February 24, 2016

TO: Members of the Board of Trustees

FROM: Mun Y. Choi, Provost

RE: Graduate Certificate in Exercise Prescription

RECOMMENDATION:

That the Board of Trustees approve the Graduate Certificate in Exercise Prescription.

BACKGROUND:

The Bureau of Labor Statistics projects that the need for exercise professionals will continue to experience above average growth in the next decade. These professionals conduct pre-participation health screening, maximal and submaximal graded exercise tests, perform strength, flexibility and body composition tests, and lead exercise training programs for patients and clients challenged with cardiovascular, pulmonary, and metabolic diseases and disorders, as well as with apparently healthy populations that also may have special considerations.

Market research suggests strong demand exists for a graduate certificate in Exercise Prescription to better prepare practicing professionals with the requisite knowledge necessary to successfully earn the American College of Sports Medicine (ACSM) Certified Exercise Physiologist (ACSM EP-C), and Certified Clinical Exercise Physiologist (ACSM CEP) designations, among other professional organizations such as the Strength and Conditioning Association. The graduate certificate being proposed is designed around what is widely known as the “gold standard” in the field of sports medicine, exercise science, and health and fitness – ACSM’s Guidelines for Exercise Testing and Prescription (GETP) the 9th edition. Dr. Linda Pescatello is the Senior Editor of the GETP 9th edition handbook.

The level of mastery required to prepare for the various certifications listed above is consistent with 9 academic credit hours. There are similar programs nationally with 9 credit hours, and discussions with department faculty during department meetings reaffirmed that broadening the scope beyond the 9 credit hours being proposed would only be warranted if the scope of the certificate was intentionally designed to include related areas (e.g. nutritional and rehab science), not specifically germane to professional certifications closely tied to the content covered in the proposed certificate. Further, market research suggests that an expanded certificate would not be attractive to professionals in this field.

The Graduate Certificate in Exercise Prescription is comprised of three on-line and fee-based courses.
Request for New UConn Certificate Program

Program information
Name of certificate program: Exercise Prescription
Name of sponsoring department: Kinesiology
Name of Department Head: Craig Denegar
Name of sponsoring College: College of Agriculture, Health and Natural Resources
Director of certificate program: Linda S. Pescatello, PhD, FACSM, FAHA (Board of Trustees Distinguished Professor of Kinesiology)
Type of Certificate: Graduate, Online, Fee-Based
CIP Code: 31.050
Anticipated start date: Fall, 2016
Anticipated date of first graduation: Fall, 2017
Projected annual enrollments: 45

Program outline and description of program learning outcomes
The Bureau of Labor Statistics projects that the need for exercise professionals will continue to experience above average growth in the next decade. As an example, employment of exercise physiologists is projected to grow 10% per year through 2022, but with the broad health care sector including hospitals increasingly emphasizing exercise and preventive care, and promotion of healthier lifestyles as part of prevention, treatment, and management of chronic diseases and health conditions, the projected growth rate appears to be a conservative estimate. Among other things, these professionals conduct pre-participation health screening, maximal and submaximal graded exercise tests, perform strength, flexibility and body composition tests, and lead exercise training programs for patients and clients challenged with cardiovascular, pulmonary, and metabolic diseases and disorders, as well as with apparently healthy populations that also may have special considerations.

Market research suggests strong demand exists for a graduate certificate in Exercise Prescription to better prepare practicing professionals with the requisite knowledge necessary to successfully earn the American College of Sports Medicine (ACSM) Certified Exercise Physiologist (ACSM EP-C), and Certified Clinical Exercise Physiologist (ACSM CEP) designations, among other professional organizations such as the Strength and Conditioning Association. The graduate certificate being proposed is designed around what is widely known as the “gold standard” in the field of sports medicine, exercise science, and health and fitness – ACSM’s Guidelines for Exercise Testing and Prescription (GETP) the 9th edition. Dr. Linda Pescatello is the Senior Editor of the GETP 9th edition handbook that within the first 3 months of publication became ACSM’s best-selling edition

The level of mastery required to prepare for the various certifications listed above is consistent with 9 academic credit hours. There are similar programs nationally with 9 credit hours (e.g. Rochester Institute of Technology) and discussions with department faculty during department meetings reaffirmed that broadening the scope beyond the 9 credit hours being proposed would only be warranted if the scope of the certificate was intentionally designed to include related areas (e.g. nutritional and rehab science) not specifically germane to professional certifications closely tied to the content covered in the proposed certificate. Further, market research suggests that an expanded certificate would not be attractive to professionals in this field.

Describe the educational prerequisites (and professional prerequisites, if appropriate) required of students for admission to this program.

A bachelor’s degree with a major in exercise science, kinesiology, exercise prescription, public health, nutritional sciences, health promotion, and other related allied health professions using exercise as therapeutic lifestyle therapy to prevent, treat, and manage a variety of chronic diseases and health conditions as well as normal populations with special considerations.

Describe similar programs nationally, regionally, or in CT.

There are no comparable certificate programs regionally and only a few national programs, but none are as focused or exist at a school with as high a reputation for excellence in this field as UConn. In addition, we were unable to locate any similar high quality programs online. Certificate programs do exist at: Rochester Institute of Technology (NY) Graduate Certificate in Exercise Science; Montclair State University (NJ) Graduate Certificate in Nutrition and Exercise Science; Oakland University (MI) Graduate Certificate in Clinical Exercise Science.

Describe the program learning outcomes (upon successful completion of the program, students will be able to…)

1. Examine and apply the American College of Sports Medicine (ACSM) principles of exercise testing and prescription to healthy-adult populations, and to a variety of special populations with chronic diseases and health conditions as well as normal populations with special considerations.
2. Learn the basic disease pathophysiology of various chronic diseases and health conditions, and apply the principles of exercise prescription in the prevention, treatment, and management of a variety of chronic diseases and health conditions.
3. Learn the physiological alterations and the resultant exercise and health care provider considerations of the healthy populations with special considerations and populations with chronic diseases and health conditions considering the unique circumstances under which they exercise.
4. Apply the principles of exercise prescription to a variety of case study conditions including but not limited to populations with arthritis, cancer, heart disease, low back pain, obesity, and stroke as well as children, older adults, and women who are pregnant.
5. Perform and present a systematic scientific review on exercise testing and prescription considerations for all potentially relevant populations that could be encountered in the work environment, e.g., corporate fitness, medical health-fitness centers, and personal training in the home.
Curriculum information
Total number of credits required: 9 credits

Required courses
KINS 5507 Fundamentals of Exercise Prescription (3-credits)
KINS 5508 Exercise Prescription for Chronic Diseases and Health Conditions (3-credits)
KINS 5509 Special Topics in Exercise Prescription (3-credits)

Detailed course information
Dr. Linda Pescatello (Professor of Kinesiology) will be the course designer and instructor of record for all three courses in the certificate. Additional faculty expertise will be relied upon for development and teaching of some course modules. For example, Professor Thomas Buckley in the UConn School of Pharmacy for specific modular content in KINS5507 and KINS5508 on common medications, Professors Lawrence Armstrong and Douglas Casa for discussions in KINS5509 involving temperature regulation and exercise (leading international experts in this area), Dr. Keith Bellizzi an Associate Professor in Human Development and Family Studies for discussions in KINS5508 on cancer, Dr. Beth Taylor an Associate Professor in Kinesiology for discussions in KINS 5508 and 5509 on the Exercise Paradox (i.e., more is necessarily better) and older adults, and clinical and research experts outside UConn such as Dr. Paul Thompson, Director of Cardiology, Hartford Hospital, collaborating on the module in KINS5509 on Sports and Exercise Cardiology. Frequent expert guest speakers who are leading experts in their field will be utilized throughout the program when and where appropriate.

Courses will be offered in a frequency that would allow as student to earn the certificate in one calendar year (e.g. KINS5507 fall, KINS5508 spring, KINS5509 summer or fall).

Program evaluation
All courses will undergo an evaluation using the nationally recognized Quality Matters Higher Education Rubric (5th edition, 2014). Once the program is operational, the program will be evaluated formatively using a five part framework and in summative fashion using Student Evaluation of Teaching assessments. In addition, an overall program satisfaction and learning assessment will be developed and administered to all students who complete the certificate program. All graduates of the program will be asked to complete an extensive survey following completion of the certificate program to identify ways in which the certificate was instrumental in advancing their professional career and to learn about additional areas for ongoing program improvement. Lastly, the high visibility of the program, and the well timed implementation of this program to coincide with the launch of the new professional standards provides additional opportunities to receive feedback on program emphasis (e.g. 1,000 people enrolled in this webinar to discuss new standards https://www.youtube.com/watch?v=E5tyKdxFXQA)

Resources available to support the program

Financial resources
This is a self-funded program. Program fees will be sufficient to cover instructional and program costs. eCampus will provide staff support and stipends for faculty course development and initial program marketing support, as well as ongoing inquiry
management and enrollment management support. The program will follow standard BOT approved fees for graduate online certificate programs (currently $750/credit hour).

Facilities/Equipment/Library/Special Resources
Students in the program will have access to UConn library resources and other resources available to all other matriculated students (HuskyCT, technical support and 24/7 assistance). As an online certificate program, no other facilities or resources are required, other than those provided by UConn ecampus.