from Eugene to teach in Portland since the PD Program's BFA program began in 2009. It is common practice in A&AA to rotate faculty from Eugene to teach within the programs in Portland. The longstanding Master's degree program in the Architecture Department operates in a similar manner.

The PD Program recently hired Susan Sokolowski, PhD. Her research focuses specifically on the unique design requirements for special populations in sport (women, children and disabled). Dr. Sokolowski has been recognized internationally for her achievements in design and innovation, including over 35 utility and design patents, awards from the United States Olympic Committee and Volvo. Her designs have been featured at the Design Museum London. She is a graduate of the University of Minnesota (PhD, 1999), Cornell University (MA, 1997) and the Fashion Institute of Technology (BFA, 1990).

Dr. Sokolowski's teaching load appointment is 3 courses per year, to provide adequate time to direct the SPD program. PD anticipates hiring an additional tenure track faculty who will join the University and begin teaching in the fall of the 2nd year of the program (fall 2017). This new tenure track faculty member will teach 5 courses per year, and will be based in Portland to advance research, instruct and advise students, along with supporting the operations and overall management of the new program.

f. Faculty resources

Product Design Faculty:

John Arndt (MDes), Acting Director, Product Design/Associate Professor, Tenured
Kiersten Muenchinger (MS), Director (on sabbatical in 2015)/Associate Professor, Tenured

Susan Sokolowski (PhD), Associate Professor, TTF/Co-Director of the Sports Product Institute

Wonhee Arndt (MDes), Assistant Professor, TTF

Nate Demarest (MA), Sports Product Design NTTF

Beth Esponnette (MFA), Assistant Professor, TTF

Trygve Faste (MFA), Assistant Professor, TTF

Erdem Selek (MSc), Assistant Professor, TTF

Hale Selek (MSc), Assistant Professor, TTF

NEW SPD FACULTY HIRE #2 (starting fall 2017), TTF

Wilson Smith, Pro-tem

Bruce Kilgore, Pro-tem

Matt Rhoades, Pro-tem

Business School Faculty:

Ellen Schmidt-Devlin (MBA), Director, Sports Product Management Program/Co-Director of Sports Product Institute

Roger Best (PhD), Professor Emeritus of Marketing

Dennis Howard (PhD), Professor Emeritus of Marketing

Dale Morse (PhD), Professor Emeritus of Accounting

Aparna Sundar (MBA), Assistant Professor of Marketing

Hong Yuan (PhD), Associate Professor of Marketing

Human Physiology Faculty:

John Halliwill (PhD), Professor

Brad Wilkins (PhD), NTTF

The SPD program will offer seven SPD courses per year; the six studios will be co-taught, for a total of 13 instructional positions. Two dedicated SPD faculty will cover the majority of these, with current PD faculty (TTF, NTTF, and pro-tem) filling out the teaching schedule. In 2015, PD hired 4 new faculty members: 3 in Eugene, and 1 in Portland. The PD program has capacity for any new teaching assignments associated with SPD.

g. Other staff.

There are currently four administrative staff in Eugene and two administrative staff in Portland (at the White Stag Building) who will support the SPD Program, as well as a director of operations who splits time between Eugene and Portland. There are plans to hire a third administrative staff member in Portland. In addition, five staff members will provide technical, facility and infrastructure support at the White Stag Building in Portland.

h. Facilities, library and other resources.*Facilities:*

There are top-notch facilities specifically created to support students in SPD. The program has a new maker space called the 'Innovation Lab' located adjacent to the White Stag Building. The Lab is designed for the prototyping and construction of new product concepts in the sports product realm. The lab houses specialty production machinery, including: three-dimensional (3-D) printer, a heat press, single stitch, cover stitch, active seam flat stitch, post stitch, serger, and strobel. This equipment is necessary for making sports apparel, footwear, and equipment design prototypes.



Above: the new White Stag Innovation Lab, a key facility for the Sports Product Design Program.



Above: inside the White Stag Innovation Lab. Equipped for designing and prototyping construction of new product concepts ideas in the sports product realm. The lab has an additional presentation/classroom space.

The 'Fabrication Lab' in the White Stag Building will be used as an additional prototyping space. The lab is equipped with a LASER-cutter, 3-D printer, computer-numerical-control milled machine (CNC) and workshop machinery.

Students will have their own individual studio space, with nearby output room and classrooms for lectures and seminar discussions. The program will also utilize additional studio/classroom spaces including three state-of-the-art classrooms, eight breakout rooms for smaller team-based work and large project review spaces.

Space at the White Stag is currently somewhat underutilized; the new SPD curriculum can be accommodated in the existing studios and classrooms.

Library:

Students in the SPD program will have access to the UO Knight Library, the A&AA Library, the UO Library and Learning Commons at the White Stag Building, as well as all other library and digital resources available through the University.

Student support:

SPD students will pay tuition through the traditional tuition model and thus pay required fees like other A&AA Portland students and other UO programs in Portland (with the exception of a few that are run through Academic Extension). These fees cover access

to health and counseling resources at PSU for UO Portland students, and this would apply to the incoming SPD students. In addition, UO Portland students also pay incidental fees that pay for additional student resources. We have been working closely with Jane Gordon, Vice Provost for Portland Programs, to anticipate SPD program needs, student services needs; and UO and A&AA are prepared to support these students.

In addition, there are several very active task forces working across UO Portland (led by Jane Gordon, Vice Provost for Portland Programs) working on Academic coordination and collaboration, Student Life, Social/Professional Activities, Security/Safety, Communication, and Diversity/Inclusion. A&AA has been actively involved in these groups.

i. Anticipated start date.

Fall 2016, pending approval.

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.

The primary focus of the SPD master's degree will be to give students the necessary education to generate innovative and cutting-edge research in the field, and to become leaders in the practice of sports product design. The SPD program is structured to give students a thorough theoretical understanding of sports product design methodologies and research in order to generate the future of sports products for all types of athletes.

Currently there are no universities/colleges in the state of Oregon that offer a Graduate degree in sports product design. The Master's of SPD degree is a natural progression for the growing Product Design (PD) Program at the University of Oregon (UO). The UO has a BA/BS degree in Materials and Product Studies in Eugene and a BFA Degree in Product Design offered in Portland. The SPD Master's Degree is a way for the UO to pair its growing design expertise and the ever-growing sports industry in Oregon. The state of Oregon has been recognized worldwide as a hotbed of sports product design activity. Many global brands have moved their headquarters to the Portland Oregon area over the last 30 years. With this industry concentration, which is arguably the global center for sports product development, the proposed SPD graduate program would help to support the global aims of the UO and provide a connection between industry and academia as well as Oregon and the world. The development of this program is also coordinated with the new Sports Product Management (SPM) Master's Degree in the College of Business, which began in fall 2015.

To further illustrate the significance of this program and alignment to UO's goals, PD was granted \$140,000 in Strategic Initiative funding to support a tenure-related faculty

position dedicated to sports product design. This fully covers the salary and OPE for an Associate Professor in the department.

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.

The SPD program will serve established needs in the sports product community, as voiced through focus groups conducted by the PD program with industry experts in design and product innovation. This program will pioneer in the synthesis of traditional graduate level theory and critical thinking with applied research and experiential learning to innovate new product design and knowledge in the field of sports. The SPD program will significantly enhance economic development in the state of Oregon, a strategic objective of the UO, as there are over 700 sport product companies that reside and are headquartered in the state.

UO's School of Architecture & Allied Arts has an established history of diversity within the graduate student body, attracting traditionally underrepresented students and international students. Sport also attracts diversity, as sport crosses ethnic, gender and economic boundaries. The program will foster diversity by implementing a multi-pronged approach to recruitment that includes working closely with internal UO partners such as the A&AA Office of External Relations and Communications, UO Admissions, the UO Center for Multicultural Academic Excellence and other affiliated professional and academic associations.

c. Manner in which the program meets regional or statewide needs and enhances the state's capacity to:

i. improve educational attainment in the region and state;

This program is the only Master's Degree program in the state of Oregon (and United States) that will teach SPD. This unique degree program will produce a new design expertise that our focus groups have indicated is a serious need for the over 700+ sports product companies in Oregon to thrive today and in the future. The intensity and richness of the curriculum proposed here would be at the cutting edge of the SPD.

ii. respond effectively to social, economic and environmental challenges and opportunities;

The SPD program is centered on applied research and product innovation. Many global sport brands are opening their US headquarters in the state of Oregon, due to the already-established talent base that has developed over the last 30 years. This growth also includes a significant number of start-ups in the field. Graduates of the SPD program will positively impact and influence the future of this global sports hub through the innovative theories and methodologies that they will bring to practice.

The generation of this program shows a strong commitment to the state of Oregon's economic growth. The University of Oregon, led by the SPD and SPM programs are

finalists for the National Network for Manufacturing Innovation (NNMI) in fibers and textile innovation grant. NNMI is intended to create a competitive, effective and sustainable manufacturing research-to-manufacturing infrastructure for industry and academia in the United States to solve industry-relevant problems. The UO is 1 of 2 national teams invited to submit a proposal in collaboration with NC State University, Georgia Tech University, UMass Lowell University and the University of Maryland to build Innovation Manufacturing Centers (IMC), which devise and support research projects for the member companies, such as Intel, Under Armour, Nike, and the Department of Defense. The grant is \$75 million from the Department of Defense. If awarded, Oregon's Governor Kate Brown has committed to working with legislators to match \$25 million in state support. The UO Office for Research and Innovation has committed to \$2.4 million of cost share over the next 5 years if the grant is awarded (see the attached letter). While other IMC universities will focus on materials innovation, the UO will focus on the entire sports product creation process from design to pilot manufacturing.

iii. and address civic and cultural demands of citizenship.

Culturally, product designers in the sports industry are part of a cross-functional team, where members work together to solve complex problems for athletes. It is the designer's role to understand the product development process, collaborate with teammates to innovate new product design opportunities and expand knowledge in the field. This knowledge and innovation will be beneficial to the field in many ways. It will help address issues related to gender and diverse sport body types including athletes with disabilities, and enable the development of products that allow the user to become stronger, train harder, injury-free and provide a competitive edge. The new knowledge may also help the industry find innovative solutions around procurement, sustainability, materials and manufacturing. It may even change how products are conceptualized and prototyped in the field. The success of the sports product design industry relies heavily on design innovation and the ability for companies to continuously invest in innovation resources. With the SPD degree, graduates will raise the importance of team building/collaboration and knowledge sharing in the sports product design field in Oregon and beyond.

3. Accreditation

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

The National Association for Schools of Art and Design (NASAD) is the national accrediting institution for art and design-related disciplines.

All A&AAA art and design degrees that are not otherwise accredited by a distinct accrediting entity are incorporated into A&AA's NASAD accreditation. (Architecture, for example, is separately accredited by the National Architectural Accrediting Board)

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.

Faculty programming and course curriculum have been carefully laid out to meet NASAD requirements.

There is no delineation between the MA or MS degrees based on number of technical or science courses taken, other than that the curricular content is relevant to the area of study. In the design field, an MA degree is typically understood to be a general liberal arts-oriented degree that does not focus on a particular area of expertise. As demonstrated from the supplied curriculum and syllabi, the SPD degree is highly focused on enhancing the performance of the user through sports products, so it follows that a MS degree is the appropriate degree classification based on the conventional understanding that the degree is based on scientific learning.

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.

The undergraduate program, which provides a BA or BS in Materials and Product Studies (MPS) and BFA in Product Design (PD), is accredited with NASAD.

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.

NASAD protocol requires that new degree programs be approved by the state before NASAD reviews them. Pending state approval, the MS in Sports Product Design will be reviewed as part of the regular submission and accreditation process starting in the spring of 2017.

4. Need.

a. Anticipated fall term headcount and FTE enrollment over each of the next 5 years.

We expect enrollments for the 5 years beginning Fall 2016 to be:

Year 1 (2016-2017)
20 new students

Year 2 (2017-2018)
20 continuing students
20 new students

Year 3 (2018-2019)
20 continuing students
20 new students

Year 4 (2019-2020)
20 continuing students
20 new students

Year 5 (2020-2021)
20 continuing students
20 new students

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

We predict the following number of degrees granted over the next 5 years to be:

Year 1 (2016-2017)
0 Degrees

Year 2 (2017-2018)
15 Degrees

Year 3 (2018-2019)
16 Degrees

Year 4 (2019-2020)
18 Degrees

Year 5 (2020-2021)
20 Degrees

The Master's Degree completion rate in 2010 for A&AA programs was 87.3%, and 87.1% for UO as a whole. A&AA's Master's in Architecture degree program, a studio-discipline based degree program similar to SPD had a 90.1% completion rate. Other UO Master's Degree programs based in Portland have also similar rates - 93% for 2-year and 96% for 3-year programs.

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

This is a full-time graduate program, where students will matriculate for a full two years. As this Master's Degree is focused in a specific field (sports products), it is expected

that the majority of students will have had experience working professionally in a design field, or hold a bachelor's degree in product/industrial design or a related field (e.g. apparel design, engineering).

The application process for this program will include a portfolio review to understand design capabilities in: problem solving, design process management, drawing, prototyping and story telling, along with an essay of intent, interview in person or over videoconference, transcript, TOEFEL scores (if the student is non-native English speaker), GRE score, 3 recommendation letters and a resume/CV. Potential students will apply through the UO Graduate School and Sports Product Design program.

The program expects that 25% of the students will be domestic residents of the state of Oregon, 50% domestic non-residents and 25% international. The School of Architecture & Allied Arts has on average about 20% domestic residents and 80% domestic non-residents and international students. The rare and unique quality of the SPD program will draw a large pool of students outside of Oregon and the United States. Initial program inquiries also reflect these numbers.

d. Evidence of market demand.

Portland, Oregon is the center for global sports product design. As mentioned earlier, the state of Oregon is home to more than 700 sports product companies. This growing market demands highly skilled and talented designers. A series of intensive market research and focus group work sessions involving senior executives and senior designers from 18 different sports product companies along with UO faculty from the Product Design program and the Business School were held to determine the needs of academia and the industry. The support for the development of a new sports products masters program from industry was very strong, as a degree program like SPD does not exist. The content of the program and curriculum were developed based on the information gathered from these sessions and tools.

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 design programs in Oregon that focus on sports product design. Furthermore, there are no programs worldwide that focus on a combination of sports product design, sports product management, human physiology and journalism/communications. Representatives from the sports product design community present at the focus group work sessions expressed the severe lack of educational programs within this field and the great opportunity that exists.

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?

The specialized skills earned by graduates of the SPD program will give them a huge advantage to find high-level design jobs in Oregon and globally. The state of Oregon has a high concentration of sports and outdoor product companies and many global brands are opening their US headquarters in the Portland area. Manufacturers in the sports products field produce apparel, footwear and equipment for professional and recreational athletes, and for indoor and outdoor activities. The industry is in need of creative and innovative designers who can understand the challenges and make significant contributions to the future of sports product design.

5. Outcomes and Quality Assessment

a. Expected learning outcomes of the program.

The expected learning outcomes of the program focus on educating designers with the ability to apply the diverse and specialized knowledge acquired throughout the coursework to innovative design solutions that advance the field of sports products. Graduates will have an understanding of the physical and physiological performance effects sport products have on the body and an understanding of the materials and manufacturing methods used in the development of these products. They will be able to use quantitative and qualitative analytical and critical thinking skills to evaluate data from users and products, solve problems and make intelligent material and production decisions in a creation environment, and understand and apply complex issues pertaining to sustainability in production. Graduates will also gain a broad understanding of the business and marketing aspects of the sports industry through the SPM collaboration.

b. Methods by which the learning outcomes will be assessed and used to improve curriculum and instruction.

Studio course work assessment will include project reviews and intensive feedback from faculty, peers and industry experts. As is custom in graduate courses there will be papers, constructed objects, and presentations that will all generate feedback and evaluation from instructors.

Final presentations will be open to industry professionals and other sports field experts where feedback on the projects and the program will be expected. It is a common practice in A&AA to invite external reviewers from the industry and academia to participate the final presentation of studio courses. Reviews are usually held for 3 to 4 hours during week 10 of each term. Students typically present their course project through a PowerPoint/InDesign presentation together with posters and product prototypes. Guest reviewers spend time with assigned students and give 15-20 minute feedback to each project based on their expertise for a total of 3 to 4 hours. The PD program and instructors organize the guest reviewers, and there are typically 6 to 15 external reviewers for each course.

Other assessment methods already incorporated into the PD undergraduate curriculum will be used, such as student evaluations at the end of each term and annual faculty peer evaluations.

The caliber of research produced by students will be at a professional level and allow for dissemination at international design conferences such as International Sporting Goods Exhibition (ISPO), Industrial Design Society of America (ISDA) and International Textile and Apparel Association (ITAA). Internationally recognized competitions such as Red Dot Design Concept Awards (held in Singapore and Germany), Industrial Design Excellence Awards (IDEA) by IDSA, IF Design Award (held in Germany), as well as prominent international design weeks such as Milan Design Week, New York Design Week will also be opportunities for students to compete and share their work.

The PD program currently tracks job placement, employment and accomplishments of program alumni. We will maintain this practice with the SPD program.

For the first five years, the program director will conduct a post-graduation survey of alumni seeking feedback on program strengths and weaknesses, and professionals acting as external reviewers of student final design work will also be asked to provide program feedback.

After five years, the program will be evaluated by Academic Affairs, and the program will also be reviewed by the university every ten years.

c. Nature and level of research and/or scholarly work expected of program faculty, indicators of success in those areas.

This new program's concentration in sports product will expand the already diverse research and creative practices of current PD faculty. Potential research areas will include designing products that help reduce injuries and extend an athlete's career, addressing issues of gender in sports products, designing for diversities of body types including disabilities, improving performance of elite, amateur and recreational athletes, and the application and development of new sustainable materials and technologies in sports products.

The first hire for the new program, Susan Sokolowski, PhD, has a strong professional and academic background with numerous awards and accomplishments in the field of sports products, textile and apparel design. Her research will focus on the issues surrounding the design of products for special populations (including women, children and disabled athletes).

The National Network for Manufacturing Innovation (NNMI) in fibers and textile innovation grant (if awarded) also has the potential of driving innovative sports product design research opportunities for SPD faculty through the development of the Innovation Manufacturing Centers.

6. Program Integration and Collaboration

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

The proposed SPD program is unique in that it combines specialized courses from different areas of study including Human Physiology, Journalism and Communication, Business and Management, along with PD to educate designers with expansive but specific skills in the area of Sports Products. The proposed SPD program will collaborate closely with the Lundquist College of Business Master's Program in SPM, at the UO. The SPM program began in the fall of 2015 and is an 18-month business degree focused on the education of managers for marketing, ideation and implementation for performance sports products such as footwear, apparel and equipment. The Human Physiology department and the School of Journalism and Communication are providing courses specifically for students in the SPD and SPM programs.

Oregon State University has an undergraduate degree (BS) in Apparel Design, housed in the School of Design & Human Environment, within the College of Business. While this program includes specializations in active, protective, and functional apparel, it is a bachelor's degree only. The proposed SPD program offers a Master's degree (MS) and focuses on sports products that includes apparel but also non-apparel areas of design such as footwear and equipment.

Portland State University offers a BA/BS in Graphic Design in the School of Art and Design within College of the Arts. This program is not sports product-specific. The School of Community Health offers a BA/BS in Health Studies with a concentration in physical activity / exercise; this program is not a design program, and focuses on human health, not the products associated with physical activity and exercise. The School of Business Administration offers an undergraduate certificate in Athletic and Outdoor Industry, and a professional certificate in Athletic and Outdoor Product Management. This program, while most closely aligned with the SPD program, is also not a design degree; the professional certificate focuses on the business management of the sports product industry, not the design of new products.

Pacific Northwest College of Art (PNCA) offers a Master of Art in Applied Craft and Design. Their MFA program focuses on issues of craft and hands-on making, and is not related to sports product design.

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 SPD program will round out the UO's PD offerings, by complementing the existing undergraduate product design program, and the BFA program in Portland. It will offer curriculum shared directly with the UO's MS in Sports Product Management program currently being offered in Portland, and generate a future interest for the Product Design Program to develop new elective classes for our Portland based design students. Our students will also be taking courses in Human Physiology, Journalism and Business.

While Oregon State University (OSU) offers a BS degree in Apparel Design, there are no other graduate degree programs specializing in Sports Product Design in Oregon. The SPD program is interested in pursuing future collaborations between these programs as students entering the program from an engineering background (who do not have a soft goods background) may find value in the undergraduate courses at OSU.

Although Portland State University (PSU) doesn't offer product design in general or sports product design specifically, it offers several complementary programs, and we are pursuing collaborations with PSU ranging from shared programming, to course reciprocity, to advanced standing for some of their undergraduate students.

The three closest potential partners at PSU are the School of Art + Design, the School of Community Health, and the School of Business Administration. The *School of Art + Design* does not offer product design, and some of their students may be interested in that profession. SPD could be an attractive graduate specialization for these students. The *School of Community Health* offers a BA / BS in Health studies: physical activity / exercise. Some of these students may be interested in a graduate degree in product design, and could have advanced standing with their coursework in human physiology already completed. The SPD masters program could have course reciprocity in human physiology courses, including PHE 573 Physiology of Exercise, PHE 575 Exercise Testing Techniques and PHE 577 Exercise, Nutrition & Performance. The *School of Business Administration* offers an undergraduate certificate in Athletic and Outdoor Industry, and a professional certificate in Athletic and Outdoor Product Management. These certificates could have complementary programming, or instructional or research collaborations with the SPD degree, which will focus on product design. Students who complete one of the Business Administration certificates may be interested in pursuing the graduate degree in SPD, and could have advanced standing in the degree program. Conversations are ongoing between the three schools and A&AA, with meetings planned in January 2016 to discuss the best partnership.

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

Not applicable.

d. Potential impacts on other programs.

This program will have a positive impact on other programs offered at the White Stag Building by diversifying the student population and curriculum offered. It will also help generate new curriculum in other academic areas such as Human Physiology and Business. Because SPD will increase the usage of shop space at the White Stag Building, a new lab space (the Innovation Lab) has already been set-up specifically for this program to address shop need. The Innovation Lab is adjacent to the White Stag Building and will accommodate students for their product and research development.

The SPD program expects no significant impact on faculty teaching resources for the PD program in Eugene. Last year, the program hired 3 new tenure track faculty for the Eugene campus in addition to the new SPD faculty in Portland.

The BFA PD Program and proposed MS SPD programs relate to each other in that they will share resources such as classrooms, shop space, presentation space and library resources. The PD faculty, in addition to the specific SPD faculty, will be available to teach classes in the MS program when the subject matter overlaps with their area of expertise. Such areas may include soft goods production, manufacturing techniques, and user centered design methodology. Having the SPD MS and PD BFA located together will generate a more vibrant community hub in Portland to draw in guest speakers and industry experts.

7. Financial Sustainability *(see Budget Outline form)*

a. Business plan for the program that anticipates and provides for its long-term financial viability, addressing anticipated sources of funds, the ability to recruit and retain faculty and plans for assuring adequate library support over the long term.

There are 3 key sources of funding for the SPD Master's program including: the 2013-14 UO strategic initiatives funding, Oregon Budget Model (OBM) revenue generated from student tuition, and foundation funding collaboratively raised between SPD and SPM (through a collaborative entity, the Sports Product Institute).

2013-14 Strategic Initiatives Funding (shown in Column B of the Budget Outline): Product Design was granted \$140,000 in permanent funding to support a tenure related faculty position dedicated to SPD. This funding fully covers the salary and OPE for an Associate Professor in the department.

PD was also granted one-time funding of \$150,000 to support the launch of this program. The program intends to use those funds to support the first two years of operations of the program. That includes purchasing of required equipment, studio space renovation in the White Stag Building, and launch costs related to marketing, communication and student tuition remissions to ensure the success of the initial two cohorts.

OBM Revenue (Shown in Column A of the Budget Outline): The department will receive sufficient funding allocation from the Oregon Budget Model to pay for an additional tenure related faculty line and support normal operational expenses of the program for all future years.

Sports Product Institute Foundation Support: SPD and SPM have already received significant foundation funding which will help support the SPD Master's program. As the Strategic Initiatives and OBM revenues will provide sufficient funding to run a world-class program on their own, the program is not reliant on philanthropic sources of

funding to maintain a quality masters program. Nevertheless, it is likely that a growing group of alumni from this degree and awareness of the program will help to generate a strong support for the program from the local sports industry at large. Funding received through this source will be used for a variety of purposes including: additional space, equipment, student support and immersive student experiences.

b. Plans for development and maintenance of unique resources (buildings, laboratories, technology) necessary to offer a quality program in this field.

The equipment specified within the proposal already exists at the White Stag facility and is ample to run a world-class program. Maintenance and additional equipment and/or upgrades may be needed as the program develops. This equipment is not expected to require enhancements or upgrades within the first 4 years of the program. In maturity, the program will generate a sufficient amount of cash flow from tuition to handle equipment repairs and upgrades as needed. Fundraising will help procure additional equipment to enhance the program if needed.

c. Targeted student/faculty ratio (student FTE divided by faculty FTE).

Several different metrics are used to identify targeted student/faculty ratio in SPD. With a team of 10 TTF and NTTF faculty, 2 of whom are dedicated to the MS, graduate students will have access to extensive specialized faculty expertise. At the targeted program stabilization size (20 new students per year), with just the dedicated faculty, the program will have a student/faculty ratio of 20:1.

The targeted student/faculty ratio for design studios is 13:1. Given that the cohort is forecast to be 20 students, each studio course will be co-taught by two faculty members; a combination of tenure-related, NTTF, and / or pro-tem faculty.

d. Resources to be devoted to student recruitment.

A&AA has made the development and promotion of Sports Product Design as one of its top priorities. A&AA will publish promotional material on its website, print media and through other online media relevant to the field of design. Susan Sokolowski, PhD, will be responsible for recruitment of new students. The Product Design program in Eugene as well as the office of External Relations and Communications will play an active role in recruitment of new students for the SPD program. Design competitions, exhibitions and conferences (such as ITAA, ISPO and ISDA) that the Product Design faculty will attend, will provide tremendous opportunities to recruit graduate students as well.

8. External Review

a. 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.

An External Review Committee composed of three academics (Clark Lundell, MArch – Auburn University, Barry Katz, PhD – California College of the Arts and Lorraine Justice, PhD – Rochester Institute of Technology) were commissioned by the UO Graduate Council and briefed by the Product Design curriculum committee. They met and reviewed the proposal on March 5, 2015 and submitted their report on March 13, 2015. The Product Design curriculum committee made additions to the proposal in response to this report. Both have been provided to the Graduate Council.