

Materials linked from the Exercise and Sport Science Graduate Program Review; this document was developed by the unit following the graduate program review.

The Future of the Exercise and Sport Science Program

A Report of the EXSS Task Force

Submitted December 13, 2012

Introduction

The plan outlined in this document is designed to advance the Exercise and Sport Science (EXSS) program in the School of Biological and Population Health Sciences at Oregon State University. Such strategic planning is consistent with the value of continuous improvement to which the College of Public Health and Human Sciences is dedicated, where we continually strive toward high standards by optimizing individual and collective strengths.

The mission of the EXSS program is to improve human health and wellness through the study and application of physical activity across the lifespan in all populations. This is achieved by generating new knowledge, translating knowledge into practice, and developing exceptional professionals.

Inspired by our program mission and OSU's status as a leading land-grant university, the EXSS Task Force evaluated all aspects of the current EXSS program to identify ways of leveraging our unique position, within a college of public health, to become a recognized leader in the interdisciplinary study and application of physical activity aimed at improving human health and wellness across the lifespan.

Planning Process

Dean Bray announced a task force comprised of five faculty members in EXSS on September 28, 2012. The members included Simon Driver, Vicki Ebbeck (co-chair), Kathy Gunter, Marc Norcross, and Mike Pavol (co-chair). The Task Force first met with Dean Bray in an organizational session and then met as a group on a regular basis across Fall term.

The Task Force gathered information that could assist in the formulation of ideas, and faculty in EXSS were invited to alert the Task Force to any resources that might be beneficial. The Task Force reviewed materials that included journal articles addressing trends in kinesiology specifically and higher education in general, job market projections, models of academic programs at other institutions, breakdown statistics of our current students and curriculum offerings, as well as various professional certifications currently available through different organizations.

Furthermore, faculty who teach in the EXSS program ($n=11$) accepted the invitation to individually meet for one hour with a member of the Task Force to share ideas and suggestions that were transcribed, verified by the faculty, and then distributed to members of the Task Force. Additional stakeholders with a vested interest in the EXSS program also engaged in a scheduled conversation with a Task Force member, including administrators ($n=3$), academic advisors ($n=5$) who met collectively, and a faculty representative from the Cascades campus. Faculty also responded to requests from the Task Force for further meetings and for answers to specific inquiries that better informed the Task Force about the nature of particular programs.

The Task Force shared their emerging recommendations with EXSS faculty over a 2-week period. During this time, the Task Force held meetings with the EXSS faculty and encouraged faculty members to provide feedback (via personal conversations or email) to Task Force members. This ongoing exchange of ideas ensured that the final recommendations were the result of considering a range of ideas and approaches as well as seeing each decision from various perspectives. Nevertheless, the final decisions regarding

the content of this report were those of the Task Force. Although general support was voiced by many of the EXSS faculty for the objectives presented in this report, no formal consensus was sought nor was this final report subjected to review by the faculty.

Current State of the Program and Why Change is Needed

The program in EXSS has many strengths. At the undergraduate level, the program in EXSS is one of the largest on campus. In 2011-12, EXSS was the fifth largest major in terms of number of Bachelor's degrees conferred. The undergraduate option in Pre-Therapy and Applied Health (PTAH) is an especially popular one, comprising 64% of EXSS majors. Of these, approximately 40% are pre-physical therapy, with the remainder divided between pre-occupational therapy, pre-medicine, pre-nursing, and pre-physician assistant. The other undergraduate options are Fitness & Nutrition (26% of majors), Physical Education Teacher Education (PETE; 5% of majors), and Applied EXSS (4% of majors). Graduates of the undergraduate program in EXSS appear to be viable professionally. Of the respondents to a recent alumni survey, 98% were either employed or enrolled in graduate/professional school and, of those who were employed, 83% had a job that was either directly or somewhat related to EXSS. As another indicator of marketability, over 90% of students who completed an internship during their undergraduate studies would have been recommended by their supervisor for hiring.

At the graduate level, the doctoral program in EXSS was ranked as the 11th best such program in the country in the most recent evaluation by the National Academy of Kinesiology in 2010. Movement studies in disability is an area of distinction at the graduate level, with a long history of training grants from the U.S. Department of Education. Other graduate concentrations exist in exercise physiology, neuromechanics, physical activity and public health, and sport and exercise psychology. In addition, the Master of Science program in Physical Education Teacher Education (MS-PETE) is the only program in Oregon to offer the Adapted Physical Education Endorsement. Most PhD graduates find employment in the field after graduation, typically in academia. MS-PETE graduates are also highly employable.

The faculty members associated with the EXSS program are strong instructors and productive scholars. In the recent survey of alumni, the quality of the faculty, their passion for teaching, and their care for the students were most often cited as strengths of the program. As scholars, faculty members have, on average, each published two articles and presented two abstracts at professional meetings in each of the past five years and, as a group, were awarded \$1.09 million in grants and contracts, on average, each of these years.

A major concern, however, is that the current model of undergraduate education is not sustainable. There are currently two majors, four EXSS options, and five pre-professional tracks offered and, with the exception of the Athletic Training major, there are no specific requirements for admission to the program. As of fall term 2012, there are 1018 EXSS undergraduate students and 179 Athletic Training students (including Pre-Athletic Training). By comparison, there are effectively 14 professorial faculty members and three full-time instructors in EXSS and Athletic Training, giving a student/faculty ratio of 70:1. In an attempt to accommodate the large number of majors, core 300-level classes are currently being offered at least three times each year, with class sizes ranging from 60-80 students and continuing to grow. Despite this, only 74% of EXSS students complete their

degree within four years. In the recent undergraduate program review, this diversity of specializations and course offerings, the large class sizes, the high student/faculty ratio, and students' difficulties in completing their degree within a reasonable period of time were cited as weaknesses of the program. The high student/faculty ratio also limits students' opportunities to get involved in research. A major recommendation of the program review was to "consider reducing the number of majors by instituting admission requirements, restructuring course offerings, or expanding the number of faculty," with a student/faculty ratio of 30:1 or less being recommended. The PTAH option, in particular, is one in which the number of interested students exceeds the capacity to find practicum sites. Furthermore, the number of pre-therapy graduates from Oregon colleges and universities each year greatly exceeds the total capacity of the two Doctor of Physical Therapy programs in Oregon.

At the graduate level, there are currently five concentrations, two of which (exercise physiology, physical activity and public health) have less than 1.0 FTE of associated faculty, with the others each having 2.0-3.0 FTE of associated tenured or tenure-track faculty. Furthermore, each concentration tends to function largely in isolation from the others. There is no coordination of coursework between concentrations and only recently has there been any deliberate consideration of establishing overarching thematic areas of excellence across concentrations. Arguably, this fractured organizational structure and lack of critical mass in most areas reduces the visibility of the program, impairs the ability to attract the strongest graduate students in some concentrations, places increased instructional demands on the faculty, undermines collaboration, and diminishes faculty productivity. This is without considering the impact of large undergraduate class sizes on faculty productivity. Another challenge being faced is the impending retirement of one of the two faculty members responsible for delivering the PETE program at the graduate and undergraduate levels. In a review of comparable programs, none try to offer so many undergraduate options and graduate concentrations to so many students with so few faculty members.

Finally, as was noted in the EXSS self-study conducted in 2011, financial support from the State of Oregon for higher education has declined and can no longer be considered a reliable or adequate source of funding. In addition, it has become increasingly difficult to obtain Federal funding for research. This creates a challenge in generating the money needed for operating expenses, conducting research, professional development of the faculty, and providing financial assistance to students.

The program in EXSS is facing several major challenges that need to be addressed. However, in responding to these concerns, there is also the opportunity to build on the strengths of the program, to take a proactive approach in adapting to current trends in the field, to embrace and take advantage of the role of the program in a College of Public Health and Human Sciences, and to enhance our contribution to the mission of the college. As such, we provide the following vision for the EXSS program.

Vision for the EXSS Program

We envision that the program in EXSS will move forward with a unifying focus on physical activity and health. We are a diverse faculty integrated into a College of Public Health and Human Sciences at a land grant university with a strong Extension program. As such, we

are uniquely able to advance understanding of the physiological, psychological, and neuromechanical underpinnings of the relationships between physical activity and health and to translate this knowledge into meaningful programs and clinical applications. From a research perspective, we will embrace this opportunity and develop it as our signature area of distinction, particularly in the areas of disability and health and community-based physical activity interventions, with future faculty hires focused on growing our presence in these areas. We will take an interdisciplinary approach, with active collaboration between faculty within the program, the College, and the University. A dynamic research environment will exist, with active involvement of faculty and strong graduate and undergraduate students as a community of scholars, with high levels of external funding, with close ties to the community, and with a support structure for enhancing scholarship.

The focus on physical activity and health will also be integrated into our educational mission. At the undergraduate level, we will prepare students to obtain certifications as fitness professionals (e.g., personal trainer, strength and conditioning specialist, physical activity in public health specialist), for graduate education in exercise science, and for professional training in the allied health professions (e.g., physical and occupational therapy, medicine, nursing, physician assistant). At the master's level, we will train professionals who promote physical activity and health as practitioners in the areas of adapted physical education, athletic training, and physical activity and public health. Finally, at the doctoral level, we will produce the next generation of exceptional researchers and academics who can further advance the knowledge base related to physical activity and health. By these means, we will fulfill the mission of the program.

Goals and Objectives

The Task Force identified three overarching goals as the guiding principles to achieve our vision. These goals are to promote excellence in: 1) undergraduate education; 2) graduate education; and 3) faculty research and scholarship. What follows are specific objectives to guide this process. These objectives are our path toward excellence. In meeting our goals we will also enhance student marketability, increase faculty productivity, strengthen our alignment with public health, and cultivate new revenue streams.

We recognize that some objectives located under a particular goal may also have relevance for one or more of the other goals; therefore, our main concern is that the objectives be achieved more so than the specifics of where each objective is listed. To aid in understanding the ramifications of the various objectives that speak to programmatic changes, a visual representation of the proposed structural alterations to our current program offerings appears in Figure 1.

Goal 1. Promote Excellence in Undergraduate Education

To achieve this goal, the EXSS program will restructure the undergraduate program, revise, refocus, and streamline the undergraduate course offerings, and impose admission standards that support program excellence and student success after graduation.

The undergraduate program in EXSS at Oregon State University is one of only four such programs in the U.S. that are integrated into a college of public health. Thus, we offer a truly unique opportunity for our undergraduate students. Our Bachelor of Science degree

provides students a broad background in the core areas of the discipline and prepares students for professional careers in fitness/wellness professions, as well as for entrance into professional and academic graduate programs.

To reach our goal to “Promote Excellence in Undergraduate Education,” we propose the following three objectives.

Objective 1.1: Condense the undergraduate program to two options. We will reduce the two current undergraduate majors and four current undergraduate options to one undergraduate major and two undergraduate options. The two options will be focused on (1) preparation for careers in physical activity and fitness/wellness (“Applied” option) and (2) preparation for careers or advanced study in the allied health professions and medicine (“Pre-Allied Health” option). Both options would suitably prepare students for relevant academic graduate programs in exercise science core areas. It is envisioned that the “Pre-Allied Health” option will require more coursework/lab work in the basic sciences (e.g., chemistry, physics, psychology). By comparison, the “Applied” option will require more applied coursework in EXSS, with the intent that graduates will be prepared for certification as a personal trainer, strength and conditioning specialist, wellness coordinator, physical activity in public health specialist, or similar. It is further envisioned that, rather than specifying formal tracks, students will be provided with lists of suggested courses for different career paths, with sufficient electives in their program of study for them to tailor their coursework to their desired career path.

Rationale: The two-option structure is in acknowledgement that the B.S. degree in EXSS can serve either as preparation for employment or as preparation for graduate or professional school. The B.S. degree in EXSS provides individuals with many viable career options related to physical activity and fitness/wellness. In fact, the U.S. Department of Labor has highlighted both “Fitness Trainers and Aerobics Instructors” and “Coaches and Scouts” as occupations with bright outlooks, with each projected to have more than 100,000 job openings and greater than 24% growth nationally over the period 2010-20. In addition, “Fitness and Wellness Coordinator” is highlighted as a new and emerging occupation with a bright outlook and “Exercise Physiologist” has gained status as a new occupational category. The EXSS program will take a leadership role in training these needed professionals.

A B.S. in EXSS also serves as excellent preparation for professional study in the medical and allied health professions. As was noted earlier, there is a high demand among students for pre-professional programs in medicine and allied health. In addition, the U.S. Department of Labor projects there to be 100,600 job openings for physical therapists (39% growth), 57,100 for occupational therapists (34% growth), 1.2 million for registered nurses (26% growth), 305,100 for physicians and surgeons (24% growth), and 40,600 for physician assistants (30% growth) over the period 2010-20. With EXSS’s focus on the science of physical activity in relation to human health, we are well suited to prepare students for professional programs in medicine and allied health and we will continue to do so.

The creation of the “Applied” and “Pre-Allied Health” options acknowledges the differing educational needs of those students who wish to pursue careers related to physical activity and fitness/wellness and those who wish to pursue professional

study in the allied health professions (i.e. application versus depth of scientific knowledge). The two options will meet the needs of these two groups of students.

Action Item 1.1.1: A subcommittee will be charged with implementing the two undergraduate options prior to the start of the 2013-14 academic year. Students would no longer be admitted to the existing Applied EXSS, Fitness & Nutrition, and PETE options starting in Fall 2013. [Person with primary responsibility: EXSS Undergraduate Coordinator; Timeline for the action item: Jan-Jun, 2013]

Objective 1.2: Revise the undergraduate curriculum and how it is delivered. Guiding principles for the revision of the curriculum are as follows:

- The curriculum will be competency-driven to ensure that students will receive the essential foundational knowledge and skills;
- Course content will be standardized and focused on material of primary relevance, with redundancy between courses avoided;
- Courses will be structured to ensure continuity, reinforcement of learning, and a logical progression across courses;
- The number of credit hours that students must take to acquire competencies will be minimized, including prerequisite and ancillary coursework;
- The inclusion of lab sections among the core courses required of all students will be minimized;
- Core courses will be structured such that some can be taken during the sophomore year and to allow students to complete all of the core courses by the end of their junior year;
- A greater number of advanced undergraduate courses that are tailored to specific sets of career paths will be offered, leveraging off corresponding graduate courses;
- More opportunities will be provided to gain skill in oral communication, critical thinking, problem solving, creativity, and leadership.

With regards to course delivery, it is proposed that lecture-based core courses be offered less often with larger class sizes, in order to facilitate the delivery of smaller, advanced undergraduate courses. In addition, the lecture-based core courses will be offered online through Ecampus.

Rationale: We believe that the envisioned curricular structure will enhance student marketability and aid in the timely completion of the B.S. degree, while also allowing for a reduction in credit hour delivery and greater flexibility in course offerings. The reasons for revising the curriculum in keeping with the stated guiding principles are to:

- 1) Better prepare students for career success (particularly by means of upper-level elective courses, such as a potential course in “Corporate Health/Wellness”);
- 2) Facilitate graduation in four years (e.g., with fewer required courses and by expanding access to courses through Ecampus);
- 3) Provide students with a better understanding of EXSS earlier in their studies so that they may make more educated career choices;
- 4) Potentially allow for a cohort model and its associated benefits for students, faculty, and advising in terms of standardization/predictability;
- 5) Increase curricular efficiency (i.e. the ability to educate large numbers of students within the teaching resources available); and

6) Provide for flexibility in teaching assignments, thereby enhancing faculty productivity.

Action Item 1.2.1: A subcommittee will compile a set of “core” competencies (i.e. foundational knowledge and skills) that every EXSS student should possess on graduation. [EXSS Undergraduate Coordinator; Sep-Dec, 2013]

Action Item 1.2.2: A subcommittee will establish a new core curriculum and course sequence based on the identified competencies. [EXSS Undergraduate Coordinator; Jan-Jun, 2014]

Action Item 1.2.3: Coordinate the development of competency-based, career-specific, upper-level elective courses [EXSS Undergraduate Coordinator; Sep 2014-Jun 2017]

Action Item 1.2.4: Coordinate the migration of the EXSS core courses to Ecampus [EXSS Undergraduate Coordinator; Sep 2014-Jun 2016]

Objective 1.3: Implement standards for admission to the options and retention in the major at the undergraduate level. It is envisioned that students will enter the EXSS program with an undeclared option and will be prevented from taking upper-level coursework in EXSS until they have completed a specified set of prerequisite courses with a specified level of performance. On achieving this benchmark, undergraduate students will be allowed to declare an option and enroll in upper-level coursework. In addition, all EXSS students would be required to meet a specified minimum level of performance in order to remain in the major.

Rationale: Delaying the time at which students are accepted into an option ensures that students will be making an informed decision about their career choice; they will be more mature when making the decision; and there will be fewer students who need to switch options and take extra time to complete missed requirements. The institution of admission standards, as well as a retention standard, will allow for greater administrative control of student numbers and will restrict advancement in the major to those students who demonstrate the ability to be successful in their chosen option. This process will also reduce the demands on credit hour and course delivery, as well as demands on the number of practicum/internship opportunities that need to be found. These are important concerns, given the high student demand for the EXSS major, particularly the PTAH option, relative to the number of faculty, the practicum/internship opportunities available in the greater Corvallis area, and the number of openings available in professional schools in allied health and medicine.

Action Item 1.3.1: A subcommittee will specify and implement the admission standards for the two undergraduate options, prior to the start of the 2013-14 academic year. The standards would apply to all students who enter the program beginning in Fall 2013. [EXSS Undergraduate Coordinator; Jan-Jun, 2013]

Action Item 1.3.2: A retention policy will be developed and in place for the start of the 2013-14 academic year. [EXSS Undergraduate Coordinator, Jan-Jun, 2013]

Goal 2. Promote Excellence in Graduate Education

To achieve this goal, the EXSS program will restructure the graduate program, transition to a set of three professional degree programs at the master’s level, and impose new course and examination requirements at the doctoral level.

The graduate program in EXSS at Oregon State University is one of the few notable programs in the nation that is integrated into a college of public health. An additional point of distinction is the fact that we are the only doctoral program in Exercise Science on the west coast. Our professional master's degree programs will prepare students for entry into positions in schools, health department settings, federal agencies, prevention research centers, professional, commercial, and nonprofit organizations, and athletic programs. Graduates of our doctoral program will be trained for positions in higher education, as well as research-oriented clinical, industry, and government settings.

To reach our goal to "Promote Excellence in Graduate Education," we propose the following eight objectives.

Objective 2.1. Discontinue the current practice of admitting students into the Master of Science in EXSS degree.

Rationale: It is anticipated that this change will allow faculty to benefit from the advanced skill set of doctoral students relative to master's students. Doctoral students are better equipped to be productive collaborators with faculty on research projects and grants and require less faculty time than supervising master's theses or projects that involve manuscript writing, data analysis, etc. In addition, restricting currently available school/program student support commitments (i.e. GTAs) to doctoral-level students should result in the ability to support, and therefore recruit, more doctoral students in all EXSS research labs. Greater numbers, combined with increased scholarship expectations from doctoral students, should facilitate increased faculty research productivity. The Master of Science degree will be retained as a failsafe alternative perchance a student does not successfully advance to candidacy in the doctoral program.

Action Item 2.1.1: The change in practice would take effect with the fall of 2013 admission process, thereby impacting students who wish to start in Fall term of 2014. All promotional materials pertaining to our program would be altered to signify that we are currently not accepting students into the Master of Science degree in EXSS. The exception will be the Master of Science degree in EXSS with an area of concentration in Physical Education Teacher Education that will continue to admit students until a new practitioner-oriented master's degree in adapted physical education is established. [EXSS Graduate Coordinator; Jan-Mar, 2013]

Objective 2.2. Enroll students in one of three professional, non-thesis, master's degrees that would replace the current practice of admitting students into the Master of Science degree. We would create a new Master of Public Health in Physical Activity degree. In addition, we would discontinue the current undergraduate major in Athletic Training (AT) and replace it with a Master of Athletic Training degree. We would also replace the current Master of Science degree concentrated in Physical Education Teacher Education with a Master of Adapted Physical Education degree.

Rationale: The professional degrees will allow us to provide quality training tailored to the unique needs of future practitioners who wish to engage directly with communities and individuals to impact lives and make a difference. These non-thesis professional degree programs would allow for larger graduate student enrollments that generate student credit hours, as well as revenue from summer

tuition dollars. Larger enrollments would be in accordance with the current strategic plan of the OSU Graduate School that speaks to growing the number of graduate students on campus.

Development of a professional *Master of Public Health in Physical Activity* (MPH in PA) degree is indicated for three primary reasons:

1. As the only College of Public Health and Human Sciences in the state of Oregon, and one of a select few exercise and sport science programs within a college of public health, we are uniquely qualified to offer this degree that prepares professionals trained in the science of physical activity and its promotion in populations. The Association of Schools in Public Health recognizes three CEPH-accredited universities with the equivalent of an MPH in PA (also called an MPH in Physical Activity and Healthy Lifestyles and an MPH in Physical Activity and Public Health): Colorado State University, George Washington University, and University of South Carolina. We would thus be a national leader in providing an MPH in this important area of public health.
2. The integration of public health and physical activity aligns with the University signature area of improving human health and wellness, is consistent with the mission of the College to develop the next generation of public health and human sciences professionals through innovative curricula, and supports the shared focus on physical activity and health of the EXSS graduate program.
3. The professional degree program ensures that graduate courses are full and consistently offered. This would better justify the faculty FTE devoted to graduate teaching and would support the needs of doctoral students, who will be able to count on available and regular course offerings.

Action Item 2.2.1-MPHPA: Establish a subcommittee to oversee the process of developing and submitting a Category I proposal. [Gunter; Sept 2013-Jun 2014]

Action Item 2.2.2-MPHPA: Include MPH in PA as a degree option in our promotional materials and develop a procedure for reviewing, as well as managing, applications that will be in effect for admitting students for Fall term of 2016. [EXSS Graduate Coordinator; Apr-Jun, 2015]

A move to a professional *Master of Athletic Training* (MAT) degree is indicated for three primary reasons:

1. Between 2006-2010, of the 91 students admitted into the undergraduate AT program, 70 graduated with an AT option/major resulting in an average student attrition rate of 23%. Despite recent programmatic changes that have increased the number of students admitted each year, the maximum size of an AT student cohort is about 25 due to limitations in the number of qualified clinical training sites that are available on-campus and in the community. Additionally, given the program competencies required for accreditation and taught in a learning-over-time model, there is no mechanism to replace lost students in a given program cohort. Collectively, these circumstances make it difficult to satisfy the 20 graduates per year recommended by OSU for undergraduate programs. A shift to a MAT program would result in the discontinuation of a small undergraduate major with a high attrition rate and its replacement by a relatively large graduate program (\approx 30 students and 15 graduates per year). Additionally, as the program would run year-round and may be eligible for differential tuition rates,

we anticipate increased revenue generation will offset additional costs for summer faculty appointments. Therefore, we do not anticipate a need for increased resource allocation.

2. Nationally, the U.S. Bureau of Labor Statistics projects a 30% increase in AT jobs (5,500 jobs) and a total of 11,900 AT job openings due to growth and replacement needs over the period 2010-2020. Despite this projected growth, the AT program is one of only three accredited AT programs in the state of Oregon (along with Linfield College and George Fox University) and the only entry-level professional program in the OUS system. As such, a MAT program would continue to serve the greater land-grant mission of the University by providing this type of education to the people of Oregon.
3. At present, the entry-level education requirement for the AT profession is at the baccalaureate level. However, on June 25, 2012, the National Athletic Trainers' Association Board of Directors recommended that a new analysis of AT education be undertaken to determine the appropriate professional degree for the profession. Since then, the Commission on Accreditation of Athletic Training Education (CAATE), in its Winter 2012 newsletter, announced the formation of a transition group to help programs change from an undergraduate to a graduate-level professional AT program. Currently, two institutions with long-standing undergraduate AT programs and faculty members actively involved in the national AT education decision-making process and/or CAATE (Boston University and Indiana State University) are transitioning to graduate-level education. Collectively, these events indicate that a shift toward the master's degree being the mandated "point of entry" into the AT profession is likely to occur within the next 5-10 years. The proposed change to a MAT program would put OSU ahead of the curve nationally, enhancing the program's visibility as a leader in AT education. Otherwise, we will be one of many followers in implementing the mandate once it is made.

Action Item 2.2.1-MAT: Create a subcommittee that will evaluate existing graduate AT program models, select the most appropriate graduate model for OSU (i.e. 3/2 dual-degree (BS/MAT) option vs. 2-year MAT option), determine CAATE accreditation and transition requirements, and outline specific program requirements, course of study, and a program transition timeline. [Norcross; Apr-Jun, 2013]

Action Item 2.2.2-MAT: Establish a subcommittee to oversee the process of developing and submitting a Category I proposal and obtaining CAATE approval. [Norcross; Sep 2013-Jun 2014]

Action Item 2.2.3-MAT: Include MAT as a degree option in our promotional materials and develop a procedure for reviewing, as well as managing, applications that will be in effect for admitting students for Summer term of 2016. Admission of students to the undergraduate Pre-AT option and AT major would cease after Fall term of 2013 and 2015, respectively. [Norcross; Apr-Jun, 2015]

Development of a professional *Master of Adapted Physical Education* (MAPE) degree is indicated for four primary reasons:

1. Physical education is a primary means of advancing the health and wellness of children and creating positive health habits that children carry forward throughout their lives. As such, K-12 physical education teacher education

(PETE) is an important component of public health and integral to the missions of the program and College. This merits its continued offering, despite the imminent retirement of the one tenured faculty member with a full-time allocation to PETE.

2. The MAPE degree highlights the unique training our students would receive in adapted physical education. Currently, we are the only Oregon-approved teacher education program with an endorsement in adapted physical education, while there are 12 other institutions in Oregon that offer physical education teacher education programs (Oregon University System, *How to become an Oregon teacher: An advising guide to teacher preparation programs in the state of Oregon*, 2011). The MAPE would continue the EXSS program's long history of training adapted physical education specialists at the master's level, with associated funding from the U.S. Department of Education. The degree would directly replace the current M.S. in EXSS with a concentration in PETE. Given this fact, together with the proposed changes at the undergraduate level, it was concluded that the MAPE degree could be offered within the resources that will exist after the faculty retirement mentioned earlier. We do not anticipate a need for additional faculty or increased resource allocation.
3. The Bureau of Labor Statistics projects that the employment of adapted physical education specialists and others falling under the category of special education teachers will increase by 16.8 percent over the 2010-2020 decade. This growth, which is faster than average for all occupations, will create 213,200 positions in the industry. There is thus a need for professionals with an MAPE.
4. Master's students in adapted physical education typically are or become practitioners in the field (physical educators) and do not return to continue post-secondary education; so, a practical degree meets the students' needs. Moreover, with the current Master of Science degree concentrated in PETE, students receive waivers for many requirements, attesting to the difficulty of aligning practitioner-oriented training within an academic degree. A MAPE would eliminate the issue of waivers while maintaining the desirable model of a 1-year degree program.

Action Item 2.2.1-MAPE: Oversee the process of developing and submitting a Category I proposal. [Wegis; Sep 2013-Jun 2014]

Action Item 2.2.2-MAPE: Include MAPE as a degree option in our promotional materials and develop a procedure for reviewing, as well as managing, applications that will be in effect for admitting students for Summer term of 2016. As was noted earlier, the M.S. degree in EXSS with an area of concentration in PETE will continue to admit students until the MAPE is established. [Wegis; Apr-Jun, 2015]

Objective 2.3. Create an online graduate Certificate in Adapted Physical Education (CAPE) targeting licensed teachers who have a master's degree in hand, but are seeking to become a Certified Adapted Physical Educator and sit for the Adapted Physical Education National Standards exam.

Rationale: Data from the US Department of Labor/Employment and Training Administration projects that Adapted Physical Education will be a national growth area (10-19%) between 2010-2020. By creating an online graduate certificate, OSU will be building upon the national reputation of the Movement Studies in Disability (MSD) program and expanding the reach of the program to educators within Oregon

and beyond. Currently, no program in the US offers an online option for adapted physical education courses.

Action Item 2.3.1: Oversee the process of developing and submitting a Category I proposal. [S. Driver; Sep 2013-Jun 2014]

Action Item 2.3.2: Include CAPE as an option in our promotional materials and develop a procedure for reviewing, as well as managing, applications that will be in effect for admitting students for Fall term of 2016. [S. Driver; Apr-Jun, 2015]

Objective 2.4. Restructure the areas of concentration aligned with the EXSS doctoral degree. The five current areas of concentration (exercise physiology, movement studies in disability, neuromechanics, physical activity and public health, and sport and exercise psychology) would be reduced to two areas of concentration that would include (1) a focus on human movement sciences, with faculty who have interests in areas such as biomechanics, motor control, and musculoskeletal physiology, and (2) a focus on physical activity behavior, with faculty who have interests in areas such as movement studies and disability, physical activity and public health, sport and exercise psychology, and applied physiology.

Rationale: As part of our recent 10-year review of the EXSS graduate program, conducted by the OSU Graduate School, the external review panel suggested that we consider using broader themes to consolidate the current specializations. The logic was that restructuring to fewer areas of concentration would offer a greater critical mass of faculty in a given area, promote collaboration in research endeavors, and facilitate creative, as well as relevant, course offerings within an area of concentration. We still envision incoming applicants selecting their preference for working in certain laboratories and/or with particular faculty within an area of concentration that would determine the appropriate faculty to review specific applications.

Action Item 2.4.1: Have EXSS graduate faculty agree on the name of the two new areas of concentration. [EXSS Graduate Coordinator; Jan-Mar, 2013]

Action Item 2.4.2: Oversee the transition to two areas of concentration in promotional materials and application forms in preparation for the students applying to our program in fall of 2013. [EXSS Graduate Coordinator; Jan-Mar, 2013]

Objective 2.5. Revamp course offerings to appeal to the various student interests within one of the two newly created areas of concentration and, where applicable, be inclusive of public health issues.

Rationale: Alignment of course offerings within concentrations will increase student numbers in graduate courses, provide additional and relevant program-specific courses for graduate students, and potentially reduce graduate faculty teaching loads by merging courses – or sharing teaching responsibilities for courses that may be relevant within concentrations. As an example, to build on the national reputation of the MSD program and merge more effectively with other degree programs within the College, Disability and Public Health-specific courses would be created. A class that has recently been created is EXSS 550 Health Promotion for People with Disabilities, which is relevant for students who specialize in Movement Studies in Disability, Sport and Exercise Psychology, and Health Promotion and Health Behavior (as well as the proposed MPH in PA degree). Additional classes can be created to overlap with other areas in the College. Healthy People 2020 has an

objective (DH3) to “Increase the proportion of U.S. master of public health programs that offer graduate-level courses in disability and health,” so the initiative is timely and relevant. In addition, addressing public health issues within EXSS courses would better inform and prepare our students, and make our graduate course offerings more relevant/appealing to students majoring in public health, as well as students majoring in EXSS who are completing a MPH in PA degree.

Action Item 2.5.1: Coordinate faculty within each area of concentration to work toward viable course revisions. [EXSS Graduate Coordinator; Sep 2013-Jun 2014]

Objective 2.6. Revise the program of study requirements for doctoral students to include learning experiences that address grant writing, instructional strategies for college and university teaching, and professional development.

Rationale: This objective is designed to ensure learning experiences that facilitate success while a graduate student, enhance employability in a highly competitive job market, and offer early career preparedness. Grant writing is an important skill for students to obtain as they search for funding to support their research, continuing education, or professional development. Students who have experience with grant writing may also be of benefit to faculty who are actively writing grants. The additional training in pedagogy would elevate the quality of instruction provided by our Graduate Teaching Assistants and also equip doctoral students for positions that entail teaching. A 2011 review of the EXSS graduate program revealed that, in the last five years, the majority (88%) of our doctoral students were placed in positions that required teaching expertise, such as tenure-track assistant professor or instructor positions. In the same review, however, a survey of current and former students suggested that attention to professional development, including learning to be a good teacher, should be included in the training of students in order to strengthen the existing program. Additional topics of professional development might include involvement and leadership in professional organizations, searching for a job and preparing a personal CV, as well as understanding and practicing the manuscript review process.

Action Item 2.6.1: Establish a subcommittee to oversee the development and implementation of the new program of study requirements. [EXSS Graduate Coordinator; Jan-Jun, 2013]

Objective 2.7. Restructure the current preliminary examination requirement for doctoral students. The requirement would change from an examination solely of knowledge based on coursework to an assessment of knowledge based on coursework along with competencies related to completing an empirical, student-led research project and accompanying manuscript of publishable quality that is to be submitted to a scholarly journal or, the completion of a pilot project and development of a student-led grant proposal to be submitted for funding. This conversion will necessitate doctoral students having completed a research project prior to proposing their dissertation work.

Rationale: This change ensures that doctoral students gain additional experience in the research process so they are better prepared to complete their dissertation work. It also provides the opportunity to publish an article or submit a grant, which increases the productivity of students and faculty in our program while also helping students to be more marketable.

Action Item 2.7.1: Establish a subcommittee to oversee the development and implementation of the new preliminary examination requirements. [EXSS Graduate Coordinator; Jan-Jun, 2013]

Objective 2.8. Recruit quality, as well as diverse, graduate students.

Rationale: The better the students, the more likely they are to be successful in our program, as well as in obtaining employment. Quality students also facilitate faculty productivity. In addition, targeting diverse populations (e.g., low income, first generation, international, non-resident domestic, and other non-representative individuals) will broaden the applicant pool and enrich the educational experience for all associated with the program. This objective encompasses a shift in our current practice from a passive to a more active approach to recruiting. It also responds to the recommendation to develop recruitment strategies targeting diverse populations that was outlined in the EXSS Graduate Program Review conducted by the OSU Graduate School in 2011.

Action Item 2.8.1: Identify effective recruitment strategies to be implemented as part of the admission process for Fall term 2014. [EXSS Graduate Coordinator; Jan-Jun, 2013]

Goal 3. Promote Excellence in Faculty Research and Scholarship

To achieve this goal, the EXSS program will refocus its efforts towards collaborative research in the area of physical activity and health. We will strengthen our potential for success in obtaining extramural funding by aligning faculty interests, recruiting strategic hires congruent with our shared focus, and revising faculty workloads. Our interdisciplinary team of scientists is dedicated to expanding the body of knowledge on physical activity and health in order to identify the (1) individual and environmental factors that influence physical activity behaviors, (2) effect of physical activity on health outcomes, and (3) evidence-based approaches that facilitate the adoption and maintenance of physical activity participation, as well as promote health and wellness.

To reach our goal to “Promote Excellence in Faculty Research and Scholarship,” we propose the following three objectives. Additional focused efforts to revise the undergraduate and graduate program course offerings (listed under Goals 1 and 2) will also support this goal.

Objective 3.1. Communicate and promote a research agenda reflective of a shared focus on physical activity and health. Emphasize translational research that promotes relevant clinical and community-level applications to promote positive changes in health outcomes.

Rationale: The shared focus on physical activity and health will draw students and faculty with applied interests, nurture a greater exchange of ideas, and promote more collaborative and creative research endeavors among faculty and students. As an EXSS program embraced within a College of Public Health and Human Sciences, we are uniquely qualified to target our strengths related to understanding the physiological and behavioral underpinnings of the relationships between physical activity and health. Our land grant designation supports Extension faculty who stand ready to assist in translating our work into meaningful programs and clinical applications. Through these endeavors, students would be trained as translational scientists and exposed to a broader (multi-disciplinary) context of knowledge. The

National Institutes of Health has recently started a number of translational human health-related research initiatives that demonstrates the importance of and credence given to such an approach. Our shared focus across the multiple sub-disciplines within EXSS on translation of both applied and basic research to practice would make us more competitive for funding under such initiatives. Furthermore, promoting a culture in which expectations of research collaborations are the norm is essential to actualize our potential for excellence. We have an opportunity to respond to numerous funding opportunities that require interdisciplinary research teams with the capacity to address the etiology, prevention, intervention, and treatment of health conditions through physical activity participation. We are also unique in that we have faculty with Extension appointments who can support translation of laboratory research to community/applied research and ultimately the translation of research to practice. Bi-weekly (or monthly) meetings to present and discuss research ideas will facilitate collaboration and shared success.

Action Item 3.1: Hold bi-weekly (or monthly), scheduled faculty work sessions to review relevant RFAs and consider how we may collectively, or in small teams, pursue available funding by leveraging our interdisciplinary strengths. Faculty will share specific aims pages, RFAs/PAs, etc. to promote discussion, feedback, engagement, and collaboration. [Gunter; initiate spring, 2013]

Objective 3.2. Hire faculty in tenure-track positions whose research foci align with the EXSS program's shared focus toward physical activity and health and with strong potential for securing extramural funding. The most immediate needs of the program are in physical activity and public health (PAPH) and exercise physiology.

Rationale: As was noted earlier, the program in EXSS has many strengths. Among these, the faculty consists of fine and caring instructors and productive scholars; the undergraduate program in EXSS is one of the largest on campus; and the doctoral program in EXSS was ranked as the 11th best such program in the country. However, in order to achieve its potential, additional faculty are needed, both to assist in the delivery of the curriculum and to facilitate distinction in research and scholarship.

It is essential that hires be strategic and that any new hires support existing concentrations with demonstrated need and potential for growth. PAPH has been identified as such an area. PAPH focuses on the relationship between physical activity and health status and the promotion of physical activity in different community settings and population groups. This field is growing at a rapid pace, as evidenced by emerging professional organizations, journals, and interest groups. In 2012, the American Public Health Association (APHA) officially recognized Physical Activity as a primary special interest group of APHA. As the science and practice advance, more and more students are developing an interest in this area and job opportunities will increase as health care reform takes place. The faculty in EXSS receive several inquiries each term from students interested in pursuing graduate work in PAPH. At present, we have no full-time, tenured or tenure-track faculty with 1.0 FTE, nor any instructors, dedicated to the PAPH concentration. As such, this is identified as a critical hiring need. We propose two hires in the area of PAPH with expertise in identified areas: i.e. environmental correlates of physical activity and chronic disease and disability, physical activity behavior, physical activity assessment, and other related areas of specialization. These hires would collaborate

with current movement studies in disability, PAPH, and sport and exercise psychology faculty and would teach courses in the PAPH graduate program, the MPH in PA degree, and the EXSS undergraduate program.

A second area of critical programmatic need is in exercise physiology. Exercise physiology is the study of the effects of exercise on the various systems of the body, particularly the cardiovascular, respiratory, musculoskeletal, and endocrine systems. It is a central component of the discipline of EXSS; it is required knowledge for many or most careers related to EXSS; and it continues to be a strong area of interest to potential graduate students at OSU. However, at present, we have no tenured or tenure-track faculty with 1.0 FTE dedicated to this area. Although we have instructors who do an excellent job helping to meet the undergraduate teaching demands, we offer very few graduate courses in exercise physiology, leaving major gaps in the education of many graduate students. The research in and related to this area within the program has also been constrained by the limited faculty resources. That being said, we have existing faculty within the School with strengths in exercise and skeletal physiology, as well as innovative and advanced research instruments (e.g., DXA, Micro-CT, vibration platforms) that can be leveraged to support a full-time hire who can re-establish this area. An applied exercise physiologist with a particular interest in the physiologic basis of the exercise-health relationship, epidemiology, and intervention research would be able to collaborate with many existing faculty members in movement studies in disability, neuromechanics, PAPH, and sport and exercise psychology. We have identified such a hire as a critical need for our unit. If four hires were permitted, we would advocate for a second hire in this area to strengthen the collaborative opportunities for exercise physiology faculty and support graduate program growth.

Our vision is that the program in EXSS will move forward with a unifying focus on physical activity (PA) and health and that this will become our signature area of research distinction, particularly in the areas of disability and health and community-based PA interventions. At present we have faculty conducting research in such areas as PA promotion programs for people with disabilities, PA for falls and fracture prevention in older adults, psychosocial and sociocultural determinants of PA behaviors, motor skill development and its impact on health behaviors in children with disabilities, and anterior cruciate ligament injury prevention. Yet this research largely is focused at the level of individual and small group behaviors. The addition of faculty in PAPH will strengthen the program by providing a bridge between the individual/group and the larger community. The addition of faculty in exercise physiology will further strengthen the program by providing key expertise regarding the mechanistic bases underlying the effects of PA behaviors and the translation of that knowledge into PA interventions. With the addition of these critical missing components, the program in EXSS will be poised for distinction in our signature area of PA and health.

Action Item 3.2.1: Develop and approve position descriptions for the two PAPH and one exercise physiology tenure-track hires. [Wilcox; Apr-Jun, 2013]

Action Item 3.2.2: Appoint two search committees; one for PAPH and one for exercise physiology. A single search committee can review applicants for multiple positions in a particular area. [Wilcox; Apr 2013-Jun 2014]

Objective 3.3. Reduce teaching loads of faculty actively engaged in scholarship and actively pursuing extramural funding.

Rationale: The current PPHS Guidelines for Faculty Assignments document states that “External funding can change teaching and research assignments when the funding provides sufficient faculty salary and benefits to justify the adjustment and when the faculty member and co-directors agree.” However this does not accommodate the time needed to develop pilot work and/or grant proposals for competitive RFAs. Thus, we propose that faculty with fundable foci and ideas be afforded release time to develop competitive grant submissions.

The Research Office currently offers small awards from \$3500-\$6000 to cover the costs of a replacement instructor to cover one course, or similar responsibilities, normally presented by applicants. However, there are a limited number of these University-wide competitive awards available each year. Thus, we propose to develop a policy within the EXSS program to support the release time of faculty to develop grant proposals. This would demonstrate our shared value for research and acknowledge the reality of the time required to develop fundable proposals.

Action Item 3.3.1: Appoint a committee to develop a release time policy for EXSS program faculty who are developing and submitting grant proposals. The policy would be included in the faculty workload document. [Wilcox; Jan-Jun, 2013]

Concluding Comments and Recommendations

We are excited at the prospect of the program in EXSS moving forward in order to fully realize the individual and collective potential of the faculty. Our faculty makes significant contributions to the College of Public Health and Human Sciences, especially given the resources available and the competing demands on our time. We also, however, embrace the challenge of continuous improvement and contend that the goals and objectives outlined in this strategic plan will further our contributions and take us to a higher level of distinction.

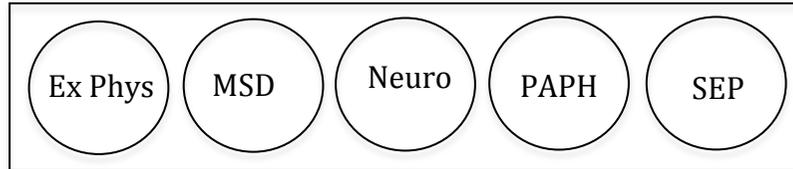
We forward some final recommendations that stem from recognizing the considerable transformation our program will experience in the near future if the proposed strategic plan is adopted. First, it might be timely to engage the faculty in a conversation about changing the name of the program from Exercise and Sport Science to a name that better reflects our mission, vision, and alignment with peer programs. Second, as several objectives implicate increased revenue streams, we suggest administrators and faculty discuss programmatic needs and the potential for money being returned to the program to support funding priorities. Third, we recommend that a periodic review be implemented to determine the success of the various ideas adopted in this strategic plan and the need for additional changes that would benefit the program.

We appreciate the opportunity to offer suggestions regarding the direction of our program in EXSS. The process has stimulated some difficult yet necessary conversations, and we are well aware that the real work of implementing actual change lies ahead. While we cannot emphatically state that the proposed changes are necessarily the correct changes, we are in agreement that the status quo will no longer suffice and that exploring well-reasoned alternatives is preferable to no change at all.

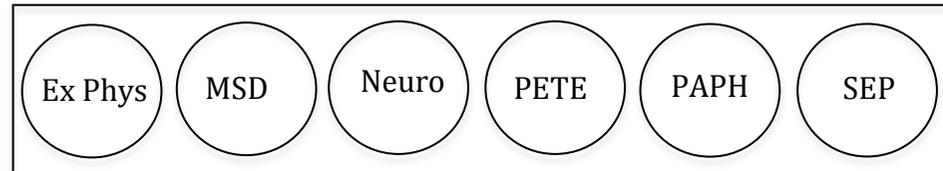
Figure 1.

Current EXSS Structure

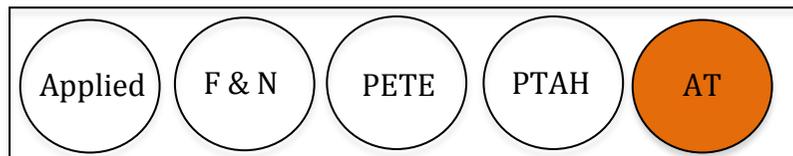
Areas of concentration for the doctoral degree in EXSS.



Areas of concentration for the Master of Science degree in EXSS.

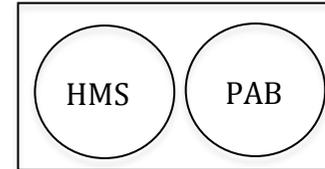


Options for the undergraduate degrees in EXSS and AT.

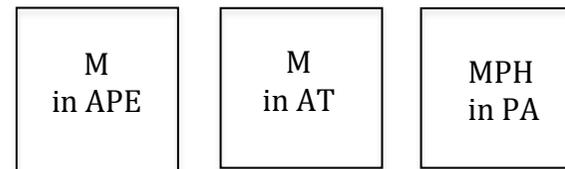


Proposed EXSS Structure

Areas of concentration for the doctoral degree in EXSS.



Professional master's degrees in EXSS.



Options for the undergraduate degree in EXSS.

