

RECEIVED

NOV 30 2009

M.MIDDLETON

## LETTER OF INTENT

**Institution:** Columbus State University

**Institutional Contact:** Dr. Inessa Levi, Ph.D.  
Provost and Vice President for Academic Affairs

**Date:** November 12, 2009

**School/Division:** College of Education and Health Professions

**Department:** Health, Physical Education and Exercise Science

**Name of Proposed Program:** Master of Science in Exercise Science

**Degree:** Master of Science

**Major:** Exercise Science

**Degree Inscription:** Master of Science in Exercise Science

**CIP Code:** 31.050501

**Anticipated Starting Date:** Fall 2010

**Program Classification:** Graduate

---

### 1. Program Description and Objectives:

Columbus State University, the College of Education and Health Professions (COEHP), and the Department of Health, Physical Education and Exercise Science (HPEX) propose a new academic program leading to the award of a Master of Science (M.S.) degree in Exercise Science. The 36 semester hour program includes an 18 semester hour core with the balance of courses being selected by students to meet their professional goals and needs. The elective component will have courses and field

experiences for those who are interested in clinical exercise physiology (hospital-based wellness and cardiac rehabilitation), corporate fitness and wellness, and club fitness and sports applications. In addition, there will be a research and thesis option for students who have the ability and desire to pursue independent study in the field and to prepare for advance graduate study.

**a. Objectives of the program**

The formal and specific learning objectives for students in this program are based on the knowledge, skills, and abilities (KSAs) identified by the American College of Sports Medicine. The specific KSAs are the foundation of a multi-tiered ACSM certification program that progresses from ACSM Certified Personal Trainer through ACSM Health Fitness Specialist, ACSM Certified Clinical Exercise Specialist, and ACSM Registered Clinical Exercise Physiologist. A detailed presentation of the KSAs can be found in *ACSMs Guidelines for Exercise Testing and Prescription, 8<sup>th</sup> Edition*, Lippincott, Williams & Wilkins, 2009. (ISBN 987-0-7817-6903-7).

Similarly, students in this program should:

1. Develop advanced knowledge, skills, and abilities necessary to function in a wide range of health/fitness professions.
2. Contribute to the development of a regional pool of professionals who can make contributions to CSU and regional employers.
3. Develop the capacity for critical thinking in regard to evaluation of health/fitness information, equipment, and services.

4. Exhibit the capacity to research, collect, and summarize information from a variety of sources and to present that information at a level that is appropriate for the population served.

**b. Needs the program will meet**

The need for this program is supported from a variety of perspectives given both the institutional and University System perspective. Most important, a master's degree in Exercise Science is the "industry standard" for professionals operating in a range of occupations, particularly for those individuals who wish to make a lifetime commitment to the industry. Specifically, hospital-based cardiac rehabilitation, wellness, administration; private corporate wellness and fitness; university-based sport applications (including coaching), state/federal employers (CDC), and others typically advertise for individuals at the Master's level. Conversely, baccalaureate trained individuals are typically not considered for top-level employment in these settings. The absence of a M.S. program means in effect that CSU undergraduates must leave the region for advanced training, settle for low-level employment, or leave the industry. Fortunately, our undergraduate student record for advanced placement has been good in graduate medical schools and universities. However, this program would create more options and would be particularly useful for those who are unable to leave the region due to family, work, or military obligations.

A need that is somewhat peculiar to CSU is that a professional work pool does not exist for employing qualified part-time instructors for the undergraduate program in Exercise Science or the Wellness and physical activity courses required of students university-wide. Other employers in the region also find it difficult to find qualified

individuals which dramatically limits their ability to provide meaningful health/fitness programming in the region.

**c. Brief explanation of how the program is to be delivered**

The program is in some ways traditional with substantial curricular flexibility to accommodate a range of professional goals. There will be no new delivery formats. Formats will include lecture, lab, on-line support of lecture/lab where appropriate, practicum, internship, and thesis research.

**d. Prioritization within the institution's strategic plan**

The proposed program is consistent with the vision, mission, values, and strategic goals and objectives of the institution (Columbus State University, 2009-2010 Catalog, p. 6-8; <http://academics.colstate.edu/catalogs/2009-2010>), furthers the goals of the Board of Regents, and will function in the best interest of the citizens of the State of Georgia.

The M.S. in Exercise Science will help the university to “achieve excellence in undergraduate and graduate education to meet community needs” (Goal One). One of the stated objectives is to “strategically develop and grow graduate programs.” Similarly, the program will contribute the university’s second goal, to “Strategically develop and grow graduate programs.”

Specifically, the program will create educational opportunities that are currently unavailable in the region. The significance of this resides in part on the fact that a M.S. degree is considered as the professional standard for students who wish to play a major role in hospital-based Wellness/Rehabilitation or who wish to seek full- or part-time employment in higher education settings (teach/coach/recreation/Wellness). Further, the

program will expand research and scholarship opportunities for faculty and students alike.

It is a priority of Exercise Science, in fact a necessity for success, to “develop and retain partnerships with governmental and business agencies, large and small” (Goal Three). Exercise Science at the baccalaureate level currently has on-going relationships with many hospitals, businesses, and agencies within the region. In addition, transient relationships are forged nation-wide with a wide variety of health, fitness or medical facilities on a regular basis. The added expertise provided by a graduate program and graduate students can only act to reinforce existing relationships and increase the demand for new ones.

The presence of a graduate program and the research opportunities that it will provide should “increase external funding and recognition” (Goal Four). Faculty will find research less problematic when graduate students and assistants with a research interest are available. Dispersion of graduates into leadership positions nationally, and perhaps internationally, should also create a positive external exposure.

## **2. Description of the program’s fit with the institutional mission and nationally accepted trends in the discipline.**

As stated in the 2009-2010 Catalog,  
([http://www.colstate.edu/aboutcsu/strategic\\_plan.asp](http://www.colstate.edu/aboutcsu/strategic_plan.asp)), it is the mission of Columbus State University:

- To achieve academic excellence through teaching, research, creative inquiry and student engagement.

- To achieve excellence in the student experience and prepare individuals for a life of success, leadership, and responsibility through community awareness, engagement, and service to others.
- To achieve recognition as a leader in community development, regional economic development, and public-private partnerships.

It is asserted that the M.S., Exercise Science, is thoroughly consistent with the mission of Columbus State University, primarily in regard to academic excellence through teaching, research, creative inquiry and student engagement. In addition, the program will assist regional growth through the development of a cadre of skilled professionals that can contribute to both private and public business. Finally, the focus on the ACSM's KSAs and certification programs is absolutely consistent with nationally accepted trends in Exercise Science.

**3. Description of how the program demonstrates demand and a justification of need in the discipline and geographic area and is not unnecessary program duplication.**

CSU is in the unique position to deliver this program due to its geographical location, the experience and academic strengths of its faculty, and the presence of a large, robust, and diverse undergraduate program in Exercise Science. Data at [http://faculty.colstate.edu/EnrDegData\\_0708.pdf](http://faculty.colstate.edu/EnrDegData_0708.pdf) indicates that the program has a three-year enrollment average of 150 and an average of 25 graduates a year. There is no other university in Georgia within 100 miles of Columbus that can deliver this program or meet the needs of individuals within the service area.

There are two significant markers that predict the success of the proposed program. First, the robust nature of the B.S. program in Exercise Science is supportive. Second, there currently exists a demand created by a partnership with a local entity, the Hughston

Clinic, renowned for the “research, education and training, and quality treatment of musculoskeletal injury and disease” it provides.

Table 1 documents the number of graduates from the Exercise Science program for the included years. Graduate records/transcripts were analyzed and faculty input collected to determine which of these graduates were considered “potential” candidates for a M.S. program in Exercise Science. Potential in this setting means that students have a strong academic base but were constrained by family, military, or work and did not apply to distant medical or graduate programs. The number labeled as “advanced study” represents program graduates that pursued an advanced degree at another institution. Both “advanced study” and “potential” represents a possible pool for a M.S. Exercise Science program.

Table 1. CSU Exercise Science (BS) Graduation Summary.

REPORTING YEAR	GRADUATES	ADVANCED STUDY	POTENTIAL
Fall '06-Summer '07	28	14	5
Fall '07-Summer '08	27	11	7
Fall '08-Summer '09	25	*	*

\* Data not yet available.

In addition, there is an opportunity to assist soldiers from Fort Benning who often need a master’s degree to advance their careers. Finally, incoming telephone calls, emails, and other informal queries indicate that there are others unaccounted for who would come to CSU if the program was in place.

Table 2 summarizes and quantifies the estimates from the three major expected student pools. It is believed that the total is realistic and perhaps conservative.

Table 2. Potential Sources of Students for Graduate Program in Exercise Science

---

CSU Undergraduate Pool	8-10
Hughston Orthopedic Hospital	5 - 8
Transfer, military, etc.	<u>2 - 5</u>
Estimated Totals	15 -33

---

Currently there are five University System of Georgia institutions that offer a graduate degree in Exercise Science (or related degree). The five institutions are:

Georgia State University: M.S. with concentration (options) in Fitness and Health Promotion, Exercise Physiology, and Biomechanics.

Georgia Southern University: M.S. in Kinesiology (Teacher Education) with emphases (options) in Athletic Training and Exercise Science.

Kennesaw State University: M.S. with major in Applied Exercise & Health Science

Georgia College & State University: M.Ed. in Kinesiology with a Human Performance emphasis.

University of Georgia: M.S., Clinical Exercise Physiology (Adult Fitness or Cardiac Rehabilitation). M.S., Exercise Physiology.

None of the programs is closer than 100 miles from Columbus.

**4. Brief description of institutional resources that will be used specifically for the program (e.g., personnel, library, equipment, laboratories, supplies & expenses, capital expenditures at program start-up and when the program undergoes its first comprehensive program review.**

Personnel

The department currently has two full-time faculty with terminal degrees in Exercise Science and a Wellness Coordinator teaching part-time in the program with a terminal degree in Exercise Science. As indicated in the more detailed description of resource

needs (following) two additional faculty positions will be necessary at some point in time.

### Facilities

The department is housed in the Lumpkin Center and has the laboratory space, classroom, and equipment necessary to initiate this program, although all facilities will be shared with the undergraduate programs. Currently there is a laboratory with approximately 1400 square feet of floor space. It is equipped as a “work physiology” lab with multiple ergometry modes, Moxus Modular VO<sub>2</sub> System (AEI Technologies), and Excalibur Sport Anaerobic Power System (LODEBV). There is also a Quinton Q4500 Stress Test System that includes a clinical treadmill (MedTrack T65) and modern 12-lead electrocardiograph. On site facilities will be supported by local agencies with special health/fitness emphases.

The Lumpkin Center also has two moderate capacity classrooms (~45 seats), two seminar rooms (~15 seats), and three multipurpose gym floors. Large capacity classrooms are available at multiple sites on campus. All classrooms are media/computer equipped.

### Library

Columbus State University Libraries support the University’s curricular, research, cultural and community service objectives by providing library/information resources, instruction, instructional technology support, and other services that promote and enrich intellectual and personal growth and scholarship. Specific research technologies include Galileo Interconnected Libraries (GIL) and its components. Galileo alone accesses over 100 databases indexing thousands of periodicals and journals. Over 2000 journal titles

are provided in full-text. In addition to Galileo, the library utilizes interlibrary loan (ILLiad) and a subject guide to Internet resources.

Student and faculty technical and training support is available for any student or group on request. In addition to technical support, the Instructional Technology Services support faculty initiatives for media production, special events, and faculty multimedia labs.

Budgetary Needs

The following resources are needed for the Department of Health, Physical Education and Exercise Science to deliver a master’s degree in Exercise Science and to maintain undergraduate programs at their current level. A portion of the funds may be made available by redirecting existing resources from within the college or university. The program will require, at some point, two additional full-time faculty members.

Redirected funds will also be needed to purchase new laboratory equipment and fund two graduate assistants.

Table 3. Steady State Costs

---

Faculty (1 tenure-track, 1 lecturer) .....	\$120,000
Travel.....	2,000
Graduate Assistants (2 X \$3400).....	6,800
Faculty Supplies/Copy/Library .....	1,700
Laboratory Expendables .....	1,000
Total	\$131,500

---

Table 4. Start-Up Costs\*

---

One faculty (including fringe benefits).....	\$66,500
1 Graduate assistant .....	3,400

Upgrade of laboratory equipment.....	20,000
Total start-up.....	\$89,000

---

\* It is possible that portions of the start-up cost could be transferred to the second year by shifting faculty resources from the undergraduate to the graduate program. This option would depend on the location of qualified part-time/temporary faculty to cover undergraduate needs.

It is estimated that approximately two new FTE will be needed to cover the additional load generated by the graduate course rotation. Those needs will be met in part by existing faculty so it is likely that the positions could be offered at the assistant professor level (2) or perhaps an assistant professor (1) and instructor (1).

Comprehensive Program Review

It is anticipated that the M.S. in Exercise Science, when approved, will undergo Comprehensive Program Review according to the regular review cycle.