



Wichita State University

COLLEGE OF EDUCATION

**KANSAS BOARD OF REGENTS PROGRAM REVIEW
AY 2008-2009**

Department of Human Performance Studies

**Discipline:
Athletic Training (CIP Code: -----)**

B.A. Athletic Training

I. Centrality of the program to fulfilling the mission and role of WSU.

Overview

The Department of Human Performance Studies offers a BA degree in athletic training. This program provides a comprehensive program of academic coursework and field experience that educates athletic training students for entry-level position in the profession of athletic training.

The athletic training program at WSU has always had proud tradition. Since the 1970's, WSU has offered an internship program and degree option for students wanting to pursue athletic training as a career. The early program offered a BA in education degree with an option in athletic training. This degree could be acquired through either a teaching or non-teaching degree plan to accumulate the required courses. The department had one full-time certified athletic trainer on faculty who lead the instruction of courses. The education component consisted of 8 course hours and 4 laboratory hours in athletic training. Students were able to complete the National Athletic Trainers' Association (NATA) Internship Program clinical hour requirements while working in the athletic training room under the supervision of the certified athletic training staff.

The 1990's brought change in departmental structuring and the development of separate majors in Exercise Science, K-12 Teacher Education and Sport Administration. During these years, the athletic training major shifted to an emphasis area in Exercise Science. Courses in athletic training totaled 13 credit hours with 4 hours being assigned to laboratory. Even with this restructuring, the program maintained consistent enrollment. However, leadership and instruction for the athletic training program was now maintained by the athletic training staff. The conception of national program accreditation being mainstreamed throughout the country left the athletic training program and administration with some difficult decisions. Due to the January 1, 2004 deadline for internship route abandonment, the athletic training program decided to not allow new students to enter the program beginning Fall 2000.

Concurrent with the abandonment of the internship program nationwide, the NATA mandated that aspiring athletic training students need to enroll in an accredited program or a program that is pursuing accreditation if they want to become a certified athletic trainer. In spring 2003, Mr. Rich Bomgardner, LAT, ATC, CSCS, was hired as the Education Coordinator to create the Athletic Training Education Program. One of Mr. Bomgardner's first tasks was to secure an independent major in athletic training. This became a reality in spring 2005 with the Kansas Board of Regents approval of the Bachelor of Arts in Athletic Training degree. In fall 2004, the inaugural class of athletic training students began with 7 perspective students. In fall 2005, Mr. Bomgardner completed the Commission on Accreditation of Athletic Training Education (CAATE) application for program candidacy. In addition, the program secured an affiliation agreement with Via Christi Regional Medical Center to use its clinical sites for clinical education. In August 2006, the 2nd Year Report was submitted and a mock site visit was performed by an independent reviewer in November 2006. In September 2007, the Self-Study Report was submitted and in February 2008 an official accreditation site visit was hosted by WSU. In September 2008, notification was received that the program had earned accredited status from CAATE. Now that accreditation has been granted, the program must demonstrate performance of the education standards through progress reports as dictated by the Joint Review Committee on Educational Programs in Athletic Training. The program will have an on-site visit every ten years.

WSU, COE, and Athletic Training Degree Program Mission Statements

The BA in athletic training compliments the mission of WSU, the COE, and the HPS department. WSU, as well as the COE and HPS department, strive to provide comprehensive educational opportunities by blending academic theory with practical learning opportunities while also engaging in research and community partnerships.

The BA in athletic training program reflects the urban-serving mission of WSU. Specifically, “Wichita State University is committed to providing comprehensive educational opportunities in an urban setting. Wichita State University pursues its mission utilizing the human diversity of Wichita, the state’s largest metropolitan community, and its many cultural, economic, and social resources. The University faculty and professional staff are committed to the highest ideals of teaching, scholarship, and public service, as the University strives to be a comprehensive, metropolitan university of national stature”. The BA in athletic training program meets the needs of both students and athletic training practitioners located in the Wichita metropolitan area. The athletic training profession represents the facet in allied health care geared toward physically active individuals. The degree program benefits the community by providing opportunities for aspiring health care professionals to work in settings such as college/university athletic programs, high school athletic programs, professional sports, industrial/corporate facilities, sports medicine clinics, and post bachelor academic programs.

The BA in athletic training program reflects the mission of the COE by “preparing professionals to benefit society and its institutions through the understanding, the facilitation and the illumination of the learning process”. Furthermore, the proposed ATEP reflects the COE core values based upon “fundamental beliefs in the dignity and inherent worth of all people and in the central role of education in a democratic society”. The program also reflects the mission of the HPS Department which is to “prepare students in athletic training, exercise science, and physical education as well as to provide the University community with physical activity experiences”.

The BA in athletic training program reflects the missions of WSU, the COE and the HPS Department by preparing students to benefit society through the delivery of health care to physically active individuals within the Wichita metropolitan community and surrounding area. WSU, the COE, the HPS Department, and the athletic training BA program all place a priority on scholarship, quality instruction, and community service. As will be apparent throughout this report, the athletic training faculty use scholarship in teaching, are on the cutting edge via the integration of technology into the classroom, and continually cultivate partnerships to meet community needs.

II. The quality of the program as assessed by the strengths, productivity, and qualifications of the faculty.

The faculty teaching in the undergraduate athletic training BA curriculum has graduate degrees and is well established in their profession.

HPS department faculty teaching in the BA Athletic Training program

Faculty	Academic Rank	Highest Degree, Date Earned
Ruth Bohlken	Instructor	PhD, 2008
Richard Bomgardner	Instructor	MS, 1991
Jeremy Patterson	Assistant Professor	PhD, 2004
Michael Rogers	Associate Professor	PhD, 1996
Frank Rokosz	Associate Professor	MA, 1971
Vacant Position	N/A	N/A

Scholarship

Full-time faculty possesses expertise in a variety of areas including exercise prescription, exercise physiology, risk management, injury prevention, clinical diagnosis of injuries, anatomy, first aid/CPR, motor integration, research design, statistics, aging, and cardiac rehabilitation. The table below reflects the quality of full-time HPS department faculty teaching in the BA athletic training program based on scholarly publications and presentations.

Peer reviewed journal articles, books, and book chapters and professional presentations from 2003 to the present.

Name	Primary Discipline	Publications						Presentations					
		2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Bohlken	Ex. Science	-	-	-	-	1	1	5	13	12	4	-	2
Bomgardner	Ath. Training	-	-	1	-	-	-	-	1	1	1	-	-
Patterson	Ex. Science	-	2	1	2	4	-	-	1	6	11	16	5
Rogers	Ex. Science	6	8	7	8	2	5	29	29	22	29	11	20
Rokosz	Generalist	1	-	-	-	-	-	-	-	1	-	-	1

Faculty publications have appeared in premier journals including *National Strength and Conditioning Performance Journal*, *American Journal of Lifestyle Medicine*, *Journal of Physical Activity and Aging*, *Medicine and Science in Sports and Exercise*, *Journal of Orthopedic and Sports Physical Therapy*, *Geriatrics and Aging*, *Journal of Sports Science and Medicine*, *Asian Journal of Exercise and Sport Science*, *Journal of Aging Health*, *Preventive Medicine*, *European Journal of Applied Physiology*, *Journal of Housing for the Elderly*, *Isokinetics and Exercise Science*, *Disability and Rehabilitation*, *Women and Health*, *Journal of Cardiac Failure*, *Journal of Exercise Physiology*, *Journal of Cardiopulmonary Rehabilitation*, and *Journal of Occupational Rehabilitation*.

The scholarship capabilities and established expertise is further recognized by the faculty's role on editorial review boards and serving as peer reviewers of manuscripts and external grants. Faculty have served editorial boards for a variety of journals including *Journal of Aging and Physical Activity*, *Active Aging Today*, *Journal of Aging Health*, *ACSM's Health and Fitness Journal*, and *Journal of Sports Science and Medicine*. They have also served as peer reviewers for a large number of journals including *American Journal of Physical Medicine and Rehabilitation*, *Aging Clinical and Experimental Research*, *Archives of Physical Medicine and Rehabilitation*,

Annals of Biomedical Engineering, Journal of Gerontology: Medical Sciences, Medicina Sportiva, Canadian Medical Association Journal, Journal of Social and Clinical Psychology, Research Quarterly for Exercise and Sport, American Journal of Physical Medicine and Rehabilitation, Biological Research for Nursing, Journal of Applied Physiology, Canadian Journal of Applied Physiology, Journal of Aging and Physical Activity, Journal of Physical Education, Recreation, and Dance, European Journal of Applied Physiology, and Clinical Exercise Physiology. They are also regularly invited to review grant proposals for the Centers for Disease Control and have also reviewed grants for the Arthritis Research Campaign, the Flosie West Research Foundation, the Department of Veterans Affairs, and internal grants offered by other universities.

As noted above, the faculty is well published and respected. Dr. Rogers was recognized as the COE Research Award recipient in 2001 and 2006 and was named a Research Fellow of the American College of Sports Medicine in 2003. Dr. Rogers was awarded a Visiting Academic Scholar Appointment in Japan on behalf of the Japanese Foundation for Health and Aging in 2001, and awarded a Visiting Scholar from Abroad Appointment from Nagoya City University, Japan in 2002. Dr. Patterson was recognized as the COE Technology Innovation Award recipient in 2008 for the use of new technology in multiple research projects. He was a mentor for a McNair Scholar in 2006 that was awarded McNair Researcher of the Year and Best Study 2006. He has graduate faculty status at Oklahoma State University and Research Associate status at Cypress Heart Hospital.

Faculty's scholarship includes a variety of current projects in progress. Dr. Rogers' primary research interests concern the effects of balance and strength training on muscle and bone health, fall prevention, and functional capacity in older adults. In both rural and urban community-based settings, he has conducted several studies that have developed, implemented, and evaluated exercise programs that target the physiological systems that control balance for older adults. He is currently collaborating with colleagues in Japan to determine the efficacy of various exercise programs for older adults in 12 cities/towns across Japan. He is also working with an interdisciplinary group of researchers from three other Colleges within WSU to develop a fall prevention toolkit for older adults in Harvey County, a program that will eventually be implemented throughout the state of Kansas.

Dr. Patterson is currently collaborating with the Breakthrough Club of Wichita, Genesis Health Club and Kansas School of Medicine-Wichita on the Health Education and Leadership (HEAL) project which is funded by the Robert Wood Johnson Foundation. HEAL aims to empower individuals who have serious mental illness to take charge of their well-being through physical activity and health nutrition skills. Dr. Patterson is developing the curriculum for the project and to running long-term studies assessing the effects of exercise. The program he creates will primarily be used to train area health professionals and social service workers in how to recommend appropriate exercise and overall health regimens to patients with severe mental illnesses and receiving high-potency medications. One of his major objectives in the curriculum is to establish appropriate exercise recommendations for this high-risk population, then develop an online curriculum to disseminate the content. The project will result in a certification that will extend beyond Sedgwick County and be available to national organizations to better serve their communities when dealing with this issue.

The athletic training faculty has been awarded external grants from a variety of organizations including The Robert Wood Johnson Foundation, United Methodist Health Ministry Fund, The Nakatomi Foundation (Tokyo, Japan), Suzuken Foundation, The Central Plains Area Agency on Aging, The Kansas Health Foundation, Cargill Cares, and Hygenic Corporation.

Grants proposed and awarded from 2003 to the present.

Year	2003	2004	2005	2006	2007	2008	Totals
Unfunded	\$3,204,647	\$457,500	47,300	\$3,040	\$0	\$48,250	\$3,760,737
Funded	\$55,694	\$23,000	\$17,624	\$100,00	\$0	\$693,250	\$889,568

Teaching

The athletic training faculty is recognized for their quality teaching, in addition to their superior scholarship. Each of the athletic training faculty is routinely nominated for various teaching awards including the COE Teaching Award, the Board of Trustees Excellence in Teaching, and the Academy of Effective Teaching Award. Dr. Patterson was awarded the College of Education Teacher of the Year Award in 2007 and Dr. Rogers earned the same award in 2008. Dr. Rogers is also an adjunct professor (non-compensated) at the University of Kansas School of Medicine – Wichita where he provides lectures to sports medicine physician residents.

SPTE evaluations routinely complement exercise faculty. Positive student comments regarding the quality of faculty are abundant. Comments from Mr. Bomgardner's evaluations included "I learned a lot from this class and really enjoyed it", "He is always great about working with students", and "I would recommend this class to all students". Dr. Patterson is "Extremely knowledgeable", "Very professional", "Accommodates to needs well...and works well with students" and Dr. Rogers' comments include "I felt that I learned a great deal", "I wish all my instructors were as organized", "Always comes across as a person as well as a teacher" and "He has exceptional knowledge of the material". Comments from Dr. Bohlken's evaluations include "Instructor was very helpful and knowledgeable", "She has a wonderful way of teaching", and "She enjoys teaching". Mr. Rokosz's evaluations included "Very knowledgeable and organized", "The teacher made class interesting", and "I will definitely be able to use what I learned in this course".

The faculty constantly considers how the best interests of the student can be accommodated while maintaining the integrity of a quality education. Introduction to athletic training, care and prevention of athletic injuries, upper/lower injury assessment, therapeutic modalities, kinesiology, exercise physiology, motor learning, and prescription of exercise integrate a lab within the course itself. A variety of guest lecturers from the allied health fields speak in the classes on current issues in the profession. Other innovative and experiential learning opportunities developed and used by faculty include PowerPoint, web-enhanced instruction, BlackBoard, Pod casts, scientific methods explained through activities like juggling, student poster presentations, and the development and use of a Jeopardy-like computer game that is used to review for tests. The six practicum classes and internship curriculum requirements provide students an opportunity to apply learned knowledge to practical, experiential situations.

Professional Development

The athletic training faculty is interested in, and actively pursues, professional development opportunities. All faculty have capitalized on the computer workshops and training provided by the College of Education Technology Center. Workshops attended and individual training has included the use of Blackboard, Banner, online education, and website development. Dr. Bohlken, who has been part of the faculty since 1998, earned her PhD from Oklahoma State University in 2008. She was also certified as a Clinical Densitometry Technologist by the International Society for Clinical Densitometry in 2005 and became a Master Trainer for the Kansas Department of Health and Education's Kansans Optimizing Health Program in 2007. She has been invited to attend a grant writing workshop sponsored by the National Institute on Aging in Washington DC this November.

Dr. Rogers has attended four semesters of Japanese instructional classes here at WSU to better understand and more effectively address international educational distinctions. Mr. Bomgardner and Dr. Rogers have maintained their Certified Strength and Conditioning Specialist credentials from the National Strength and Conditioning Association for nearly a decade by accumulating substantially more continuing education credits than required each year. Mr. Bomgardner does the same to maintain his NATA Athletic Training Certification. During the past three years, he has also completed 18 credit hours towards a MEd degree in exercise science. Mr. Rokosz attends annual CPR and First Aid Instructional workshops. Dr. Patterson routinely attends electrocardiogram workshops and technology-based training sessions which have helped him to earn the College of Education Innovation in Technology Award in 2008. Furthermore, the faculty attends annual conferences to share their own scholarship while also updating their own knowledge based on current professional breakthroughs.

Lecturers Teaching in the Program

Lecturers teaching in the athletic training program all possess advanced degrees and/or valuable years of experience as athletic trainers. These individuals provide unique wisdom, knowledge, and practical experience in specialty areas such as care, prevention and recognition of injuries, administration of athletic training programs, and use of rehabilitation modalities. In addition, these lecturers are valuable in providing students with educational experiences in athletic training settings. As indicated below, lecturers teaching in the athletic training program all have advanced degrees and/or bring a wealth of knowledge and personal experience to the classrooms.

Lecturers, degrees, practitioner experience, and content taught

Name	Degree	Years of Experience	Content Taught
Todd Fagan	MEd, Univ. of Texas	5	Practicum
Jay Hedger	BS, NW Missouri St.	6	Care and Prevention
Terra Higgins	MS, TN-Chattanooga	6	Administration of AT
Carolyn LeFevre	BS, ESU	12	Intro to AT

III. The quality of the program as assessed by the curriculum and impact on students.

Curriculum Description

The athletic training curriculum was designed in accordance with professional standards established by the Commission on Accreditation of Athletic Training Education. Quality faculty, placement of graduating students, strong relationships with athletic trainer practitioners, and administrative support have all enabled the athletic training program to gain recognition, respect, and credibility.

All students in the COE are required to take 42 credit hours of general education course work. The athletic training program consists of a two-year pre-professional phase, along with the general education requirements, and a two-year professional phase to include all other general education electives. The pre-professional phase emphasizes introductory skills and knowledge to prepare students for daily athletic training tasks or duties. The professional phase emphasizes advanced athletic training skills and knowledge to prepare the student in decision-making, leadership, and supervision. Core classes in the athletic training curriculum are listed on the following page.

Athletic Training Core Classes

HPS 114	Introduction to Athletic Training	3
HPS 117	First Aid and Community CPR	2
HPS 130	Taping and Bandaging in Athletic Training	1
HP 203	Medical Terminology	2
BIOL 223	Human Anatomy and Physiology	5
HPS 229	Applied Human Anatomy	3
HPS 301	Fundamentals of Physical Fitness and Exercise	3
HS 301	Clinical Pharmacology	3
HPS 328	Kinesiology	3
HPS 331	Care and Prevention of Athletic Injuries	3
HS 331Q	Diet and Nutrition	3
HPS 350	Upper Extremity Assessment	4
HPS 351	Lower Extremity Assessment	4
HPS 352	General Medical Conditions in Athletics	3
STAT 370	Elementary Statistics OR	
HPS 762	Tests and Measurement	3
HPS 440	Concepts of Exercise Prescription	3
HPS 442	Administration of Athletic Training Programs	3
HPS 450	Therapeutic Modalities	3
HPS 451	Therapeutic Exercise	3
HPS 460	Motor Learning	3
HPS 490	Exercise Physiology	3
HPS 498	Internship in Athletic Training	8
CI 105	Introduction to Computers OR	
CI 541	Desktop Publishing	3

Practicum: (6)

HPS 220	Athletic Training Practicum I	1
HPS 221	Athletic Training Practicum II	1
HPS 320	Athletic Training Practicum III	1
HPS 321	Athletic Training Practicum IV	1
HPS 420	Athletic Training Practicum V	1
HPS 421	Athletic Training Practicum VI	1

Admission Standards.

Students seeking admission into the BA in athletic training program must meet the COE's entrance requirements for admission. These entrance requirements include: 1) maintain at least a 2.500 overall grade point average, and 2) complete with a "C" or better: ENGL 100 (English Composition) or ENGL 101 (College English 1), ENGL 102 (College English 2), COMM 111 (Public Speaking), and MATH 111 (College Algebra) within their first 48 credit hours. Any student denied permission to the College may appeal by filing a written petition with the Standards Committee of the COE.

Prospective students pursuing an athletic training major must assemble a personal portfolio of pre-admission materials. The deadline for submission of personal portfolio pre-admission

materials to the ATEC's office will be March 1st. The personal portfolio admission materials for year one include 1) a completed application form, 2) letter of interest, 3) three letters of recommendation, and 4) official transcripts from all colleges/universities attended.

As prospective high school, transfer, and currently enrolled WSU students apply for admission into the program, the Athletic Training Education Coordinator initiates a review process. Candidates are granted a personal interview with the Athletic Training Major Selection Committee, composed of athletic training faculty, and the Athletic Training Advisory Committee. Candidates are selected on the basis of their portfolio admission materials and personal interview. Prior experience in athletic training is encouraged but not required as a prerequisite. Students who are selected for admission in the program have an opportunity during the first year to interact and learn from professionals in the allied health care community of Wichita. These professional interactions will include physicians, physical therapists, nurses, physician assistants, and other athletic trainers. Once admitted, the first year student must assemble supplemental materials to apply for admission into the second year in the program to complete their personal portfolio. Students completing their first year in the program must also complete their supplemental materials by March 1st to be admitted into the second year of the program. First year students are not informed from the ATEC regarding admittance to the second year of the program until spring semester grades are released.

Program Assessment

Program evaluation in the Athletic Training BA program occurs both (a) to make decisions about individual candidates' progress through the program and (b) to make decisions about the effectiveness of the program at preparing candidates to meet the standards of the program. The program developed an assessment plan in 2007 and started to collect data in 2008.

There are four internal assessments the program uses to assess the effectiveness of the proposed athletic training program. First, to comply with the *Standards and Guidelines for the Athletic Trainer* for accreditation, programs must demonstrate that students learn material and related skills over a logical progression through the program. This is accomplished by assessing skills on a one-on-one basis and ensuring that the student demonstrates mastery of the skills before they are permitted to use them in the practical setting. Students must demonstrate competency of specific skills that pertain to each level of the program before progression to the next level in the program. Second, the program is evaluated by graduating seniors who will offer their perspectives on course sequences, clinical experiences, and course/practicum materials via student exit interviews. Graduates from the program offer valuable feedback on the applicability of the program in reference to preparing students for employment. Third, the program will survey alumni from the program within the first three years of their employment to evaluate the program's effectiveness of professional preparation in athletic training (e.g., enrollment figures, dropout rates, graduation rates, competency evaluation, placement figures, surveys from initial employers). Fourth, the program will use the success rates on the Board of Certification national certification examination to assess any areas of weakness that may become visible. Maintaining statistics on the success of the national certification examination can provide information as to the effectiveness of specific aspects of the program. External assessments will also be conducted through employer surveys on former students. These surveys will assist in demonstrating how the WSU athletic training program is preparing students for professional employment.

The Athletic Training Program Committee is the primary group responsible for reviewing the data and for making recommendations about the adequacy of the program. The Program Committee consists of the full-time members of the athletic training faculty. The Athletic Training

Program Committee obtains advice from the Athletic Training Advisory Council. The Advisory Council consists of the full-time members of the athletic training faculty, two practitioners, two alumni, and two candidates.

On an annual basis, the Athletic Training Program Committee examines aggregated data for the preceding year. This includes but is not limited to aggregated data from (a) decisions made about individual candidates at transition points, (b) the exercise science advising survey, (c) candidate exit surveys from the COE, (d) surveys of graduates, (e) surveys of employers of graduates, and (f) any external reviews that occurred in the past year. Each year, the Athletic Training Program Committee submits to the College of Education Unit Assessment Committee the annual report of its program review. Each report summarizes its conclusions and recommendations, and describes program changes undertaken, the problem each program change was designed to address, and how the data should change if the revision is successful. Additionally, it summarizes how effective prior program revisions were at addressing the problem(s) they were designed to solve, and any unexpected outcomes thought to be due to the program revisions.

In addition, Student Perceptions of Teaching Effectiveness (SPTE) evaluations are used to evaluate each faculty member's course every semester. Faculty uses this feedback to adjust curriculum as appropriate, modify teaching styles, and improve the overall communication of core content. Furthermore, students routinely provide feedback about the faculty and program via both formal and informal comments and discussions. The HPS department utilizes a HPS Concern Card. This card provides an opportunity for students to communicate program-related concerns and have their question or concern addressed by appropriate faculty or administrators. Additional feedback can be gained by the more formal university grievance procedures. At this point, there have not been any formal concerns that have not been settled internally.

Advising

Advising of students in the BA athletic training program is performed by the department's undergraduate advisor, Carol Pitetti. Data indicate that she is effectively advising students. Advising surveys completed by students in the department's programs since 2003 indicate a high level of satisfaction. When asked to rate the quality of their advising on a scale of 1 (low) to 4 (high), surveys completed by over 300 students in HPS programs resulted in an average score of 3.8.

Support Staff

The athletic training faculty and students are supported by quality, competent office staff as well as graduate research assistants. The Human Performance Studies department has one administrative specialist serving various faculty and related degree programs. The department's administrative specialist, Stacy Johnson, has 20 years of experience (5 at WSU) and is able to multi-task effectively and efficiently. Ms. Johnson assumes responsibility for many tasks, including the ordering of text books, entering scheduling information into the appropriate data base, payroll, paperwork associated with faculty travel, monitoring the budget and related paperwork, and handling phone calls. Each untenured faculty member also has the assistance of a graduate research assistant to help him/her with research. The graduate research assistant works with the faculty for 10 hours per week. This assistance and support facilitates the ability of faculty to successfully engage in research endeavors while also balancing scholarship, teaching, and service commitments.

Use and Integration of Technology – BA Athletic Training Program

The Mission of the College of Education is to ensure a technology rich culture in which students, faculty, staff, alumni, and the community work together to (a) pursue excellence, (b) promote intellectual exploration, and (c) enhance learning. A college-wide technology committee reviews policies and decisions related to technology implementation according to the COE Technology Action Plan. The COE Technology Center provides technical and instructional support staff, access to workstation and laptop computer labs, and a variety of digital technology for both faculty and student use. Both hardwire and wireless networks are maintained to allow easy access to technology resources in all classrooms.

Technology is a major component of the athletic training BA degree program. The program is on the cutting edge when it comes to the integration of technology into the education of the student. Athletic training courses integrate knowledge regarding the use of electric muscle stimulation, ultrasound, intermittent compression units, heart rate monitors, lactate analyzers, step counters, body fat analyzers, digital movies, PowerPoint, web site development, Pod casts, digital cameras, and other athletic training-specific software.

IV. Demonstrated student need and employer demand for the program.

Employer Need for the Program

According to the US Department of Labor Bureau of Labor Statistics Occupational Outlook Handbook (2008-2009 edition: www.bls.gov/oco/ocos294.htm) jobs for athletic trainers are expected to increase much faster than the average for all occupations. Athletic trainers held about 17,000 jobs in 2006 and are found in every part of the country. Most athletic trainer jobs are related to sports, although an increasing number also work in nonsports settings. About 34% of athletic trainers worked in health care, including jobs in hospitals, offices of physicians, and offices of other health practitioners. Another 34 percent were found in public and private educational services, primarily in colleges, universities, and high schools. About 20% worked in fitness and recreational sports centers.

Employment of athletic trainers is expected to grow 24% from 2006 to 2016, much faster than the average for all occupations. Job growth will be concentrated in the health care industry, including hospitals and offices of health practitioners. Fitness and recreation sports centers also will provide many new jobs, as these establishments become more common and continue to need athletic trainers to care for their clients. Growth in positions with sports teams will be somewhat slower, however, as most professional sports clubs and colleges and universities already have complete athletic training staffs.

The demand for health care should grow dramatically as the result of advances in technology, increasing emphasis on preventive care, and an increasing number of older people who are more likely to need medical care. Athletic trainers will benefit from this expansion because they provide a cost-effective way to increase the number of health professionals in an office or other setting. Also, employers increasingly emphasize sports medicine, in which an immediate responder, such as an athletic trainer, is on site to help prevent injuries and provide immediate treatment for any injuries that do occur. Increased licensure requirements and regulation has led to a greater acceptance of athletic trainers as qualified health care providers. As a result, third-party reimbursement is expected to continue to grow for athletic training services.

As athletic trainers continue to expand their services, more employers are expected to use these workers to realize the cost savings of providing health care in-house. There should be strong

demand for athletic trainers in settings outside the sports world, especially those that focus on health care. Continuing efforts to have an athletic trainer in every high school reflect concern for the health of student-athletes as well as efforts to provide more funding for schools, and may lead to growth in the number of athletic trainers employed in high schools. The occupation is expected to continue to change over the next decade, including more administrative responsibilities, adapting to new technology, and working with larger populations, and job seekers must be able to adapt to these changes.

Student Need for the Program

Nationwide, student interest in athletic training continues to increase with the development of accredited programs. The NATA has reported that student membership increased from 3,998 in 2006 to 4,501 in 2007, an increase of 8.3% during the most recent year for which data are available (www.nata.org/members/documents/membstats/2007EOY-stats). In addition, total membership in the NATA has gone from 23,749 in 1997 to 30,405 in 2007, an increase of 28% over the past decade. With the anticipated job growth described above, opportunities for students to become employed after earning the BA degree in athletic training from WSU are going to be numerous.

Students pursuing an undergraduate athletic training degree must attend and successfully graduate from a CAAHEP accredited program such as the WSU program to become a certified athletic trainer. WSU is an ideal location for this degree program because of: 1) the numerous medical and clinical opportunities located in the Wichita metropolitan area, 2) the numerous employment opportunities for graduates, and 3) the numerous internship supervisors, and other experiences that are provided to our students.

The faculty is working to increase enrollments in the athletic training BA degree. Information stating that the program is accredited now appears on the NATA website which is a primary resource for potential students. Mr. Bomgardner is in the process of contacting athletic trainers at each community college in Kansas. By providing information regarding the newly accredited program, it is believed that many students will be interested in transferring to WSU after completing their two-year degree. Dr. Rogers has met with academic advisors from community colleges throughout Kansas as well as with the WSU Admissions Office to discuss the athletic training program. The athletic training faculty also works with other health-related programs (e.g., physical therapy, physician assistant) at WSU to offer the opportunity to earn an additional degree that will compliment/enhance the degree(s) they have already earned. Two students currently in the program have already earned a bachelor degree from WSU in another discipline. The faculty has also developed relationships with athletic trainers in other countries and is actively recruiting students from areas around the globe. Currently, there are two students from Japan and one from China who have been accepted into the athletic training program. Additional recruitment efforts have been pursued through web page development and promotional brochures. We are confident that the newly accredited program at WSU, combined with these promotional efforts, will attract many students interested in a career in athletic training and employment in the discipline.

V. The services the program provides to the discipline, the university, and beyond.

Service to the Profession

The athletic training faculty is involved with professional associations and has occupied, and currently holds, a variety of leadership roles. Mr. Bomgardner is the Kansas representative for NATA District V for the NATA Research and Education Foundation. He is also the Kansas

Athletic Trainers' Society liaison to the Board of Certification Approved Provider Program which provides organizations with opportunities to offer continuing education credits for certified athletic trainers through symposia and meetings. Dr. Rogers is serving his second three-year term as chair of the Strategic Health Initiative on Aging and has served as co-chair for the Special Interest Group on Aging, both for the American College of Sports Medicine. He is a past-president of the Central States Regional Chapter of the American College of Sports Medicine which consists of Kansas, Oklahoma, Missouri, and Arkansas. He is the vice president of the Active Aging Association of Japan and serves on the Executive Committee for the International Society for Aging and Physical Activity. He has also presented lectures and workshops for professional organizations in Hiroshima, Tokyo, Mito, Nagoya, Shimane (Japan), Prague (Czech Republic), Cologne (Denmark), Seoul (South Korea), Cologne, Berlin, Frankfurt (Germany), Krakow (Poland), Taipei (Taiwan), Salzburg (Austria), Mexico City, Puebla, Chihuahua, and Puerto Vallarta (Mexico) and throughout the United States and Canada. He has also developed and chaired a variety of symposia at many conferences. Dr. Patterson is currently running for president of the Central States Regional Chapter of the American College of Sports Medicine and has served on several committees within that organization. He has also presented lectures for a variety of professional organizations throughout the United States.

Service to WSU, the COE, and the HPS Department

Athletic training faculty support and respect the goals of WSU. Athletic training faculty attend university functions, participate in university new student and faculty orientations and welcome events, and fundraise for the university's sponsored radio station. Athletic training faculty also serves on vital university committees including, for example, the Institutional Review Board, Undergraduate Research Committee, and the Faculty Senate. The wisdom gained from these committee exposures benefits the functioning of the athletic training degree program. Similarly, athletic training faculty takes a prominent role in various COE activities. Athletic training faculty serves on the Online Teaching, Strategic Planning, Curriculum, Diversity, Faculty Personnel, and Leadership Team Committees. Faculty regularly attends COE meetings and provides valuable input where appropriate. In 2008, Mr. Bomgardner received the COE Service Award in recognition of his outstanding service activities.

The athletic training faculty is highly involved in daily HPS department operations. Faculty serves on the merit, travel, and curriculum committees. The faculty is in their offices on a daily basis and willingly visits with, and addresses the needs of, students on a walk-in basis. In addition, faculty assist with special events including the annual HPS Chili Cook-off and Student Appreciation Day and are preparing to help the department host an upcoming Kansas Association of Health, Physical Education, Recreation, and Dance (KAHPERD) Convention (2010) at WSU which will attract approximately 600 attendees.

Services To The Kansas, Wichita, And The Surrounding Community

Faculty routinely participates in community programs. For example, Mr. Bomgardner volunteers as an athletic trainer through Via Christi Sports Medicine to provide athletic training services at high school athletic events for public schools in the greater Wichita community. He also lectures to emergency medical technicians on behalf of the Kansas Athletic Trainers' Society throughout the state of Kansas and also serves on the North Wichita YMCA Program and Membership Committee. Dr. Bohlken has organized a variety of educational booths at local events including the American Heart Health Walk Health Fair and the Sedgwick County Department of

Aging Annual Senior Exposition. She has also provided presentations on the benefits of physical activity to many constituents in the local community and throughout the state including YMCA of Hutchinson, Belle Plaine Senior Nutrition Program, Garden Plaine Senior Center, and the Junction City Center for Aging. Mr. Rokosz is a certified Red Cross First Aid Volunteer Instructor. Mr. Rokosz teaches and certifies approximately 200 WSU students annually. In addition, Mr. Rokosz hosts First Aid/CPR clinics for the community and teaches and certifies approximately 50 individuals annually. Dr. Rogers has been a volunteer for the National Youth Sports Program held in Wichita and has served on the executive committee for the Senior Nutrition & Activity Program of Senior Services, Inc (Wichita) and on the advisory council for the Magic Mornings Program, Healthy Options for Planeview (Wichita). As Director of the Human Performance Laboratory, Dr. Patterson provides voluntary consultant work with numerous professional and amateur athletes, hospitals regarding cardiac rehabilitation, and speaking engagements with community fitness centers.

VI. The program's cost effectiveness.

Enrollment Trends for the Department

Information provided by the WSU Office of Institutional Research reflects that student credit hours within the department for all undergraduate programs have increased over the past five years.

Student credit hours for all departmental undergraduate programs

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Lower level	4,441	4,148	3,817	3,603	3,817	3,935
Upper division	3,852	4,333	4,639	4,530	4,918	4,454
Total	8,293	8,481	8,456	8,133	8,735	8,420

Students, Degrees Conferred in the Program

Student enrollment in the BA athletic training program has increased substantially during the past *three* years. The difference between FY 2006 and 2008 represents an increase of 229%.

Majors in the BA athletic training program

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Majors	0	0	7	18	23	N/A

The number of degrees conferred in the BA athletic training program is reflected below.

Number of degrees conferred

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Degrees Conferred	0	0	0	0	1	N/A

FTE per Student Credit Hour Ratio

FTEs per SCH reflect an efficient and effective department. Based on data from the WSU Office of Institutional Research, tenured/tenure eligible faculty is generating an average of 1,312 credit hours annually (five year average). The SCH/FTE ratio indicates that a single tenured/tenured track faculty member averages 219 credit hours (five year average). SCH per other instructional faculty reveals an average of 234 credit hours (five year average) generated by other instructional

faculty. Combining all SCH generated by both tenured/tenure track and other instructional faculty, there is an average of 229 credit hours are being generated per FTE. Again, these numbers reflect a highly efficient and cost-effective department.

HPS Department OOE

The HPS department is very resourceful in trying to accomplish its degree program objectives. The department's 12-month OOE budget for FY 2008-2009 is \$18,301, or \$1,525 per month.

Summary

Although enrollment appears to be low and only one degree has been conferred, the BA in athletic training was not recognized as a separate, free-standing degree until 2005. In 2006, seven students were enrolled in the program. The program is now accredited and enrollment has increased over 200% during the past three years. We anticipate a continued increase in the number of students enrolled and degrees conferred based on escalating undergraduate enrollments in the program and job opportunities in the field. As the program grows, the program will accept 15-20 students per year based upon the quality of applicants and the availability of openings (not exceeding an 8:1 student to certified athletic training staff member ratio per CAATE accreditation guidelines) and eventually serve a maximum of 80 students.



Wichita State University

COLLEGE OF EDUCATION

**KANSAS BOARD OF REGENTS PROGRAM REVIEW
AY 2008-2009**

Department of Human Performance Studies

**Discipline:
Exercise Science (CIP Code: -----)**

B.A. Exercise Science

I. Centrality of the program to fulfilling the mission and role of WSU.

Overview

The Department of Human Performance Studies offers a BA degree in exercise science. The BA in exercise science was recognized as a separate, free-standing degree in 2001. Prior to this, students received a degree in physical education with an emphasis in either (a) K-12 physical education or (b) exercise science. In 2001, eight students graduated with a BA degree in exercise science. During the five year period from 2003-2007, an average of 41 BA degrees were conferred each year.

Exercise science is a multifaceted field of study in which movement or physical activity is the intellectual focus. This includes exercise for improvement of health and physical fitness, activities of daily living, work, sport, and play, and involves special population groups such as children and older adults, persons with disability, injury or disease, and athletes.

The program provides instruction, conducts research and offers public service/outreach regarding the scientific aspects of exercise and sport and their affects on health, fitness, performance and quality of life. The program prepares students for careers in health promotion and exercise science. Graduates are represented by careers in hospital or corporate health promotion/wellness centers; adult fitness centers; military institutes; senior living communities; clinical exercise physiology clinics; cardiac rehabilitation clinics; coaching; and college teaching. The program is also structured to prepare students for further academic study in such areas as physical/occupational therapy, medical and allied health, and exercise science at the master and doctoral level.

WSU, COE, and Exercise Science Degree Program Mission Statements

The BA in exercise science compliments the mission of WSU, the COE, and the HPS department. WSU, as well as the COE and HPS department, strive to provide comprehensive educational opportunities by blending academic theory with practical learning opportunities while also engaging in research and community partnerships.

The mission of the exercise science program at WSU is to promote health and well-being through research, teaching, and service/outreach in the study of physical activity. Faculty work with students to improve the lives of citizens of Wichita, the state of Kansas, the United States, and the world by the creation and dissemination of knowledge about physical activity and its relationship to health and well-being. An essential aspect of these efforts is the preparation of scholars and professionals in the study of exercise science at the graduate level. In addition, the program educates the public and the university community in the scientific aspects of physical activity, especially exercise, sport, and the movements of daily life. Emphasizing practical skill acquisition, the program prepares students for careers in adult fitness centers; senior living communities; hospital- or corporate-based wellness programs and other health/fitness related agencies; research and military institutes; as well as for future academic study. The Human Performance Laboratory works with a variety of populations including athletes, the physically and mentally challenged, children and older adults. The laboratory has access to a variety of state-of-the-art technology to measure exercise/work performance, body composition, bone health, metabolic/biochemical parameters, isokinetic strength, postural balance, gait and other human movement, functional abilities, psychological dimensions, and psychomotor skills. The department's Center for Physical Activity and Aging encourages and facilitates research, instruction, and public service in all areas of

physical activity and aging through relationships with a full range of academic units within the university and in partnership with organizations outside the university.

More specifically, the exercise science program at WSU is responsible for:

- Creating and disseminating basic and applied knowledge about physical activity and its relationship to health and well-being;
- Preparing professionals for leadership roles in the field of exercise science;
- Qualifying individuals for advanced study or further training in exercise science or health-related fields such as physical therapy, medicine, and cardiac rehabilitation;
- Preparing graduate students at the master level to understand and create basic and applied knowledge in the study of physical activity, especially exercise, sport, and the movements of daily life;
- Preparing students to lead others in developing physically active and healthy lifestyles as well as to supervise programs in exercise and sport;
- Providing learning experiences related to physical activity and health for the general population of the Wichita metropolitan community; and
- Providing services and outreach related to physical activity and health to the citizens of Wichita (in particular), but more generally to the national and world communities.

As indicated in the WSU mission statement, “WSU is committed to providing comprehensive educational opportunities in an urban setting . . . the University seeks to equip both students and the larger community with the educational and cultural tools they need to thrive in a complex world. . .” The exercise science program effectively “advance[s] the University’s goals of providing high quality instruction, making original contributions to knowledge and human understanding, and serving as an agent of community service” (WSU Mission Statement).

WSU, the COE, and the exercise science BA program all place a priority on scholarship, quality instruction, and community service. As will be apparent throughout this report, the exercise science faculty use scholarship in teaching, are on the cutting edge via the integration of technology into the classroom, and continually cultivate partnerships to meet community needs.

II. The quality of the program as assessed by the strengths, productivity, and qualifications of the faculty.

The faculty teaching in the exercise science BA curriculum has graduate degrees and is well established in their profession.

HPS department faculty teaching in the BA Exercise Science program

Faculty	Academic Rank	Highest Degree, Date Earned
Ruth Bohlken	Instructor	PhD, 2008
Richard Bomgardner	Instructor	MS, 1991
Jeremy Patterson	Assistant Professor	PhD, 2004
Michael Rogers	Associate Professor	PhD, 1996
Frank Rokosz	Associate Professor	MA, 1971
<i>Vacant Position</i>	N/A	N/A

Scholarship

Full-time faculty possesses expertise in a variety of areas including exercise prescription, exercise physiology, injury recognition, rehabilitation, anatomy, first aid/CPR, motor integration, research design, statistics, aging, and cardiac rehabilitation. The table below reflects the quality of full-time HPS department faculty teaching in the BA exercise science program based on scholarly publications and presentations.

Peer reviewed journal articles, books, and book chapters and professional presentations from 2003 to the present.

Name	Primary Discipline	Publications						Presentations					
		2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Bohlken	Ex. Science	-	-	-	-	1	1	5	13	12	4	-	2
Bomgardner	Ath. Training	-	-	1	-	-	-	-	1	1	1	-	-
Patterson	Ex. Science	-	2	1	2	4	-	-	1	6	11	16	5
Rogers	Ex. Science	6	8	7	8	2	5	29	29	22	29	11	20
Rokosz	Generalist	1	-	-	-	-	-	-	-	1	-	-	1

Faculty publications have appeared in premier exercise science journals including *National Strength and Conditioning Performance Journal*, *American Journal of Lifestyle Medicine*, *Journal of Physical Activity and Aging*, *Medicine and Science in Sports and Exercise*, *Journal of Orthopedic and Sports Physical Therapy*, *Geriatrics and Aging*, *Journal of Sports Science and Medicine*, *Asian Journal of Exercise and Sport Science*, *Journal of Aging Health*, *Preventive Medicine*, *European Journal of Applied Physiology*, *Journal of Housing for the Elderly*, *Isokinetics and Exercise Science*, *Disability and Rehabilitation*, *Women and Health*, *Journal of Cardiac Failure*, *Journal of Exercise Physiology*, *Journal of Cardiopulmonary Rehabilitation*, and *Journal of Occupational Rehabilitation*.

The scholarship capabilities and established expertise is further recognized by the faculty's role on editorial review boards and serving as peer reviewers of manuscripts and external grants. Faculty have served editorial boards for a variety of journals including *Journal of Aging and Physical Activity*, *Active Aging Today*, *Journal of Aging Health*, *ACSM's Health and Fitness Journal*, and *Journal of Sports Science and Medicine*. They have also served as peer reviewers for a large number of journals including *American Journal of Physical Medicine and Rehabilitation*, *Aging Clinical and Experimental Research*, *Archives of Physical Medicine and Rehabilitation*, *Annals of Biomedical Engineering*, *Journal of Gerontology: Medical Sciences*, *Medicina Sportiva*, *Canadian Medical Association Journal*, *Journal of Social and Clinical Psychology*, *Research Quarterly for Exercise and Sport*, *American Journal of Physical Medicine and Rehabilitation*, *Biological Research for Nursing*, *Journal of Applied Physiology*, *Canadian Journal of Applied Physiology*, *Journal of Aging and Physical Activity*, *Journal of Physical Education, Recreation, and Dance*, *European Journal of Applied Physiology*, and *Clinical Exercise Physiology*. They are also regularly invited to review grant proposals for the Centers for Disease Control and have also reviewed grants for the Arthritis Research Campaign, the Flosie West Research Foundation, the Department of Veterans Affairs, and internal grants offered by other universities.

As noted above, the faculty is well published and respected. Dr. Rogers was recognized as the COE Research Award recipient in 2001 and 2006 and was named a Research Fellow of the American College of Sports Medicine in 2003. Dr. Rogers was awarded a Visiting Academic Scholar Appointment in Japan on behalf of the Japanese Foundation for Health and Aging in 2001, and awarded a Visiting Scholar from Abroad Appointment from Nagoya City University, Japan in 2002. Dr. Patterson was recognized as the COE Technology Innovation Award recipient in 2008 for

the use of new technology in multiple research projects. He was a mentor for a McNair Scholar in 2006 that was awarded McNair Researcher of the Year and Best Study 2006. He has graduate faculty status at Oklahoma State University and Research Associate status at Cypress Heart Hospital.

Faculty's scholarship includes a variety of current projects in progress. Dr. Rogers' primary research interests concern the effects of balance and strength training on muscle and bone health, fall prevention, and functional capacity in older adults. In both rural and urban community-based settings, he has conducted several studies that have developed, implemented, and evaluated exercise programs that target the physiological systems that control balance for older adults. He is currently collaborating with colleagues in Japan to determine the efficacy of various exercise programs for older adults in 12 cities/towns across Japan. He is also working with an interdisciplinary group of researchers from three Colleges within WSU to develop a fall prevention toolkit for older adults in Harvey County, a program that will eventually be implemented throughout the state of Kansas.

Dr. Patterson is currently collaborating with the Breakthrough Club of Wichita, Genesis Health Club and Kansas School of Medicine-Wichita on the Health Education and Leadership (HEAL) project which is funded by the Robert Wood Johnson Foundation. HEAL aims to empower individuals who have serious mental illness to take charge of their well-being through physical activity and health nutrition skills. Dr. Patterson is developing the curriculum for the project and to running long-term studies assessing the effects of exercise. The program he creates will primarily be used to train area health professionals and social service workers in how to recommend appropriate exercise and overall health regimens to patients with severe mental illnesses and receiving high-potency medications. One of his major objectives in the curriculum is to establish appropriate exercise recommendations for this high-risk population, then develop an online curriculum to disseminate the content. The project will result in a certification that will extend beyond Sedgwick County and be available to national organizations to better serve their communities when dealing with this issue.

The exercise science faculty has been awarded external grants from a variety of organizations including The Robert Wood Johnson Foundation, United Methodist Health Ministry Fund, The Nakatomi Foundation (Tokyo, Japan), Suzuken Foundation, The Central Plains Area Agency on Aging, The Kansas Health Foundation, Cargill Cares, and Hygenic Corporation.

Grants proposed and awarded from 2003 to the present.

Year	2003	2004	2005	2006	2007	2008	Totals
Unfunded	\$3,204,647	\$457,500	47,300	\$3,040	\$0	\$48,250	\$3,760,737
Funded	\$55,694	\$23,000	\$17,624	\$100,00	\$0	\$693,250	\$889,568

Teaching

The exercise science faculty is recognized for their quality teaching, in addition to their superior scholarship. Dr. Patterson was awarded the College of Education Teacher of the Year Award in 2007 and Dr. Rogers earned the same award in 2008. Dr. Rogers is also an adjunct professor (non-compensated) at the University of Kansas School of Medicine – Wichita where he provides lectures to sports medicine physician residents. Each of the exercise science faculty is routinely nominated for various teaching awards including the COE Teaching Award, the Board of Trustees Excellence in Teaching, and the Academy of Effective Teaching Award.

SPTe evaluations routinely complement exercise faculty. Positive student comments regarding the quality of faculty are abundant and include, for example, the following: Dr. Patterson is “Extremely knowledgeable”, “Very professional”, “Accommodates to needs well...and works well with students” and Dr. Rogers’ comments include “I felt that I learned a great deal”, “I wish all my instructors were as organized”, “Always comes across as a person as well as a teacher” and “He has exceptional knowledge of the material”. Comments from Dr. Bohlken’s evaluations include “Instructor was very helpful and knowledgeable”, “She has a wonderful way of teaching”, and “She enjoys teaching”. Mr. Rokosz’s evaluations included “Very knowledgeable and organized”, “The teacher made class interesting”, and “I will definitely be able to use what I learned in this course”. Comments from Mr. Bomgardner’s evaluations included “I learned a lot from this class and really enjoyed it”, “He is always great about working with students”, and “I would recommend this class to all students”.

The faculty constantly considers how the best interests of the student can be accommodated while maintaining the integrity of a quality education. Introduction to exercise science, care and prevention of athletic injuries, kinesiology, exercise physiology, motor learning, and prescription of exercise integrate a lab within the course itself. Other innovative and experiential learning opportunities developed and used by faculty include PowerPoint, web-enhanced instruction, BlackBoard, poster presentations, Pod casts, scientific methods explained through activities like juggling, and the development and use of a Jeopardy-like computer game that is used to review for tests. A variety of guest lecturers from the allied health fields speak in the classes on current issues in the profession. The culminating practicum and internship curriculum requirements provide students an opportunity to apply learned knowledge to practical, experiential situations.

Professional Development

The exercise science faculty is interested in, and actively pursues, professional development opportunities. All faculty have capitalized on the computer workshops and training provided by the College of Education Technology Center. Workshops attended and individual training has included the use of Blackboard, Banner, online education, and website development. Dr. Bohlken, who has been part of the faculty since 1998, earned her PhD from Oklahoma State University in 2008. She was also certified as a Clinical Densitometry Technologist by the International Society for Clinical Densitometry in 2005 and became a Master Trainer for the Kansas Department of Health and Education’s Kansans Optimizing Health Program in 2007. She has been invited to attend a grant writing workshop sponsored by the National Institute on Aging in Washington DC this November. Dr. Rogers has attended four semesters of Japanese instructional classes here at WSU to better understand and more effectively address international educational distinctions. Mr. Bomgardner and Dr. Rogers have maintained their Certified Strength and Conditioning Specialist credentials from the National Strength and Conditioning Association for nearly a decade by accumulating substantially more continuing education credits than required each year. Mr. Bomgardner does the same to maintain his Athletic Training Certification from the National Athletic Trainers’ Association. Over the past three years, he has also completed 18 credit hours towards a MEd in exercise science. Mr. Rokosz attends annual CPR and First Aid Instructional workshops. Dr. Patterson routinely attends electrocardiogram workshops and technology-based training sessions which have helped him to earn the College of Education Innovation in Technology Award in 2008. Furthermore, the faculty attends annual conferences to share their own scholarship while also updating their own knowledge based on current professional breakthroughs.

III. The quality of the program as assessed by the curriculum and impact on students.

Curriculum Description

The exercise science curriculum was designed in accordance with professional standards established by the American College of Sports Medicine. Quality faculty, placement of graduating students, strong relationships with exercise science practitioners, and administrative support have all enabled the exercise science program to gain international recognition, respect, and credibility.

All students in the COE are required to take 42 credit hours of general education course work. In addition, students are required to successfully complete 54 credit hours of core exercise science course work (see below). Core course work includes, for example, courses in anatomy, motor learning, kinesiology, exercise physiology, fitness activities/leadership, physics, chemistry, diet and nutrition, care and prevention of athletic injuries, concepts in exercise prescription, and measurement and evaluation in human performance. As a culminating educational experience, each student completes both a one-semester practicum and a one semester full-time internship.

CORE REQUIREMENTS FOR EXERCISE SCIENCE MAJOR (54 hours)

PHYS 213	General College Physics I (5)
CHEM 110	Preparatory Chemistry (3)
HPS 113	Foundations of Exercise Science (3)
HPS 117	First Aid and Community CPR (2)
HPS 229	Anatomy and Physiology (3)
HPS 301	Fundamentals in Fitness and Exercise (3)
HPS 328	Kinesiology (3)
HS 331	Diet and Nutrition (3)
HPS 331	Care & Prevention of Athletic Injuries (3)
HPS 440	Concepts in Exercise Prescription (3)
HPS 460	Motor Learning (3)
HPS 470	Practicum (3)
HPS 490	Exercise Physiology (3)
HPS 495	Internship (8)
HPS 762	Measurement and Evaluation (3)
CI 541	Desktop Publishing (3) OR CS 105 Introduction to Computers (3)

Admission Standards

Entrance into the exercise science program requires completion of 24 hours of college course work with an overall grade point average of 2.5 or above.

Program Assessment

Program evaluation in the exercise science BA program occurs both (a) to make decisions about individual candidates' progress through the program and (b) to make decisions about the effectiveness of the program at preparing candidates to meet the standards of the program. The program developed an assessment plan in 2005 and has been collecting/reviewing data since 2006.

The Exercise Science Program Committee is the primary group responsible for reviewing the data and for making recommendations about the adequacy of the program. The Program Committee consists of the full-time members of the exercise science faculty. The Exercise Science Program Committee obtains advice from the Exercise Science Advisory Council. The Advisory Council consists of the full-time members of the exercise science faculty, two practitioners, two alumni, and two candidates.

On an annual basis, the Exercise Science Program Committee examines aggregated data for the preceding year. This includes but is not limited to aggregated data from (a) decisions made about individual candidates at transition points, (b) the exercise science advising survey, (c) candidate exit surveys from the COE, (d) surveys of graduates, (e) surveys of employers of graduates, and (f) any external reviews that occurred in the past year. Each year, the Exercise Science Program Committee submits to the College of Education Unit Assessment Committee the annual report of its program review. Each report summarizes its conclusions and recommendations, and describes program changes undertaken, the problem each program change was designed to address, and how the data should change if the revision is successful. Additionally, it summarizes how effective prior program revisions were at addressing the problem(s) they were designed to solve, and any unexpected outcomes thought to be due to the program revisions.

In addition, Student Perceptions of Teaching Effectiveness (SPTE) evaluations are used to evaluate each faculty member's course every semester. Faculty use this feedback to adjust curriculum as appropriate, modify teaching styles, and improve the overall communication of core content. Furthermore, students routinely provide feedback about the faculty and program via both formal and informal comments and discussions. The HPS department utilizes a HPS Concern Card. This card provides an opportunity for students to communicate program-related concerns and have their question or concern addressed by appropriate faculty or administrators. Additional feedback can be gained by the more formal university grievance procedures. At this point, there have not been any formal concerns that have not been settled internally.

One means by which the program is evaluated is that the BA exercise science program has ten standards which are evaluated by embedded assessments within courses. In order to 'pass' an assessment, students must achieve a score of 60% or higher. To consider a program as effective, 80% or more of the students should pass each assessment (i.e., standard criterion). Data compiled from 2006 and 2007 (see below) indicate pass rates for each standard exceed the minimum percents (i.e., 80%) set for each proficiency. This indicates that the program is preparing students to meet the established standards of learning.

BA Exercise Science: Program Standards

Standard	Assessment	Assessment Criterion	Standard Criteria	Overall Pass Rate
1	HPS 117 - Final Exam	60% or better	80%	100%
	HPS 117 - Labs	60% or better		
2	HPS 229 - Final Exam	60% or better	80%	94%
	HPS 229 - Mid Term Exam	60% or better		
3	HPS 328 - Final Exam	60% or better	80%	100%
	HPS 328 - Class Project	60% or better		
4	HPS 440 - Final Exam	60% or better	80%	100%
	HPS 490 - Final Exam	60% or better		
5	HS 331 - Final Exam	60% or better	80%	99%

	HS 331 - Class Project	60% or better		
6	HPS 440 - Class Final Project	60% or better	80%	100%
	HPS 301 - Final Exam	60% or better		
7	HPS 113 - Final Exam	60% or better	80%	100%
	HPS 762 - Class Final Project	60% or better		
8	HPS 557 - Faculty Evaluation	60% or better	80%	100%
	HPS 557 - Student Journal	60% or better		
9	HPS 440 - Lab Reports	60% or better	80%	98%
	HPS 490 - Lab Reports	60% or better		
10	HPS 460 - Final Exam	60% or better	80%	97%
	HPS 460 - Lab Reports	60% or better		

Student Survey

Based surveys gathered from graduating students between 2003 and 2007 regarding student perceptions of the quality and utility of required undergraduate course curriculum, students responded as indicated below. A score of "1" indicated that the course contributed a lot to what you think you need to know to perform successfully in a job related to exercise science, and at the other extreme, a score of "5" indicated the course contributed very little to their learning objectives. The means of each course are given below.

Course	Mean
HPS 113 Intro to Exercise Science	1.66
HPS 117 First Aid	1.76
HPS 229 Anatomy & Physiology	1.74
HPS 301 Fundamentals of Fitness	1.65
HPS 328 Kinesiology	1.25
HPS 331 Athletic Injuries	1.50
HPS 440 Exercise Prescription	1.10
HPS 470 Practicum	1.55
HPS 490 Exercise Physiology	1.10
HPS 495 Internship	1.40

This survey also revealed that graduates indicate a high level of satisfaction with the program. When asked to rate the overall program on a scale of 1 (low) to (10) high, respondents gave the program a mean score of 8.8. As indicated from the above survey responses, students feel confident that the curriculum they are receiving will directly benefit them in their career aspirations.

Advising

Advising of students in the BA exercise science program is performed by the department's undergraduate advisor, Carol Pitetti. Data indicate that she is effectively advising students. Advising surveys completed by exercise science students since 2003 indicate a high level of satisfaction. When asked to rate the quality of their advising on a scale of 1 (low) to 4 (high), surveys completed by 256 exercise science students resulted in an average score of 3.8.

Support Staff

The exercise science faculty and students are supported by quality, competent office staff as well as graduate research assistants. The Human Performance Studies department has one administrative specialist serving various faculty and related degree programs. The department's administrative specialist, Stacy Johnson, has 20 years of experience (5 at WSU) and is able to multi-task effectively and efficiently. Ms. Johnson assumes responsibility for many tasks, including the ordering of text books, entering scheduling information into the appropriate data base, payroll, paperwork associated with faculty travel, monitoring the budget and related paperwork, and handling phone calls. Each untenured faculty member also has the assistance of a graduate research assistant to help him/her with research. The graduate research assistant works with the faculty for 10 hours per week. This assistance and support facilitates the ability of faculty to successfully engage in research endeavors while also balancing scholarship, teaching, and service commitments.

Use and Integration of Technology – BA Exercise Science Program

The Mission of the College of Education is to ensure a technology rich culture in which students, faculty, staff, alumni, and the community work together to (a) pursue excellence, (b) promote intellectual exploration, and (c) enhance learning. A college-wide technology committee reviews policies and decisions related to technology implementation according to the COE Technology Action Plan. The COE Technology Center provides technical and instructional support staff, access to workstation and laptop computer labs, and a variety of digital technology for both faculty and student use. Both hardwire and wireless networks are maintained to allow easy access to technology resources in all classrooms.

Technology is a major component of the exercise science BA degree program. The program is on the cutting edge when it comes to the integration of technology into the education of the student. Exercise science courses integrate knowledge regarding the use of heart rate monitors, lactate analyzers, step counters, body fat analyzers, digital movies, PowerPoint, web site development, Pod casts, digital cameras, and other exercise science-specific software.

The exercise science program uses technology in many ways. For example, courses explain how the body responds and adapts to exercise. In the exercise science courses, students are trained to evaluate aerobic fitness levels of individuals by being taught how the oxygen/carbon dioxide gas analyzer can be used in conjunction with a variety of computerized ergometers to measure an individual's oxygen consumption, food substrate utilization, cardio-vascular and respiratory responses during an acute exercise bout and/or as a result of adaptation to a training program. Students also become familiar with using a computerized cycle ergometer and test-software to determine anaerobic (i.e., sprint) capacity in athletes. Students are trained to use a hand-held computerized force dynamometer to evaluate muscle strength. Students gain experience using an electromyography unit to evaluate muscle contraction activity during exercise. Students develop an understanding of how dual-energy x-ray absorptiometry (DEXA) can be used to determine body composition (i.e., fat, bone, muscle mass) as a means for assessing the efficacy of weight loss/gain programs. Students gain experience using a computer-integrated force platform to determine limits of stability and other parameters of postural balance.

IV. Demonstrated student need and employer demand for the program.

Employer Need for the Program

According to the US Department of Labor Bureau of Labor Statistics Occupational Outlook Handbook (2008-2009 edition: www.bls.gov/oco/ocos296.htm) jobs for fitness workers are expected to increase much faster than the average for all occupations. Fitness workers should have good opportunities due to rapid job growth in health clubs, fitness facilities, and other settings where fitness workers are concentrated. Employment of fitness workers is expected to increase 27 percent (i.e., 63,000 additional jobs) over the 2006-2016 decade, much faster than the average for all occupations. These workers are expected to gain jobs because an increasing number of people are spending time and money on fitness, and more businesses are recognizing the benefits of health and fitness programs for their employees. Aging baby boomers are concerned with staying healthy, physically fit, and independent. Moreover, parents' growing concern about childhood obesity has resulted in rapid increases in children's health club membership. Increasingly, parents are also hiring personal trainers for their children, and the number of weight-training gyms for children is expected to continue to grow. Health club membership among young adults also has grown steadily, driven by concern with physical fitness and by rising incomes.

Opportunities are expected to be good for fitness workers because of rapid job growth in health clubs, fitness facilities, and other settings where fitness workers are concentrated. In addition, many job openings will stem from the need to replace the large numbers of workers who leave these occupations each year.

Median annual earnings of fitness trainers and aerobics instructors in May 2006 were \$25,910. The middle 50 percent earned between \$18,010 and \$41,040. The top 10 percent earned \$56,750 or more. These figures do not include the earnings of the self-employed. Earnings of successful self-employed personal trainers can be much higher. Median annual earnings in the industries employing the largest numbers of fitness workers in 2006 were as follows:

General medical and surgical hospitals	\$29,640
Local government	27,720
Fitness and recreational sports centers	27,200
Other schools and instruction	22,770
Civic and social organizations	22,630

Based on completed surveys of WSU BA exercise science alumni, 93% of the students who graduated between 2003 and 2007 are employed in an exercise science-related position or are currently pursuing additional graduate studies. Graduates have gone on to careers or advanced study in: corporate fitness, commercial fitness, physical education, personal training, strength and conditioning coaching, exercise science graduate programs, medical school, physician's assistant school, physical therapy school, university sport and recreational programs, businesses related to exercise science, and the military as aerospace physiologists or physical training instructors.

Student Need for the Program

Based on the current and expected job market described above, as well as current enrollment data, there is a genuine and continued need for the BA program in exercise science. Student enrollments in the program are reflected in the table below. As indicated by the data

provided in the section VI of this report, the number of students pursuing undergraduate education in exercise science has continued to increase since 2003.

The faculty is also working to maintain and increase enrollments in the exercise science BA degree. Dr. Rogers has met with academic advisors from community colleges throughout Kansas as well as with the WSU Admissions Office to discuss the exercise science program. Dr. Patterson is working with a faculty member in the biology department to integrate exercise science-related projects in a local middle school in an effort to increase their interest in the field. Faculty regularly provides tours of the Human Performance Laboratory and discusses the exercise science program with middle and high school student groups. Additional recruitment efforts have been pursued through web page development and promotional brochures.

V. The services the program provides to the discipline, the university, and beyond.

Service to the Profession

The exercise science undergraduate faculty is involved with professional associations and has occupied, and currently holds, a variety of leadership roles. Dr. Rogers is serving his second three-year term as chair of the Strategic Health Initiative on Aging and has served as co-chair for the Special Interest Group on Aging, both for the American College of Sports Medicine. He is a past-president of the Central States Regional Chapter of the American College of Sports Medicine which consists of Kansas, Oklahoma, Missouri, and Arkansas. He is the vice president of the Active Aging Association of Japan and serves on the Executive Committee for the International Society for Aging and Physical Activity. He has also presented lectures and workshops for professional organizations in Hiroshima, Tokyo, Mito, Nagoya, Shimane (Japan), Prague (Czech Republic), Cologne (Denmark), Seoul (South Korea), Cologne, Berlin, Frankfurt (Germany), Krakow (Poland), Taipei (Taiwan), Salzburg (Austria), Mexico City, Puebla, Chihuahua, and Puerto Vallarta (Mexico) and throughout the United States and Canada. He has also developed and chaired a variety of symposia at many conferences. Dr. Patterson is currently running for president of the Central States Regional Chapter of the American College of Sports Medicine and has served on several committees within that organization. He has also presented lectures for a variety of professional organizations throughout the United States. Mr. Bomgardner is the Kansas representative for NATA District V for the NATA Research and Education Foundation. He is also the Kansas Athletic Trainers' Society liaison to the Board of Certification Approved Provider Program which provides organizations with opportunities to offer continuing education credits for certified athletic trainers through symposia and meetings.

Service to WSU, the COE, and the HPS Department

Exercise science faculty support and respect the goals of WSU. Exercise science faculty attend university functions, participate in university new student and faculty orientations and welcome events, and fundraise for the university's sponsored radio station. Exercise science faculty also serves on vital university committees including, for example, the Institutional Review Board, Undergraduate Research Committee, and the Faculty Senate. The wisdom gained from these committee exposures benefits the functioning of the exercise science degree program. Similarly, exercise science faculty takes a prominent role in various COE activities. Exercise science faculty serves on the Online Teaching, Strategic Planning, Curriculum, Diversity, Faculty Personnel, and Leadership Team Committees. Faculty regularly attends COE meetings and provides valuable input

where appropriate. In 2008, Mr. Bomgardner received the COE Service Award in recognition of his outstanding service activities.

The exercise science faculty is highly involved in daily HPS department operations. Faculty serves on the merit, travel, and curriculum committees. The faculty is in their offices on a daily basis and willingly visits with, and addresses the needs of, students on a walk-in basis. In addition, faculty assist with special events including the annual HPS Chili Cook-off and Student Appreciation Day and are preparing to help the department host an upcoming Kansas Association of Health, Physical Education, Recreation, and Dance (KAHPERD) Convention (2010) at WSU which will attract approximately 600 attendees.

Services To The Kansas, Wichita, And The Surrounding Community

Faculty routinely participates in community programs. For example, Dr. Bohlken has organized a variety of educational booths at local events including the American Heart Health Walk Health Fair and the Sedgwick County Department of Aging Annual Senior Exposition. She has also provided presentations on the benefits of physical activity to many constituents in the local community and throughout the state including YMCA of Hutchinson, Belle Plaine Senior Nutrition Program, Garden Plaine Senior Center, and the Junction City Center for Aging. Mr. Rokosz is a certified Red Cross First Aid Volunteer Instructor. Mr. Rokosz teaches and certifies approximately 200 WSU students annually. In addition, Mr. Rokosz hosts First Aid/CPR clinics for the community and teaches and certifies approximately 50 individuals annually. Dr. Rogers has been a volunteer for the National Youth Sports Program held in Wichita and has served on the executive committee for the Senior Nutrition & Activity Program of Senior Services, Inc (Wichita) and on the advisory council for the Magic Mornings Program, Healthy Options for Planeview (Wichita). As Director of the Human Performance Laboratory, Dr. Patterson provides voluntary consultant work with numerous professional and amateur athletes, hospitals regarding cardiac rehabilitation, and speaking engagements with community fitness centers. Mr. Bomgardner volunteers as an athletic trainer through Via Christi Sports Medicine to provide athletic training services at high school athletic events for public schools in the greater Wichita community. He also lectures to emergency medical technicians on behalf of the Kansas Athletic Trainers' Society throughout the state of Kansas and also serves on the North Wichita YMCA Program and Membership Committee.

The Center for Physical Activity and Aging (CPAA), a program that the exercise science faculty members are involved in, serves as a resource center for care-givers of older adults in places such as hospitals and senior residence centers in the Wichita and surrounding community. It assists these local organizations in developing safe and effective exercise programs for older adults. Workshops are offered to share recent research findings and to help care-givers understand the best techniques for leading older adults in exercise activities. Through community programs and workshops, practical guidance is provided for older adults, as well as those that live and work with them. The CPAA also publishes a monthly newsletter which is distributed to local organizations that includes information on how to improve health and fitness for older adults.

VI. The program's cost effectiveness.

Enrollment Trends for the Department

Information provided by the WSU Office of Institutional Research reflects that student credit hours within the department for all undergraduate programs have increased over the past five years.

Student credit hours for all departmental undergraduate programs

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Lower level	4,441	4,148	3,817	3,603	3,817	3,935
Upper division	3,852	4,333	4,639	4,530	4,918	4,454
Total	8,293	8,481	8,456	8,133	8,735	8,420

Students, Degrees Conferred in the Program

Student enrollment in the BA exercise science program has increased substantially during the past five years. The difference between FY 2004 and 2008 represents an increase of 18%.

Majors in the BA exercise science program

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Majors	113	145	162	150	133	141

The number of degrees conferred in the BA exercise science program is reflected below.

Number of degrees conferred

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Degrees Conferred	32	28	43	61	36	40

FTE per Student Credit Hour Ratio

FTEs per SCH reflect an efficient and effective department. Based on data from the WSU Office of Institutional Research, tenured/tenure eligible faculty is generating an average of 1,312 credit hours annually (five year average). The SCH/FTE ratio indicates that a single tenured/tenured track faculty member averages 219 credit hours (five year average). SCH per other instructional faculty reveals an average of 234 credit hours (five year average) generated by other instructional faculty. Combining all SCH generated by both tenured/tenure track and other instructional faculty, there is an average of 229 credit hours are being generated per FTE. Again, these numbers reflect a highly efficient and cost-effective department.

HPS Department OOE

The HPS department is very resourceful in trying to accomplish its degree program objectives. The department's 12-month OOE budget for FY 2008-2009 is \$18,301, or \$1,525 per month.

Summary

As indicated above, the number of students enrolled and the number of degrees conferred in the BA exercise science program has been strong and stable over the past five years. Furthermore, student achievement, satisfaction and post-graduation employment rates are very high, suggesting that a program of high quality is being provided.



Wichita State University

COLLEGE OF EDUCATION

**KANSAS BOARD OF REGENTS PROGRAM REVIEW
AY 2008-2009**

Department of Human Performance Studies

**Discipline:
Physical Education (CIP Code: 131314)**

BA Physical Education

I. Centrality of the program to fulfilling the mission and role of WSU.

Overview

The Department of Human Performance Studies offers a BA degree in physical education. The BA degree program addresses student needs as well as public school physical educator demands for PreK-12 physical education within the state of Kansas. WSU's physical education curriculum is built upon a philosophy of educating students about the benefits of physical activity and healthy decision-making. The curriculum focuses on how physical educators can educate their own young students in the public schools who will possess a continuum of physical abilities, diverse cultures, and intellectual abilities about the benefits of lifetime physical activity and responsible decision-making.

WSU, COE, and Physical Education Degree Program Mission Statements

The physical education degree complements the mission of WSU, the COE, and the HPS department. WSU, as well as the COE and HPS department, all strive to provide comprehensive educational opportunities by blending academic theory with practical learning opportunities while also engaging in research and community partnerships.

The mission of the Wichita State University physical education program is to thoroughly prepare future physical educators so they may successfully guide their students in the process of becoming physically active and healthy for a lifetime. As stated in the WSU mission statement, WSU "is committed to providing comprehensive educational opportunities in an urban setting." The BA physical education program executes this by placing pre-student teachers and student teachers in urban and suburban school settings. By integrating pre-student teaching experiences into the core curriculum, combined with the dissemination of appropriate academic knowledge, students are provided with the "educational and cultural tools [necessary] to thrive in a complex world, and to achieve both individual responsibility in their own lives and effective citizenship in the local, national, and global community" (see WSU mission statement). As indicated by the PreK-12 Physical Education Conceptual Framework, the degree program strives to graduate students who are lifelong learners, display personal and social responsibility, and possess superior teaching skills.

WSU, the COE, and the physical education program all place a priority on scholarship, quality instruction, and community service. As will be apparent throughout this report, the physical education faculty use scholarship in teaching, are on the cutting edge via the integration of technology into the classroom, and continually cultivate partnerships with the community to meet community needs.

II. The quality of the program as assessed by the strengths, productivity, and qualifications of the faculty.

The faculty teaching in the physical education BA curriculum has graduate degrees and is well established in their profession. Faculty possesses expertise in areas including elementary and secondary physical education methods, K-12 rhythmic activities, injury prevention, exercise physiology, anatomy, kinesiology, and motor learning.

HPS department faculty teaching in the BA Physical Education program

Faculty	Academic Rank	Highest Degree, Date Earned
Richard Bomgardner	Instructor	MS, 1991
Marla Lindenmeyer	Instructor	MEd, 1989
Jeremy Patterson	Assistant Professor	PhD, 2004
Michael Rogers	Associate Professor	PhD, 1996
Frank Rokosz	Associate Professor	MA, 1971
<i>Vacant Position</i>	N/A	N/A

Scholarship

The table below reflects the quality of full-time HPS department faculty teaching in the BA physical education program based on scholarly publications and presentations.

Peer reviewed journal articles, books, and book chapters and professional presentations from 2003 to the present.

Name	Primary Discipline	Publications						Presentations					
		2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Bomgardner	Ath. Training	-	-	1	-	-	-	-	1	1	1	-	-
Lindenmeyer	Phys. Educ.	-	-	-	-	-	-	-	-	-	-	-	-
Patterson	Ex. Science	-	2	1	2	4	-	-	1	6	11	16	5
Rogers	Ex. Science	6	8	7	8	2	5	29	28	20	27	8	20
Rokosz	Generalist	1	-	-	-	-	-	-	-	1	-	-	1

Faculty publications have appeared in premier journals including *National Strength and Conditioning Performance Journal*, *Journal of Physical Education, Recreation, and Dance*, *American Journal of Lifestyle Medicine*, *Journal of Physical Activity and Aging*, *Medicine and Science in Sports and Exercise*, *Journal of Orthopedic and Sports Physical Therapy*, *Geriatrics and Aging*, *Journal of Sports Science and Medicine*, *Asian Journal of Exercise and Sport Science*, *Journal of Aging Health*, *Preventive Medicine*, *European Journal of Applied Physiology*, *Journal of Housing for the Elderly*, *Isokinetics and Exercise Science*, *Disability and Rehabilitation*, *Women and Health*, *Journal of Cardiac Failure*, *Journal of Exercise Physiology*, *Journal of Cardiopulmonary Rehabilitation*, and *Journal of Occupational Rehabilitation*.

The scholarship capabilities and established expertise is further recognized by the faculty's role on editorial review boards and serving as peer reviewers of manuscripts and external grants. Faculty have served editorial boards for a variety of journals including *Journal of Aging and Physical Activity*, *Active Aging Today*, *Journal of Aging Health*, *ACSM's Health and Fitness Journal*, and *Journal of Sports Science and Medicine*. They have also served as peer reviewers for a large number of journals including *American Journal of Physical Medicine and Rehabilitation*, *Aging Clinical and Experimental Research*, *Archives of Physical Medicine and Rehabilitation*, *Annals of Biomedical*

Engineering, Journal of Gerontology: Medical Sciences, Medicina Sportiva, Canadian Medical Association Journal, Journal of Social and Clinical Psychology, Research Quarterly for Exercise and Sport, American Journal of Physical Medicine and Rehabilitation, Biological Research for Nursing, Journal of Applied Physiology, Canadian Journal of Applied Physiology, Journal of Aging and Physical Activity, Journal of Physical Education, Recreation, and Dance, European Journal of Applied Physiology, and Clinical Exercise Physiology. They are also regularly invited to review grant proposals for the Centers for Disease Control and have also reviewed grants for the Arthritis Research Campaign, the Flosie West Research Foundation, the Department of Veterans Affairs, and internal grants offered by other universities.

As noted above, the faculty is well published and respected. Dr. Rogers was recognized as the COE Research Award recipient in 2001 and 2006 and was named a Research Fellow of the American College of Sports Medicine in 2003. Dr. Rogers was awarded a Visiting Academic Scholar Appointment in Japan on behalf of the Japanese Foundation for Health and Aging in 2001, and awarded a Visiting Scholar from Abroad Appointment from Nagoya City University, Japan in 2002. Dr. Patterson was recognized as the COE Technology Innovation Award recipient in 2008 for the use of new technology in multiple research projects. He was a mentor for a McNair Scholar in 2006 that was awarded McNair Researcher of the Year and Best Study 2006. He has graduate faculty status at Oklahoma State University and Research Associate status at Cypress Heart Hospital.

Faculty's scholarship includes a variety of current projects in progress. Dr. Rogers' primary research interests concern the effects of balance and strength training on muscle and bone health, fall prevention, and functional capacity in older adults. In both rural and urban community-based settings, he has conducted several studies that have developed, implemented, and evaluated exercise programs that target the physiological systems that control balance for older adults. He is currently collaborating with colleagues in Japan to determine the efficacy of various exercise programs for older adults in 12 cities/towns across Japan. He is also working with an interdisciplinary group of researchers from WSU to develop a fall prevention toolkit for older adults in Harvey County, a program that will eventually be implemented throughout the state of Kansas.

Dr. Patterson is currently collaborating with the Breakthrough Club of Wichita, Genesis Health Club and Kansas School of Medicine-Wichita on the Health Education and Leadership (HEAL) project which is funded by the Robert Wood Johnson Foundation. HEAL aims to empower individuals who have serious mental illness to take charge of their well-being through physical activity and health nutrition skills. Dr. Patterson is developing the curriculum for the project and to running long-term studies assessing the effects of exercise. The program he creates will primarily be used to train area health professionals and social service workers in how to recommend appropriate exercise and overall health regimens to patients with severe mental illnesses and receiving high-potency medications. One of his major objectives in the curriculum is to establish appropriate exercise recommendations for this high-risk population, then develop an online curriculum to disseminate the content. The project will result in a certification that will extend beyond Sedgwick County and be available to national organizations to better serve their communities when dealing with this issue.

The physical education faculty has been awarded external grants from a variety of organizations including The Robert Wood Johnson Foundation, United Methodist Health Ministry Fund, The Nakatomi Foundation (Tokyo, Japan), Suzuken Foundation, The Central Plains Area Agency on Aging, The Kansas Health Foundation, Cargill Cares, and Hygenic Corporation.

Grants proposed and awarded from 2003 to the present.

Year	2003	2004	2005	2006	2007	2008	Totals
Unfunded	\$3,204,647	\$457,500	47,300	\$3,040	\$0	\$48,250	\$3,760,737
Funded	\$55,694	\$23,000	\$17,624	\$100,00	\$0	\$693,250	\$889,568

Teaching

The physical education faculty is recognized for their quality teaching, in addition to their superior scholarship. Dr. Patterson was awarded the College of Education Teacher of the Year Award in 2007 and Dr. Rogers earned the same award in 2008. Dr. Rogers is also an adjunct professor (non-compensated) at the University of Kansas School of Medicine – Wichita where he provides lectures to sports medicine physician residents. Each of the physical education faculty is routinely nominated for various teaching awards including the COE Teaching Award, the Board of Trustees Excellence in Teaching, and the Academy of Effective Teaching Award.

SPTe evaluations routinely complement exercise faculty. Positive student comments regarding the quality of faculty are abundant and include, for example, the following: Ms. Lindenmeyer is described as “Very personable and has great experience to share”, “A wonderful teacher and I really enjoyed being her student”, “Very enthusiastic and knowledgeable”, and “She loves what she teaches”. Dr. Patterson is “Extremely knowledgeable”, “Very professional”, “Accommodates to needs well....and works well with students” and Dr. Rogers’ comments include “I felt that I learned a great deal”, “I wish all my instructors were as organized”, “Always comes across as a person as well as a teacher” and “He has exceptional knowledge of the material”. Mr. Bomgardner’s comments included “I learned a lot from this class and really enjoyed it”, “He is always great about working with students”, and “I would recommend this class to all students”. Mr. Rokosz’s evaluations included “Very knowledgeable and organized”, “The teacher made class interesting”, and “I will definitely be able to use what I learned in this course”.

The faculty constantly considers how the best interests of the student can be accommodated while maintaining the integrity of a quality education. Introduction to physical activity, technology for PreK-12 physical education, kinesiology, exercise physiology, care and prevention of athletic injuries, and motor learning, integrate a lab within the course itself. Other innovative and experiential learning opportunities developed and used by faculty include PowerPoint, web-enhanced instruction, BlackBoard, Pod casts, Geo Mats, Geo Caching, pedometers, digital movies, Fitnessgram software, and use of a Jeopardy-like computer game that is used to review for tests. A variety of guest lecturers including school teachers, coaches, and administrators speak in the classes on current issues in the profession. The pre-student teaching and student teaching requirements provide students an opportunity to apply learned knowledge to practical, experiential situations.

Professional Development

The physical education faculty is interested in, and actively pursues, professional development opportunities. All faculty have capitalized on the computer workshops and training provided by the College of Education Technology Center. Workshops attended and individual training has included the use of Blackboard, Banner, online education, and website development. Ms. Lindenmeyer has attended several leadership conferences, a variety of curriculum conferences, and was certified by the American Sport Education Program as a Certified Instructor of Coaching Principles and Sports First Aid in 2005. Dr. Rogers has attended four semesters of Japanese instructional classes here at WSU to better understand and more effectively address international educational distinctions. Mr. Bomgardner and Dr. Rogers have maintained their Certified Strength and Conditioning Specialist credentials from

the National Strength and Conditioning Association for nearly a decade by accumulating substantially more continuing education credits than required each year. Mr. Bomgardner does the same to maintain his Athletic Training Certification from the National Athletic Trainers' Association. In the past three years, he has also completed 18 credit hours towards a MEd degree in exercise science. Mr. Rokosz attends annual CPR and First Aid Instructional workshops. Dr. Patterson routinely attends electrocardiogram workshops and technology-based training sessions which have helped him to earn the College of Education Innovation in Technology Award in 2008. Furthermore, the faculty attends annual conferences to share their own scholarship while also updating their own knowledge based on current professional breakthroughs.

Lecturers Teaching in the Program

Lecturers teaching in the physical education program all possess advanced degrees and/or valuable years of experience as physical educators. These individuals provide unique wisdom, knowledge, and practical experience in specialty areas such as adapted physical education, health education, and elementary and secondary physical education. In addition, these lecturers are valuable in providing students with educational experiences in the public schools themselves. As indicated below, lecturers teaching in the physical education program all have advanced degrees and/or bring a wealth of knowledge and personal experience to the classrooms. In addition, Mary Copeland is a National Board Certified teacher.

Lecturers, degrees, practitioner experience, and content taught

Name	Degree	Years of Experience	Content Taught
Jen Byrne	BA, WSU	8	Intro to PE and Rhythmic methods
Merri Copeland	MEd, WSU	25	Health education
Jan Manion	MEd, WSU	35	Student teaching supervision
Robert Marley	MS, ESU	38	PE activities courses
Randy McVey	MA, ESU	12	PE methods for elem. educ. majors
Kim Morrissey	MEd, WSU	27	PE methods for elem. educ. majors
John Penka	MEd, WSU	10	Adapted PE

Concluding Comments

The quality of the physical education undergraduate program is solid as determined by the qualifications, strengths, and productivity of the faculty and lecturers. The program has endured a number of transitions, both in faculty and curriculum philosophy. The program is currently stable and student enrollment numbers are increasing.

III. The quality of the program as assessed by the curriculum and impact on students.

Curriculum Description

The physical education curriculum was designed in accordance with the National Association of Sport and Physical Education (NASPE) professional content standards as well as the Kansas State Department of Education (KSDE) standards. The quality of the faculty, placement of graduating students, superior relationships with student teachers, and administrative support have enabled the physical education program to gain recognition, respect, and credibility. The required courses within the physical education program are listed on the next page.

REQUIRED MAJOR COURSES (38-39 HOURS)

HPS 107A	Swimming I (or department consent) (0-1)
HPS 111	Foundations in Physical Education (3)
HPS 117	Standard First Aid and Community CPR (2)
HPS 201A	Introduction to Activities (2)
HPS 201B	Introduction to Activities (2)
HPS 201C	Introduction to Activities (2)
HPS 201D	Introduction to Activities (2)
HPS 229	Applied Human Anatomy (3)
HPS 306	Emergency Water Safety and WSI Training (2)
HPS 328	Kinesiology and Biomechanics (3)
HPS 329	Health and Wellness Concepts for PreK-12 Teacher Education
HPS 331	Care & Prevention Athletic Injuries (3)
HPS 460	Motor Learning (3)
HPS 490	Physiology of Exercise (3)

REQUIREMENTS FOR THE PROFESSIONAL EDUCATION SEQUENCE: 42 hours

Pre-professional Block	CI	271	Introduction to Professional Education (2) (B or better)
	CI	272	Pre-professional Field Experience (1) S required
Core I	CESP	334	Introduction of Diversity: Human Development (2)
	CI	321	Introduction to Diversity: Cultural Issues (2)
	HPS	360	Adapted PE (3) OR
	CI	320	Introduction to Diversity: Exceptionalities (2)
	CI	311	Introduction to Diversity: Field Experience (1)
	HPS	310	Organization/Administration of Physical Education (3)
Core I (Part II)	CI	317	Literacy Strategies in the Content Area (2)
	HPS	300	Rhythmic Activities PreK-12 (2)
	HPS	324	Instructional Strategies Assessment and Management: PE in Elementary Grades (3)
	HPS	325	PE in Elementary Grades Field Experience (1)
	CESP	433	Introduction to Learning and Evaluation (3)
	CI	427	History, Philosophy, and Ethics of Education (3)
Core II	HPS	311	Instructional Strategies Assessment and Management: PE in Secondary Grades 6-12 (3)
	HPS	312	PE in Secondary Grades 6-12 Field Experience (1)
	HPS	332	Technology for PreK-12 Physical Education (1)
	HPS	333	Assessment PreK-12 Physical Education (2)
	HPS	400	Instructional Strategies Assessment and Management: Health Education: PreK-12
	HPS	401	Health Education: PreK-12 Field Experience
Core III	HPS	471	Student Teaching – Secondary Physical Education (6)
	HPS	472	Student Teaching – Elementary Physical Education (6)
	HPS	473	Student Teaching Seminar (1)

At the undergraduate level, the physical education curriculum is built on the general education foundation. In addition, students are required to successfully complete 31 credit hours of core physical education course work. Core course work includes, for example, activity fundamental classes, first aid and CPR, anatomy, motor learning, kinesiology, exercise physiology, care and prevention of athletic injuries, and water safety instruction. Upon completing core major courses, students enter a four-part Core program. Core I introduces students to adapted physical education and organization and administration of physical education. Curriculum and Instruction department classes taken during Core I educate students about diversity, culture, and exceptionalities. In Core I, Part II, students are instructed in teaching methods for elementary school physical education and rhythms. Curriculum and Instruction courses taken during Core I, Part II, focus on literary strategies, learning and evaluation, and the history, philosophy, and ethics of education. Core II focuses on secondary physical education methods, technology in physical education, assessment in physical education, and health education methods. Core III is the student teaching semester where the physical education student utilizes his/her knowledge base in a practical situation.

Kansas State Department of Education Program Approval

In 2005, all teacher preparation programs underwent a comprehensive review to see if the WSU teacher preparation program was meeting state educational standards. The Kansas State Department of Education Office of Certification and Teacher Education provided the physical education program with an "approved" status. The physical education program's success in meeting these criteria reflects a quality education built upon state and national standards that is being provided by the physical education faculty.

Admission Standards.

Entrance into the teacher education program is governed by the Board of Regents, WSU, and College of Education requirements and occurs before the beginning of the first semester of the junior year. It includes:

- (1) Completion of 35 hours of General Education course work with an overall grade point average of 2.75 or above.
- (2) Completion, within those 35 hours, of 12 hours of the Basic Skills of English, with a grade of C or better; Communications, with a grade of C or better; College Algebra or any higher-level mathematics course, with a grade of C or better; and an introduction to statistics course.
- (3) Completion of an Introduction to Teacher Education course with a grade of B or better.
- (4) Completion of the Pre-Professional Skills Test (PPST) with minimum scores of 172 in writing, 173 in reading, and 172 in mathematics.
- (5) At least a 2.5 GPA in the major content area.

Before certification, students must meet the state's passing requirement of 161 on the Principles of Learning and Teaching (PLT--ETS).

Program Assessment

Program evaluation in the physical education BA program occurs both (a) to make decisions about individual candidates' progress through the program and (b) to make decisions about the effectiveness of the program at preparing candidates to meet the standards of the program. The program developed an assessment plan in 2005 and has been collecting/reviewing data since 2006.

The Physical Education Program Committee is the primary group responsible for reviewing the data and for making recommendations about the adequacy of the program. The Program Committee consists of the full-time members of the physical education faculty. The Physical Education Program Committee obtains advice from the Physical Education Advisory Council. The Advisory Council consists of the full-time members of the physical education faculty, three practitioners, two alumni, and two candidates.

On an annual basis, the Physical Education Program Committee examines aggregated data for the preceding year. This includes but is not limited to aggregated data from (a) decisions made about individual candidates at transition points, (b) the physical education advising survey, (c) candidate exit surveys from the COE, (d) surveys of graduates, (e) surveys of employers of graduates, and (f) any external reviews that occurred in the past year. Each year, the Physical Education Program Committee submits to the College of Education Unit Assessment Committee the annual report of its program review. Each report summarizes its conclusions and recommendations, and describes program changes undertaken, the problem each program change was designed to address, and how the data should change if the revision is successful. Additionally, it summarizes how effective prior program revisions were at addressing the problem(s) they were designed to solve, and any unexpected outcomes thought to be due to the program revisions.

In addition, Student Perceptions of Teaching Effectiveness (SPTE) evaluations are used to evaluate each faculty member's course every semester. Faculty uses this feedback to adjust curriculum as appropriate, modify teaching styles, and improve the overall communication of core content. Furthermore, students routinely provide feedback about the faculty and program via both formal and informal comments and discussions. The HPS department utilizes a HPS Concern Card. This card provides an opportunity for students to communicate program-related concerns and have their question or concern addressed by appropriate faculty or administrators. Additional feedback can be gained by the more formal university grievance procedures. At this point, there have not been any formal concerns that have not been settled internally.

One means by which the program is evaluated is that the BA physical education program has seven standards which are evaluated by embedded assessments within courses. In order to 'pass' an assessment, students must achieve a given proficiency level on rubrics. To consider a program as effective, 80% or more of the students should pass each assessment (i.e., standard criterion). Data compiled from 2007 indicate pass rates for each proficiency that exceed the minimum percents (i.e., 80%). Furthermore, as shown in the table below, pass rates in 2007 for Types of NCATE Knowledge exceed the minimum percent (i.e., 80%) set for the program standards. The only exception is Content Knowledge (78%) which the program committee perceived as not being of concern based upon the small data sample for that area. These data indicate that the program is preparing students to meet the established standards of learning.

NCATE Types of Knowledge

NCATE Types of Knowledge	Possible # of Scores	Scores with Data	
		Count	Pass Rate
Content Knowledge	10	9	78%
Dispositions	60	60	93%
Student Learning	46	45	87%
Pedagogical Content Knowledge	362	362	98%
Professional and Pedagogical Knowledge and Skills	49	49	98%

Advising

Advising of students in the BA physical education program is performed by Ms. Lindenmeyer. Data indicate that she is effectively advising students. Advising surveys completed by physical education students since 2006 when she joined the faculty indicate a high level of satisfaction. When asked to rate the quality of their advising on a scale of 1 (low) to 4 (high), surveys completed by 24 students resulted in an average score of 3.9.

Support Staff

The physical education faculty and students are supported by quality, competent office staff as well as graduate research assistants. The Human Performance Studies department has one administrative specialist serving various faculty and related degree programs. The department's administrative specialist, Stacy Johnson, has 20 years of experience (5 at WSU) and is able to multi-task effectively and efficiently. Ms. Johnson assumes responsibility for many tasks, including the ordering of text books, entering scheduling information into the appropriate data base, payroll, paperwork associated with faculty travel, monitoring the budget and related paperwork, and handling phone calls. Each untenured faculty member also has the assistance of a graduate research assistant to help him/her with research. The graduate research assistant works with the faculty for 10 hours per week. This assistance and support facilitates the ability of faculty to successfully engage in research endeavors while also balancing scholarship, teaching, and service commitments.

Use and Integration of Technology – BA Physical Education Program

The Mission of the College of Education is to ensure a technology rich culture in which students, faculty, staff, alumni, and the community work together to (a) pursue excellence, (b) promote intellectual exploration, and (c) enhance learning. A college-wide technology committee reviews policies and decisions related to technology implementation according to the COE Technology Action Plan. The COE Technology Center provides technical and instructional support staff, access to workstation and laptop computer labs, and a variety of digital technology for both faculty and student use. Both hardware and wireless networks are maintained to allow easy access to technology resources in all classrooms.

Technology is a major component of the physical education BA degree program. The program is on the cutting edge when it comes to the integration of technology into the education of the student. Physical education courses integrate knowledge regarding the use of heart rate monitors, step counters, body fat analyzers, digital movies, PowerPoint, web site development, Pod casts, digital cameras, and other physical education-specific software. Furthermore, the program offers HPS 332: Technology for K-12 Physical Educators (3 cr. hrs.) in the curriculum as a required course for undergraduate physical education majors. This course serves to expose the student to the multitude of ways in which technology can be used when teaching physical education students. Specifically, the course exposes physical education majors to the use of heart rate monitors, step counters, Geo Mats, Geo Caching, pedometers, digital movies, PowerPoint, Excel, Fitnessgram software, and other physical education-specific software. Further, this comprehensive integration of technology into the curriculum complements NCATE and physical education national and state accreditation requirements.

Curriculum Effects

The effects of the physical education curriculum on program graduates are evident by a number of observations. First, as mentioned above, the curriculum for the physical education program has been recognized as meeting all state guidelines. Second, students have provided feedback on

assessment surveys indicating satisfaction with the curriculum. Third, cooperating student teachers are complimentary regarding the competency of students they have had working with their classrooms. Fourth, SPTE course evaluations are consistently favorable. Fifth, students have an extremely high rate of placement. In the past two years, graduating students have accepted positions with Hamilton Middle School, Coleman Middle School, Gardner Elementary, Mineha Elementary, Loveture Elementary, Jackson Elementary, Great Bend Middle School, Wilbur Middle School, Woodman Elementary School, and Dodge City Public Schools.

IV. Demonstrated student need and employer demand for the program.

Employer Need for the Program

According to the US Department of Labor Bureau of Labor Statistics Occupational Outlook Handbook (2008-2009 edition: www.bls.gov/oco/ocos069.htm), there were approximately 1.5 million elementary school teachers, 1.1 million secondary school teachers, 674,000 middle school teachers, 437,000 preschool teachers, and 170,000 kindergarten teachers in 2006. The vast majority work in elementary and secondary schools.

Employment of school teachers is expected to grow by 12% between 2006 and 2016, about as fast as the average for all occupations. However, because of the size of the occupations in this group, this growth will create 479,000 additional teacher positions, more than all but a few occupations. Job prospects are expected to be favorable, with particularly good prospects for teachers in less desirable urban or rural school districts.

The number of teachers employed is dependent on state and local expenditures for education and on the enactment of legislation to increase the quality and scope of public education. At the Federal level, there has been a large increase in funding for education, particularly for the hiring of qualified teachers in lower income areas. Also, some states are instituting programs to improve early childhood education, such as offering full day kindergarten and universal preschool. These programs, along with projected higher enrollment growth for preschool age children, will create many new jobs for preschool teachers, which are expected to grow much faster than the average for all occupations.

Job opportunities for teachers over the next 10 years will vary from good to excellent. Most job openings will result from the need to replace the large number of teachers who are expected to retire over the 2006-2016 period. Also, many beginning teachers decide to leave teaching for other careers after a year or two creating additional job openings for teachers. Job prospects should be better in inner cities and rural areas than in suburban districts. Many inner cities—often characterized by overcrowded, ill-equipped schools and higher-than-average poverty rates—and rural areas—characterized by their remote location and relatively low salaries—have difficulty attracting and retaining enough teachers. Increasing enrollments of minorities, coupled with a shortage of minority teachers, should cause efforts to recruit minority teachers to intensify. Also, the number of non-English-speaking students will continue to grow, creating demand for bilingual teachers.

Physical education is an important component within the educational system and has gained renewed interest, acceptance, respect, and credibility as a result of a growing incidence of childhood obesity, diabetes, and other health issues that are directly related to a lack of physical activity. Physical education is an integral part of the total education of every child in pre-kindergarten through grade 12. Quality physical education programs are needed to increase the physical competence, health-related fitness, self-responsibility and enjoyment of physical activity for all students so that they can be physically active for a lifetime. In addition, physical education can

improve physical fitness, skill development, self-confidence, self-discipline and relationships with peers while reducing stress

There is a continuous need for certified physical educators. Faculty receives phone calls all summer long inquiring about the availability of any graduating physical educators who might still need a job. The job market is robust for physical educators because, in part, of the continued amount of scholarship documenting the importance of physical activity and healthy decision-making. WSU's quality physical education program is well known and respected by urban, suburban, and rural school districts throughout the state of Kansas.

Student Need for the Program

Based on the current and expected job market described above, as well as current enrollment data, there is a genuine and continued need for the undergraduate program in physical education. As indicated by the data provided in the section VI of this report, the number of students pursuing the undergraduate degree in physical education has remained steady over the past five years while the number of degrees conferred has increased.

PreK-12 physical education student enrollment is expected to increase as a result of various faculty transitions and curriculum revisions. WSU's location in a metropolitan environment will always benefit recruitment efforts as students can receive exposure and broadened "life" knowledge that cannot be learned in the less diverse and smaller populations surrounding Emporia State, Pittsburg State, and Fort Hays State Universities. As a teacher in today's society, this well-rounded exposure to diversity and diverse cultures is critical to the success of any teacher. Ms. Lindenmeyer actively recruits prospective WSU physical educators at local high school career fairs in the Wichita and surrounding school districts. Dr. Rogers has met with Kansas community college academic advisors and the WSU Admission Office staff to discuss and promote the physical education program. In addition, faculty regularly attends COE events, campus recruitment activities, and health fair exhibits. Additional recruitment efforts have been pursued through web page development and promotional brochures.

V. The services the program provides to the discipline, the university, and beyond.

Professional Involvement

The physical education faculty is involved with professional associations and has occupied, and currently holds, a variety of leadership roles. Ms. Lindenmeyer is chair of higher education of the Kansas Association of Health, Physical Education, Recreation, and Dance. She also has 29 years of public school experience where she was a Highly Qualified Teacher, served as an athletic director, and chair of a physical education department. Dr. Rogers is serving his second three-year term as chair of the Strategic Health Initiative on Aging and has served as co-chair for the Special Interest Group on Aging, both for the American College of Sports Medicine. He is a past-president of the Central States Regional Chapter of the American College of Sports Medicine which consists of Kansas, Oklahoma, Missouri, and Arkansas. He is the vice president of the Active Aging Association of Japan and serves on the Executive Committee for the International Society for Aging and Physical Activity. He has also presented lectures and workshops for professional organizations in Hiroshima, Tokyo, Mito, Nagoya, Shimane (Japan), Prague (Czech Republic), Cologne (Denmark), Seoul (South Korea), Cologne, Berlin, Frankfurt (Germany), Krakow (Poland), Taipei (Taiwan), Salzburg (Austria), Mexico City, Puebla, Chihuahua, and Puerto Vallarta (Mexico) and throughout the United States and Canada. He has also developed and chaired a variety of symposia at many conferences. Dr. Patterson is currently running for president of the Central States Regional

Chapter of the American College of Sports Medicine and has served on several committees within that organization. He has also presented lectures for a variety of professional organizations throughout the United States. Mr. Bomgardner is the Kansas representative for NATA District V for the NATA Research and Education Foundation. He is also the Kansas Athletic Trainers' Society liaison to the Board of Certification Approved Provider Program which provides organizations with opportunities to offer continuing education credits for certified athletic trainers through symposia and meetings. Mr. Marley, a lecturer with 37 years of public school experience, is a member of the National Educational Research Policy and Priorities Board, an organization under the domain of the Office of Educational Research and Improvement with the U.S. Department of Education. He also serves on the Mid America All Indian Center Board of Directors where he works with the Kansas Indian Educators Association. He also has been appointed to serve on the American Indian and Alaska Native Research Agenda, a committee resulting from Executive Order 13096. Mr. Rokosz received a 1998 service award from the National Intramural Sports Council of the American Association of Health, Physical Education, Recreation, and Dance.

Service to WSU, the COE, and the HPS Department

Physical education faculty support and respect the goals of WSU. Physical education faculty attend university functions, participate in university new student and faculty orientations and welcome events, and fundraise for the university's sponsored radio station. Physical education faculty also serves on vital university committees including, for example, the Institutional Review Board, Undergraduate Research Committee, and the Faculty Senate. The wisdom gained from these committee exposures benefits the functioning of the physical education degree program. Similarly, physical education faculty takes a prominent role in various COE activities. Physical education faculty serves on the Unit Assessment, Online Teaching, Undergraduate Teaching Programs, Strategic Planning, Curriculum, Faculty Personnel, and Leadership Team Committees. Faculty regularly attends COE meetings and provides valuable input where appropriate. In 2008, Mr. Bomgardner received the COE Service Award in recognition of his outstanding service activities.

The physical education faculty is highly involved in daily HPS department operations. Faculty serves on the merit, travel, and curriculum committees. The faculty is in their offices on a daily basis and willingly visits with, and addresses the needs of, students on a walk-in basis. In addition, faculty assist with special events including the annual HPS Chili Cook-off and Student Appreciation Day and are preparing to help the department host an upcoming Kansas Association of Health, Physical Education, Recreation, and Dance (KAHPERD) Convention (2010) at WSU which will attract approximately 800 attendees.

Furthermore, the physical education faculty and students also established a student organization, "Team K-12", in 2006. The purpose of Team K-12 is to (a) promote an appreciation of, commitment to, involvement in, and responsibility to the field of physical education, (b) support community events in the area of physical education (e.g., Jump Rope for Heart, Hoops for Heart, Kansas Kids Fitness Day), (c) support the state, district, and national physical education organizations, (d) provide a variety of educational and professional development opportunities, and (e) provide support and camaraderie among physical education majors. Through various fund raising initiatives, Team K-12 raises enough money to send a large constituency of students to the annual state professional conventions. In addition, Team K-12 offers lectures provided by invited speakers, holds an annual bowling and billiards party, and hosts a variety of game nights throughout the year.

Services To The Kansas, Wichita, And The Surrounding Community

Surrounding teachers play a prominent role in the physical education program. Current physical educators routinely teach as lecturers, serve as guest speakers in various courses, and provide both pre-student teaching and student teaching experiences for K-12 physical education students. Specifically, for example, physical education majors spend approximately 15 hours per semester in the public schools performing pre-student teaching beginning their junior year. Furthermore, faculty and students assist with Kansas Kids Fitness Day activities and assist the public schools in numerous events related to promoting physical activity.

Faculty routinely participates in additional community programs. For example, Mr. Bomgardner volunteers as an athletic trainer through Via Christi Sports Medicine to provide athletic training services at high school athletic event at public schools in the greater Wichita community. He also lectures to emergency medical technicians on behalf of the Kansas Athletic Trainers' Society throughout the state of Kansas and also serves on the North Wichita YMCA Program and Membership Committee. Mr. Rokosz is a certified Red Cross First Aid Volunteer Instructor. Mr. Rokosz teaches and certifies approximately 200 WSU students annually. In addition, Mr. Rokosz hosts First Aid/CPR clinics for the community and teaches and certifies approximately 50 individuals annually. Dr. Rogers has been a volunteer for the National Youth Sports Program held in Wichita and has served on the executive committee for the Senior Nutrition & Activity Program of Senior Services, Inc (Wichita) and on the advisory council for the Magic Mornings Program, Healthy Options for Planeview (Wichita). As Director of the Human Performance Laboratory, Dr. Patterson provides voluntary consultant work with numerous professional and amateur athletes, hospitals regarding cardiac rehabilitation, and speaking engagements with community fitness centers. Mr. Marley serves on the Board of Directors for Hunter Health Clinic. His experience and partnership with the Clinic enables him to communicate critical health issues pertaining to society. His input is valuable to updating our health-related curriculum as appropriate.

VI. The program's cost effectiveness.

Enrollment Trends for the Department

Information provided by the WSU Office of Institutional Research reflects that student credit hours within the department for all undergraduate programs have increased over the past five years.

Student credit hours for all departmental undergraduate programs

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Lower level	4,441	4,148	3,817	3,603	3,817	3,935
Upper division	3,852	4,333	4,639	4,530	4,918	4,454
Total	8,293	8,481	8,456	8,133	8,735	8,420

Students, Degrees Conferred in the Program

Student enrollment in the BA physical education program has increased substantially during the past five years. The difference between FY 2004 and 2008 represents an increase of 86%.

Majors in the BA physical education program

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Majors	35	51	47	61	65	52

The number of degrees conferred in the BA physical education program is reflected below.

Number of degrees conferred

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Degrees Conferred	5	10	11	14	14	10.8

FTE per Student Credit Hour Ratio

FTEs per SCH reflect an efficient and effective department. Based on data from the WSU Office of Institutional Research, tenured/tenure eligible faculty is generating an average of 1,312 credit hours annually (five year average). The SCH/FTE ratio indicates that a single tenured/tenured track faculty member averages 219 credit hours (five year average). SCH per other instructional faculty reveals an average of 234 credit hours (five year average) generated by other instructional faculty. Combining all SCH generated by both tenured/tenure track and other instructional faculty, there is an average of 229 credit hours are being generated per FTE. Again, these numbers reflect a highly efficient and cost-effective department.

HPS Department OOE

The HPS department is very resourceful in trying to accomplish its degree program objectives. The department's 12-month OOE budget for FY 2008-2009 is \$18,301, or \$1,525 per month.

Summary

As indicated above, the number of students enrolled in the BA physical education program has increased significantly over the past five years. It is anticipated that there will be a continued increase in the number of physical education degrees conferred based on escalating undergraduate enrollments in the program. Likewise, based on recent enrollment trends and the strength of the program, it is anticipated that the number of majors in the physical education program will continue to increase. Furthermore, student achievement, satisfaction and post-graduation employment rates are very high, suggesting that a program of high quality is being provided.



Wichita State University

COLLEGE OF EDUCATION

**KANSAS BOARD OF REGENTS PROGRAM REVIEW
AY 2008-2009**

Department of Human Performance Studies

Discipline:

Exercise Science (CIP Code: -----)

Degree Program:

MEd Exercise Science

I. Centrality of the program to fulfilling the mission and role of WSU.

Overview

The Department of Human Performance Studies offers a MEd degree in exercise science. The MEd in exercise science was recognized as a separate, free-standing degree in 2006. Prior to this, students received a MEd degree in physical education with an emphasis in either (a) K-12 physical education/pedagogy, or (b) exercise science. However, due to faculty transitions and low enrollment in the physical education/pedagogy tract, the program was suspended in 2005. Currently, the MEd in exercise science is the only graduate-level program offered in the department.

The graduate program consists of a common core of four classes, a significant number of elective classes in exercise science, and practical experience. It also offers research thesis, internship experience, or coursework-only options. The program provides instruction, conducts research and offers public service/outreach regarding the scientific aspects of exercise and sport and their affects on health, fitness, performance and quality of life. The program prepares students for careers in health promotion and exercise science. Graduates are represented by careers in hospital or corporate health promotion/wellness centers; adult fitness centers; military institutes; senior living communities; clinical exercise physiology clinics; cardiac rehabilitation clinics; coaching; and college teaching. The program is also structured to prepare students for further academic study in such areas as physical/occupational therapy, medical and allied health, and exercise science at the doctoral level.

The program also offers a graduate certificate in Functional Aging. Students seeking a graduate certificate must be admitted to the graduate school in a degree program or in a non-degree, category A status. All graduate school policies relative to admissions apply. Students must maintain a grade point average of 3.00 or better. The 13 credit hour graduate certificate in functional aging, which consists of coursework from the exercise science, human factors psychology, gerontology, and/or communication sciences and disorders programs, provides knowledge and training for those working in the field of aging. Students gain education regarding older adults and the retention of functional ability and an understanding of the physiologic changes that occur with aging and how these changes impact the quality of life for older adults.

WSU, COE, and Exercise Science Degree Program Mission Statements

The MEd in exercise science compliments the mission of WSU, the COE, and the HPS department. WSU, as well as the COE and HPS department, strive to provide comprehensive educational opportunities by blending academic theory with practical learning opportunities while also engaging in research and community partnerships.

The mission of the exercise science program at WSU is to promote health and well-being through research, teaching, and service/outreach in the study of physical activity. Faculty work with students to improve the lives of citizens of Wichita, the state of Kansas, the United States, and the world by the creation and dissemination of knowledge about physical activity and its relationship to health and well-being. An essential aspect of these efforts is the preparation of scholars and professionals in the study of exercise science at the graduate level. In addition, the program educates the public and the university community about the scientific aspects of physical activity, especially exercise, sport, and the movements of daily life. Emphasizing practical skill acquisition, the program prepares students for careers in adult fitness centers; senior living communities; hospital- or corporate-based wellness programs and other health/fitness related agencies; research and military institutes; as well as for future academic study. The Human Performance Laboratory works with a variety of populations including athletes, the physically and mentally challenged, children, and older adults. The laboratory has access to a variety of state-of-the-art technology to measure exercise/work performance,

body composition, bone health, metabolic/biochemical parameters, isokinetic strength, postural balance, gait and other human movement, functional abilities, psychological dimensions, and psychomotor skills. The department's Center for Physical Activity and Aging encourages and facilitates research, instruction, and public service in all areas of physical activity and aging through relationships with a full range of academic units within the university and in partnership with organizations outside the university.

More specifically, the exercise science program at WSU is responsible for:

- Creating and disseminating basic and applied knowledge about physical activity and its relationship to health and well-being;
- Preparing professionals for leadership roles in the field of exercise science;
- Qualifying individuals for advanced study or further training in exercise science or health-related fields such as physical therapy, medicine, and cardiac rehabilitation;
- Preparing graduate students at the master level to understand and create basic and applied knowledge in the study of physical activity, especially exercise, sport, and the movements of daily life;
- Preparing students to lead others in developing physically active and healthy lifestyles as well as to supervise programs in exercise and sport;
- Providing learning experiences related to physical activity and health for the general population of the Wichita metropolitan community; and
- Providing services and outreach related to physical activity and health to the citizens of Wichita (in particular), but more generally to the national and world communities.

As indicated in the WSU mission statement, "WSU is committed to providing comprehensive educational opportunities in an urban setting . . . the University seeks to equip both students and the larger community with the educational and cultural tools they need to thrive in a complex world. . ." The exercise science program effectively "advance[s] the University's goals of providing high quality instruction, making original contributions to knowledge and human understanding, and serving as an agent of community service" (WSU Mission Statement).

WSU, the COE, and the exercise science MEd program all place a priority on scholarship, quality instruction, and community service. As will be apparent throughout this report, the exercise science faculty use scholarship in teaching, are on the cutting edge via their integration of technology in to the classroom, and continually cultivate partnerships to meet community needs.

II. The quality of the program as assessed by the strengths, productivity, and qualifications of the faculty.

Scholarship

The two faculty members teaching graduate exercise science courses in the department have doctoral degrees and are well established in their profession.

HPS department faculty teaching in the MEd exercise science program

Faculty	Academic Rank	Highest Degree, Date Earned
Michael Rogers ⁺	Associate Professor	PhD, 1996
Jeremy Patterson ⁺	Assistant Professor	PhD, 2004
<i>Vacant Position</i>	N/A	N/A

⁺ Full graduate faculty status

The faculty possesses expertise in a variety of areas including research methods, statistics, advanced exercise physiology, anatomy, motor integration, aging, and cardiac rehabilitation. The table below reflects the quality of full-time HPS department faculty teaching in the MEd exercise science program based on scholarly publications and presentations.

Peer reviewed journal articles, books, and book chapters and professional presentations from 2003 to the present.

Name	Primary Discipline	Publications						Presentations					
		2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Patterson	Ex. Science	-	2	1	2	4	-	-	1	6	11	16	5
Rogers	Ex. Science	6	8	7	8	2	5	29	29	22	29	11	20

Faculty publications have appeared in premier journals including *American Journal of Lifestyle Medicine, Journal of Physical Activity and Aging, Medicine and Science in Sports and Exercise, Journal of Orthopedic and Sports Physical Therapy, Geriatrics and Aging, Journal of Sports Science and Medicine, Asian Journal of Exercise and Sport Science, Journal of Aging Health, Preventive Medicine, European Journal of Applied Physiology, Journal of Housing for the Elderly, Isokinetics and Exercise Science, Disability and Rehabilitation, Women and Health, Journal of Cardiac Failure, Journal of Exercise Physiology, Journal of Cardiopulmonary Rehabilitation, and Journal of Occupational Rehabilitation.*

The scholarship capabilities and established expertise is further recognized by the faculty's role on editorial review boards and serving as peer reviewers of manuscripts and external grants. Faculty have served editorial boards for a variety of journals including *Journal of Aging and Physical Activity, Active Aging Today, Journal of Aging Health, ACSM's Health and Fitness Journal, and Journal of Sports Science and Medicine.* They have also served as peer reviewers for a large number of journals including *American Journal of Physical Medicine and Rehabilitation, Aging Clinical and Experimental Research, Archives of Physical Medicine and Rehabilitation, Annals of Biomedical Engineering, Journal of Gerontology: Medical Sciences, Medicina Sportiva, Canadian Medical Association Journal, Journal of Social and Clinical Psychology, Research Quarterly for Exercise and Sport, American Journal of Physical Medicine and Rehabilitation, Biological Research for Nursing, Journal of Applied Physiology, Canadian Journal of Applied Physiology, Journal of Aging and Physical Activity, European Journal of Applied Physiology, and Clinical Exercise Physiology.* They are also regularly invited to review grant proposals for the Centers for Disease Control and have also reviewed grants for the Arthritis Research Campaign, the Flosie West Research Foundation, the Department of Veterans Affairs, and internal grants offered by other universities.

As noted above, the faculty is well published and respected. Dr. Rogers was recognized as the COE Research Award recipient in 2001 and 2006 and was named a Research Fellow of the American College of Sports Medicine in 2003. Dr. Rogers was awarded a Visiting Academic Scholar Appointment in Japan on behalf of the Japanese Foundation for Health and Aging in 2001, and awarded a Visiting Scholar from Abroad Appointment from Nagoya City University, Japan in 2002. Dr. Patterson was recognized as the COE Technology Innovation Award recipient in 2008 for the use of new technology in multiple research projects. He was a mentor for a McNair Scholar in 2006 that was awarded McNair Researcher of the Year and Best Study 2006. He has graduate faculty status at Oklahoma State University and Research Associate status at Cypress Heart Hospital.

Faculty's scholarship includes a variety of current projects in progress. Dr. Rogers' primary research interests concern the effects of balance and strength training on muscle and bone health, fall prevention, and functional capacity in older adults. In both rural and urban community-based settings,

he has conducted several studies that have developed, implemented, and evaluated exercise programs that target the physiological systems that control balance for older adults. He is currently collaborating with colleagues in Japan to determine the efficacy of various exercise programs for older adults in 12 cities/towns across Japan. He is also working with an interdisciplinary group of researchers from three Colleges within WSU to develop a fall prevention toolkit for older adults in Harvey County, a program that will eventually be implemented throughout the state of Kansas.

Dr. Patterson is currently collaborating with the Breakthrough Club of Wichita, Genesis Health Club and Kansas School of Medicine-Wichita on the Health Education and Leadership (HEAL) project which is funded by the Robert Wood Johnson Foundation. HEAL aims to empower individuals who have serious mental illness to take charge of their well-being through physical activity and health nutrition skills. Dr. Patterson is developing the curriculum for the project and to running long-term studies assessing the effects of exercise. The program he creates will primarily be used to train area health professionals and social service workers in how to recommend appropriate exercise and overall health regimens to patients with severe mental illnesses and receiving high-potency medications. One of his major objectives in the curriculum is to establish appropriate exercise recommendations for this high-risk population, then develop an online curriculum to disseminate the content. The project will result in a certification that will extend beyond Sedgwick County and be available to national organizations to better serve their communities when dealing with this issue.

The faculty has also been awarded external grants from a variety of organizations including The Robert Wood Johnson Foundation, United Methodist Health Ministry Fund, The Nakatomi Foundation (Tokyo, Japan), Suzuken Foundation, Cargill Cares, and Hygenic Corporation.

Grants proposed and awarded from 2003 to the present.

Year	2003	2004	2005	2006	2007	2008	Totals
Unfunded	\$3,204,647	\$457,500	47,300	\$3,040	\$0	\$48,250	\$3,760,737
Funded	\$55,694	\$23,000	\$17,624	\$100,00	\$0	\$693,250	\$889,568

Teaching

The graduate faculty is recognized for their quality teaching, in addition to their superior scholarship. Dr. Patterson was awarded the College of Education Teacher of the Year Award in 2007 and Dr. Rogers earned the same award in 2008. Dr. Rogers is also an adjunct professor (non-compensated) at the University of Kansas School of Medicine – Wichita where he provides lectures to sports medicine physician residents. Each of the exercise science faculty is routinely nominated for various teaching awards including the Board of Trustees Excellence in Teaching and the Academy of Effective Teaching Award.

SPTE evaluations routinely complement exercise faculty. Positive student comments regarding the quality of faculty are abundant and include, for example, the following: Dr. Patterson is “Extremely knowledgeable”, “Very professional”, “Accommodates to needs well...and works well with students” and Dr. Rogers’ comments include “I felt that I learned a great deal”, “I wish all my instructors were as organized”, “Always comes across as a person as well as a teacher”, and “He has exceptional knowledge of the material”.

The faculty constantly considers how the best interests of the student can be accommodated while maintaining the integrity of a quality education. Most of the exercise science graduate classes integrate a lab within the course itself. Other innovative and experiential learning opportunities developed and used by faculty include PowerPoint, web-enhanced instruction, BlackBoard, Pod casts, student poster presentations, the Applied Research course which provides opportunities for students to engage in research activities with the faculty, scientific methods explained through enjoyable activities

such as juggling, a moot court activity to teach exercise-related issues in a legal setting, and the development and use of a Jeopardy-like computer game that is used to review for tests. In addition, a variety of guest lecturers from the allied health fields speak in the classes on current issues in the profession. Furthermore, the culminating internship and thesis requirements provide students an opportunity to apply learned knowledge to practical, experiential situations.

Professional Development

The exercise science faculty is interested in, and actively pursues, professional development opportunities. All faculty have capitalized on the computer workshops and training provided by the College of Education Technology Center. Workshops attended and individual training has included the use of Blackboard, Banner, online education, and website development. Dr. Rogers has attended four semesters of Japanese instructional classes at WSU to better understand and more effectively address international educational distinctions. Dr. Patterson routinely attends electrocardiogram workshops and technology-based training sessions which have helped him to earn the College of Education Innovation in Technology Award in 2008. The faculty attends annual conferences to share their own scholarship while also updating their own knowledge based on current professional breakthroughs.

III. The quality of the program as assessed by the curriculum and impact on students.

Admission Standards.

WSU graduate school admission criteria require all candidates to have earned an undergraduate degree from a regionally-accredited institution and a minimum grade point average of 2.750 (4.0 system) for the last 60 hours of course work, in accordance with WSU graduate policy. Students pursuing the exercise science tract must also have the following prerequisites or a course equivalent: elementary chemistry, human anatomy and physiology, principles of diet and nutrition, biomechanics/kinesiology, and exercise physiology.

Curriculum Description

The exercise science curriculum was designed in accordance with professional standards established by the American College of Sports Medicine. The core courses provide preparation in the biological theory of exercise science as well as the skills required for the design and analysis of research. The exercise science program has three options: Thesis Option consisting of 34 credit hours, an Internship Option consisting of 36 credit hours, and a Coursework Option consisting of 36 hours. The option pursued by the candidate is determined based on the candidate's interests and under advisement of the faculty advisor. The thesis option is designed for those students who are interested in conducting research in exercise science and, in most cases, continue on to PhD studies. The thesis option requires an oral examination on the research. The non-thesis and coursework options are designed as a terminal non-thesis degree program for students who intend to pursue careers in areas related to exercise science, fitness, and/or allied health. These two options require written comprehensive examinations. The entire curriculum is provided on the following page.

Curriculum: Masters of Education in Exercise Science

Prerequisites

CHEM	101G	Elementary Chemistry (or equivalent)	3 Hours
BIO	223	Human Anatomy and Physiology (or equivalent)	5 Hours
HS	331Q	Principles of Diet and Nutrition (or equivalent)	3 Hours
HPS	328	Biomechanics/Kinesiology (or equivalent)	3 Hours
HPS	490	Exercise Physiology (or equivalent)	3 Hours

Required Core Courses (12 Hours)

HPS	800	Recent Literature in the Profession	3 Hours
HPS	815	Fitness Assessment/Exercise Recommendations	3 Hours
HPS	830	Advanced Physiology and Anatomy of Exercise	3 Hours
HPS	860	Research Methods in the Profession	3 Hours

Required Specialty Courses: Must complete three (9 credit hours) of the following courses for thesis and internship options. Must complete seven (18 credit hours) of the following courses for coursework option.

HPS	732	Pathophysiology of the Cardiovascular System	3 Hours
HPS	762	Test & Measurement in Human Performance	3 Hours
HPS	780	Physical Dimensions of Aging	3 Hours
HPS	790	Applied Exercise Physiology	3 Hours
HPS	795	Physiological Basis of Athletic Performance	3 Hours
HPS	796	Motor Integration	3 Hours
HPS	797	Exercise in Health and Disease	3 Hours
HPS	815	Fitness Assessment/Exercise Recommendations	3 Hours
HPS	890	Special Topics	1-3 Hours
HPS	895	Applied Research	1-3 Hours
SMGT	711	Structuring and Scheduling Sports Tournaments	3 Hours
SMGT	835	Legal Issues in the Profession	3 Hours
CEBP	704	Introduction to Educational Statistics*	3 Hours

Options

Thesis Option (34 hrs)

HPS 875	Thesis Research	2 Hours
HPS 876	Thesis	2 Hours
Required courses (25 Hours)		
Electives ⁺ (9 Hours)		
Examination: Oral Defense of Thesis		

Internship Option (36 hrs)

HPS 890	Special Topics	3 Hours
HPS 857	Internship [#]	6 Hours
Required courses (30 Hours)		
Electives ⁺ (6 Hours)		
Examination: Written Comprehensive		

Coursework option (36 hours)

Required courses (30 hours)	
Electives ⁺ (6 hours)	
Examination: Written Comprehensive	

* Required for students choosing the thesis option.

All required core and specialty courses must be completed before taking the internship.

⁺ Electives are to be selected with advisor's approval.

Program Assessment

Program evaluation in the exercise science MEd program occurs both (a) to make decisions about individual candidates' progress through the program and (b) to make decisions about the effectiveness of the program at preparing candidates to meet the standards of the program. The faculty developed an assessment plan in 2005 and has been collecting/reviewing data since 2006.

The Exercise Science Program Committee is the primary group responsible for reviewing the data and for making recommendations about the adequacy of the program. The Program Committee consists of the full-time members of the exercise science graduate faculty. The Exercise Science Program Committee obtains advice from the Exercise Science Advisory Council. The Advisory Council consists of the full-time members of the graduate exercise science faculty, two practitioners, two alumni, and two candidates.

On an annual basis, the Exercise Science Program Committee examines aggregated data for the preceding year. This includes but is not limited to aggregated data from (a) decisions made about individual candidates at transition points, (b) the exercise science advising survey, (c) candidate exit surveys from the COE and/or Graduate School, (d) surveys of graduates, (e) surveys of employers of graduates, and (f) any external reviews that occurred in the past year. Each year, the Exercise Science Program Committee submits to the College of Education Unit Assessment Committee the annual report of its program review. Each report summarizes its conclusions and recommendations, and describes program changes undertaken, the problem each program change was designed to address, and how the data should change if the revision is successful. Additionally, it summarizes how effective prior program revisions were at addressing the problem(s) they were designed to solve, and any unexpected outcomes thought to be due to the program revisions.

In addition, Student Perceptions of Teaching Effectiveness (SPTE) evaluations are used to evaluate each faculty member's course every semester. Faculty uses this feedback to adjust curriculum as appropriate, modify teaching styles, and improve the overall communication of core content. Furthermore, students routinely provide feedback about the faculty and program via both formal and informal comments and discussions. The HPS department utilizes a HPS Concern Card. This card provides an opportunity for students to communicate program-related concerns and have their question or concern addressed by appropriate faculty or administrators. Additional feedback can be gained by the more formal university grievance procedures. At this point, there have not been any formal concerns that have not been settled internally.

One means by which the program is evaluated is that the MEd exercise science program has seven standards which are evaluated by embedded assessments within courses. In order to 'pass' an assessment, students must achieve a score of 70% or higher. To consider a program as effective, 80% or more of the students should pass each assessment (i.e., standard criterion). As can be seen in the table below, data compiled from 2006 and 2007 (see below) indicate pass rates for each standard exceed the minimum percents (i.e., 80%) set for each proficiency. This indicates that the program is preparing students to meet the established standards of learning.

**MEd Exercise Science
Program Standards**

Standard	Assessment	Criterion	Standard Criterion	Overall Pass Rate
1	HPS 800 - Midterm Exam	70% or better	80%	100%
2	HPS 800 - Research Proposal	70% or better	80%	100%
3	HPS 860 - Research Presentation	70% or better	80%	100%
4	HPS 830 - Final Exam	70% or better	80%	94%
5	HPS 815 - Midterm Exam	70% or better	80%	100%
6	HPS 815 - Final Exam	70% or better	80%	100%
7	HPS 815 - Practical Exam	70% or better	80%	100%

As apparent from the internship evaluation results below from 2003-2008, the graduating exercise science students who chose the Internship Option within the program were viewed by exercise science practitioners as very capable.

2003-2008 INTERNSHIP EVALUATIONS
Information provided by Intern Site Supervisors

<u>Relations with Others</u>		<u>Total</u>	<u>Dependability</u>		<u>Total</u>
Exceptionally well accepted		11	Completely dependable		10
Works well with others		1	Above average dependability		2
Gets along satisfactorily		0	Usually dependable		0
Has some difficulty working w/others		0	Sometimes careless		0
Works very poorly with others		0	Unreliable		0
<u>Attitude – Applications to Work</u>		<u>Total</u>	<u>Ability to Learn</u>		<u>Total</u>
Outstanding in enthusiasm		10	Learns very quickly		11
Very interested and industrious		2	Learns readily		1
Usually dependable		0	Average in learning		0
Sometimes neglectful or careless		0	Rather slow to learn		0
Unreliable		0	Very slow to learn		0
<u>Judgment</u>		<u>Total</u>	<u>Quality of Work</u>		<u>Total</u>
Exceptionally mature		10	Excellent		11
Above average in making decisions		2	Very good		1
Usually makes the right decisions		0	Average		0
Often uses poor judgment		0	Below average		0
Consistently uses bad judgment		0	Unacceptable		0

Additional assessment mechanisms also support that the program is effective:

- Surveys of recent program graduates indicate a high level of satisfaction with the program. When asked to rate the overall program on a scale of 1 (low) to (10) high, respondents gave the program a mean score of 9.4.
- Ratings of candidates by their internship site supervisor (i.e., employer) indicated that students were prepared for effective practice. Each candidate successfully scored at least a '3' out of '5' on individual evaluations within HPS 857.

Data gathered between 2003 and 2008 from the Graduate Student Exit Survey administered by the WSU Graduate School indicates a high level of satisfaction with the program. Below are percentages of students who indicated they were 'satisfied' or 'very satisfied' with:

- The program overall (92.1%)
 - Feedback provided by faculty about course work (97.4%)
 - Quality of instruction in courses required by your program (100%)
- Below are the percentages of students who 'agree' with the following statements:
- Faculty/staff were well-informed about program degree requirements (92%)
 - Faculty/staff were accessible (97%)
 - Course offerings enabled me to complete my degree in a timely manner (97%)

Based on completed surveys of WSU MEd exercise science alumni, 100% of the students who graduated between 2003 and 2008 are employed in an exercise science-related position or are currently pursuing additional graduate studies. Graduates have gone on to careers or advanced study in: corporate fitness, commercial fitness, physical education, personal training, community college instructors, university faculty, strength and conditioning coaching, medical school, physician's assistant school, physical therapy school, university sport and recreational programs, businesses related to exercise science, and the military as aerospace physiologists or physical training instructors.

Advising

Advising of all graduate students in the MEd exercise science program is performed by Drs. Patterson and Rogers. Data indicate that they are effectively advising students. Advising surveys completed by exercise science students since 2003 indicate a high level of satisfaction. When asked to rate the quality of their advising on a scale of 1 (low) to 4 (high), surveys completed by 58 students resulted in an average score of 3.8. In addition, data gathered between 2003 and 2008 from the Graduate Student Exit Survey administered by the WSU Graduate School indicates a high level of satisfaction with the advising. Below are the percentages of students who 'agree' with the following statements:

- My academic advisor was usually accessible for advising (97%)
- My academic advisor was knowledgeable about requirements in the major (100%)
- My academic advisor made clear the requirements I needed to complete my degree (92%)
- My academic advisor provided information to help me select courses (97%)
- My advisor was accessible when I wanted to talk about my research (100%)
- My advisor provided feedback about rough drafts of my research (100%)
- My advisor provided useful advice about preparing for my research defense (100%)

Support Staff

The exercise science faculty and students are supported by quality, competent office staff as well as graduate research assistants. The Human Performance Studies department has one administrative specialist serving various faculty and related degree programs. The department's administrative specialist, Stacy Johnson, has 20 years of experience (5 at WSU) and is able to multi-task effectively and efficiently. Ms. Johnson assumes responsibility for many tasks, including the ordering of text books, entering scheduling information into the appropriate data base, payroll, paperwork associated with faculty travel, monitoring the budget and related paperwork, and handling phone calls. Each untenured faculty member also has the assistance of a graduate research assistant to help him/her with research. The graduate research assistant works with the faculty for 10 hours per week. This assistance and support facilitates the ability of faculty to successfully engage in research endeavors while also balancing scholarship, teaching, and service commitments.

Use and Integration of Technology – MEd Exercise Science Program

The Mission of the College of Education is to ensure a technology rich culture in which students, faculty, staff, alumni, and the community work together to (a) pursue excellence, (b) promote intellectual exploration, and (c) enhance learning. A college-wide technology committee reviews policies and decisions related to technology implementation according to the COE Technology Action Plan. The COE Technology Center provides technical and instructional support staff, access to workstation and laptop computer labs, and a variety of digital technology for both faculty and student use. Both hardware and wireless networks are maintained to allow easy access to technology resources in all classrooms.

Technology is a major component of the graduate exercise science degree program. The program is on the cutting edge when it comes to the integration of technology into the education of the student. Exercise science courses integrate knowledge regarding the use of heart rate monitors, lactate analyzers, step counters, body fat analyzers, digital movies, PowerPoint, web site development, Podcasts, digital cameras, and other exercise science-specific software.

The exercise science program uses technology in many ways. For example, courses explain how the body responds and adapts to exercise. In the exercise science graduate courses, students are trained to evaluate aerobic fitness levels of individuals by being taught how the oxygen/carbon dioxide gas analyzer can be used in conjunction with a variety of computerized ergometers to measure an individual's oxygen consumption, food substrate utilization, cardio-vascular and respiratory responses during an acute exercise bout and/or as a result of adaptation to a training program. Students also become familiar with using a computerized cycle ergometer and test-software to determine anaerobic (i.e., sprint) capacity in athletes. Students are trained to use a hand-held computerized force dynamometer to evaluate muscle strength. Students gain experience using an electromyography unit to evaluate muscle contraction activity during exercise. Students develop an understanding of how dual-energy x-ray absorptiometry (DEXA) can be used to determine body composition (i.e., fat, bone, muscle mass) as a means for assessing the efficacy of weight loss/gain programs. Students gain experience using a computer-integrated force platform to determine limits of stability and other parameters of postural balance.

IV. Demonstrated student need and employer demand for the program.

Employer Need for the Program

According to the US Department of Labor Bureau of Labor Statistics Occupational Outlook Handbook (2008-2009 edition: www.bls.gov/oco/ocos296.htm) jobs for fitness workers are expected to increase much faster than the average for all occupations. Fitness workers should have good opportunities due to rapid job growth in health clubs, fitness facilities, and other settings where fitness workers are concentrated. Employment of fitness workers is expected to increase 27 percent (i.e., 63,000 additional jobs) over the 2006-2016 decade, much faster than the average for all occupations. These workers are expected to gain jobs because an increasing number of people are spending time and money on fitness, and more businesses are recognizing the benefits of health and fitness programs for their employees. Aging baby boomers are concerned with staying healthy, physically fit, and independent. Moreover, parents' growing concern about childhood obesity has resulted in rapid increases in children's health club membership. Increasingly, parents are also hiring personal trainers for their children, and the number of weight-training gyms for children is expected to continue to grow. Health club membership among young adults also has grown steadily, driven by concern with physical fitness and by rising incomes.

Opportunities are expected to be good for fitness workers because of rapid job growth in health clubs, fitness facilities, and other settings where fitness workers are concentrated. In addition, many job openings will stem from the need to replace the large numbers of workers who leave these occupations each year.

Median annual earnings of fitness trainers and aerobics instructors in May 2006 were \$25,910. The middle 50 percent earned between \$18,010 and \$41,040. The top 10 percent earned \$56,750 or more. These figures do not include the earnings of the self-employed. Earnings of successful self-employed personal trainers can be much higher. Median annual earnings in the industries employing the largest numbers of fitness workers in 2006 were as follows:

General medical and surgical hospitals	\$29,640
Local government	27,720
Fitness and recreational sports centers	27,200
Other schools and instruction	22,770
Civic and social organizations	22,630

Student Need for the Program

Based on the current and expected job market described above, as well as current enrollment data, there is a genuine and continued need for the graduate program in exercise science. As indicated by the data provided in the section VI of this report, the number of students pursuing graduate education in exercise science remains strong and steady.

The faculty is also working to maintain and increase enrollments in the exercise science MEd degree. Dr. Rogers has been supported by the graduate school to attend the Central States ACSM conference for the purpose of recruiting students for the program from Kansas, Missouri, Arkansas, and Oklahoma. Additional recruitment efforts have been pursued through web page development, promotional brochures, listings on GradSchools.com and other websites, and direct communication with students in undergraduate programs at WSU.

V. The services the program provides to the discipline, the university, and beyond.

Service to the Exercise Science Profession

The exercise science graduate faculty is involved with professional associations and has occupied, and currently holds, a variety of leadership roles. Dr. Rogers is serving his second three-year term as chair of the Strategic Health Initiative on Aging and has served as co-chair for the Special Interest Group on Aging, both for the American College of Sports Medicine. He is a past-president of the Central States Regional Chapter of the American College of Sports Medicine which consists of Kansas, Oklahoma, Missouri, and Arkansas. He is the vice president of the Active Aging Association of Japan and serves on the Executive Committee for the International Society for Aging and Physical Activity. He has also presented lectures and workshops for professional organizations in Hiroshima, Tokyo, Mito, Nagoya, Shimane (Japan), Prague (Czech Republic), Cologne (Denmark), Seoul (South Korea), Cologne, Berlin, Frankfurt (Germany), Krakow (Poland), Taipei (Taiwan), Salzburg (Austria), Mexico City, Puebla, Chihuahua, and Puerto Vallarta (Mexico) and throughout the United States and Canada. He has also developed and chaired a variety of symposia at many conferences. Dr. Patterson is currently running for president of the Central States Regional Chapter of the American College of Sports Medicine and has served on several committees within that organization. He has also presented lectures for a variety of professional organizations throughout the United States.

Service to WSU, the COE, and the HPS Department

Exercise science faculty support and respect the goals of WSU. Exercise science faculty attend university functions, participate in university new student and faculty orientations and welcome events, and fundraise for the university's sponsored radio station. Exercise science graduate faculty also serves on vital university committees including, for example, the Institutional Review Board and the Undergraduate Research Committee. The wisdom gained from these committee exposures benefits the functioning of the exercise science degree program. Similarly, exercise science faculty takes a prominent role in various COE activities. Exercise science graduate faculty have served on the Online

Teaching, Strategic Planning, Technology, Faculty Personnel, and Leadership Team Committees. Faculty regularly attends COE meetings and provides valuable input where appropriate.

The exercise science faculty is highly involved in daily HPS department operations. Faculty serves on the merit, travel, and curriculum committees. The faculty is in their offices on a daily basis and willingly visits with, and addresses the needs of, students on a walk-in basis. In addition, faculty assist with special events including the annual HPS Chili Cook-off and Student Appreciation Day and are preparing to help the department host an upcoming Kansas Association of Health, Physical Education, Recreation, and Dance (KAHPERD) Convention (2010) at WSU which will attract approximately 600 attendees.

Services To The Kansas, Wichita, And The Surrounding Community

Faculty routinely participates in community programs. Dr. Rogers has been a volunteer for the National Youth Sports Program held in Wichita and has served on the executive committee for the Senior Nutrition & Activity Program of Senior Services, Inc (Wichita) and on the advisory council for the Magic Mornings Program, Healthy Options for Planeview (Wichita). As Director of the Human Performance Laboratory, Dr. Patterson provides voluntary consultant work with numerous professional and amateur athletes, hospitals regarding cardiac rehabilitation, and speaking engagements with community fitness centers.

The Center for Physical Activity and Aging (CPAA), a program that the exercise science faculty members are involved with, serves as a resource center for care-givers of older adults in places such as hospitals and senior residence centers in the Wichita and surrounding community. It assists these local organizations in developing safe and effective exercise programs for older adults. Workshops are offered to share recent research findings and to help care-givers understand the best techniques for leading older adults in exercise activities. Through community programs and workshops, practical guidance is provided for older adults, as well as those that live and work with them. The CPAA also publishes a monthly newsletter which is distributed to local organizations that includes information on how to improve health and fitness for older adults.

VI. The program's cost effectiveness.

Enrollment Trends

Student enrollment in the MEd exercise science program has remained steady during the past five years.

Enrollment

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Majors	32	26	25	23	29	27

Student credit hours (SCH) have also remained relatively constant over the past five years with an average of 422 SCH per year. However, the difference between FY 2004 and 2008 is a 20.4% increase.

Graduate student credit hours generated

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
SCH	445	358	400	370	536	422

Time to Complete Degree

Students earning the MEd degree appear to be completing the requirements in an appropriate amount of time. Data from 2004-2008 indicate that, on average, it takes 2.1 years to complete the requirements.

Time to Complete MEd Degree in Exercise Science

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Years	2.0	2.5	2.0	2.0	2.0	2.1

Students, Degrees Conferred

The number of degrees conferred in the MEd exercise science program is reflected below.

Number of degrees conferred

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	5 Yr. Avg.
Degrees Conferred	8	7	11	3	9	8

FTE per Student Credit Hour Ratio

FTEs per SCH reflect an efficient and effective department. Based on data from the WSU Office of Institutional Research, tenured/tenure eligible faculty is generating an average of 1,312 credit hours annually (five year average). The SCH/FTE ratio indicates that a single tenured/tenured track faculty member averages 219 credit hours (five year average). SCH per other instructional faculty reveals an average of 234 credit hours (five year average) generated by other instructional faculty. Combining all SCH generated by both tenured/tenure track and other instructional faculty, there is an average of 229 credit hours are being generated per FTE. Again, these numbers reflect a highly efficient and cost-effective department.

HPS Department OOE

The HPS department is very resourceful in trying to accomplish its degree program objectives. The department's 12-month OOE budget for FY 2008-2009 is \$18,301, or \$1,525 per month.

Summary

As indicated above, the number of students enrolled in the MEd in exercise science has remained strong during the past five years. The ability to maintain enrollment and SCH during this period is particularly impressive considering that there has been a vacant faculty position for over a year and only two department faculty members currently teach in the graduate program. The two faculty members provide nearly all of the instruction, supervision, and advising for the graduate students. Given that students are completing the program in an average of two years and they indicate a high level of satisfaction with the program, it appears that the faculty is providing a program of high quality that promotes student learning, achievement, and completion. Furthermore, these two faculty members also teach undergraduate courses that are required in the BA programs for exercise science, athletic training, and physical education. This suggests that the MEd program in exercise science is a very cost effective program.