

**Bachelor of Science
Fitness Programming and
Management**

**New Degree Program Proposal
University of Missouri – Columbia**

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Executive Summary

The B.S. in *Fitness Programming and Management (FPM)* with a minor in *Business* program. will provide all coursework necessary to prepare for the national American College of Sports Medicine (ACSM) Certified Personal Trainer (CPT) Exam. ACSM is the world's largest and most influential organization in sports medicine, exercise science, and the promotion of physical activity and its co-benefits. Our unique degree, in conjunction with field certification significantly elevates graduates and bolsters job opportunities in roles such as fitness specialists, corporate wellness directors, personal trainers, group fitness instructors, health coaches, and physical activity and fitness leaders. The minor in *Business* further separates our graduates providing them the problems solving skills and industry knowledge that most fitness professionals lack. Our graduates will be qualified in additional roles such as sales, consulting, and ownership. By creating a state-of-the-art online program, a network of graduates from across the nation will be able to tackle the issue of physical inactivity and chronic disease.

The job outlook for *FPM* graduates exceeds growth across all fields with the Bureau of Labor Statistics predicting 21% growth from 2012-2022 ⁽¹⁾. With the rise of obesity and chronic related diseases, along with the increasing cost of healthcare, there will be a need to train students who want to become fitness experts in the area of disease prevention. The current obesity rate in Missouri is 31 percent, up from 21 percent in 2000 and from 11 percent in 1990 ⁽²⁾. There is great opportunity for our students to address these needs locally and impact the health of Missourians. A market analysis (3.A.) shows a strong demand for the *FPM* degree with little competition. The initial investment and risk are low while there is strong potential to generate large numbers of students and revenue, which is consistent with MU's strategic priorities regarding enrollment growth.

The proposed program is 100% online targeted to distance students only. By keeping all students online, we intend to help build a community of learners sharing a common approach and perspective. Online learners are often non-traditional students. They can be mid-career professionals, active or retired military, folks considering a second career, etc. By designing chat rooms, group projects and other activities online we want our students to develop a community progressing through the coursework. If students are combining bricks and mortar classes with online classes on campus, they will likely not be fully engaged with their online community peers.

FPM builds on current faculty strengths and online courses already in existence. It is significantly different from the two other MU System degrees with similar names/fields, Nutrition and Fitness (PANEP) at MU, and Athletic Training at MU. PANEP is designed to prepare students for advanced learning and advanced degrees. *FPM* is also significantly different than MU Health Professions Athletic Training Degree. Athletic

trainers are health care professionals who collaborate with physicians to provide preventative services, emergency care, clinical diagnosis, therapeutic intervention and rehabilitations of injuries and medical conditions. FPM graduates will not be eligible or qualified to sit for the national board exam of certified athletic trainers.

1.0 Introduction

The Bachelor of Science in *Fitness Programming Management (FPM)* provides students with the knowledge and skills to assist individuals across the lifespan in adopting physical activity, exercise, and other healthy behaviors that lead to increased fitness, wellness and optimal health. Students are prepared to pursue national certifications provided by professional organizations in fields of study related to exercise, strength and conditioning, and sports medicine. Graduates will be experts at teaching exercise to most populations. Additionally, students will graduate with a Minor in Business preparing them for a variety of jobs in the fitness industry and beyond.

An entire list of learning objectives can be found in Appendix A. In general, *FPM* graduates will possess:

- skills in designing, implementing, administering and evaluating effective exercise/health promotion programs in private, worksite, community, health care, medical, and agency settings.
- foundational knowledge in fitness, exercise, and physical activity.
- methods for helping people make healthy behavior changes and lessen unhealthy behaviors.
- competencies required to obtain the Fitness/Exercise Personal Training and Group Fitness certifications.

The three word title “*Fitness Programming and Management*” concisely represent the goals of the degree and the skills our graduates will have.

“*Fitness*” is the body’s ability to function effectively and efficiently. It is not the same as exercise or health. It is multi-dimensional in nature and includes a variety of related but different components. These components are classified as “Health- Related” (cardiovascular, muscular strength, muscular endurance, flexibility, and body composition) or “Skill – Related” (agility, speed, power, reaction time, balance, coordination). The “Health-Related” components of fitness are obviously more important for health, longevity, and quality of life. The “Skill-Related” components are more important for performance and sport. The proposed degree will cover the science of fitness and how to modify/improve both “Health” and “Skill” related components.

Our graduates will therefore be able to work with a diverse set of clients and in multiple arenas. We strongly believe “*Fitness*” is the appropriate first word in the title.

“*Programming*” is an umbrella term that encompasses many things (assessment/evaluation, program design, exercise prescription, implementation, tracking, periodization). Graduates from the program will have a unique set of skills and be able to “program” exercise/fitness for a variety of populations.

“*Management*” refers to not only the Business minor that accompanies the degree, but implies graduates will be able to manage and run a business in the fitness industry. The already existing *Business* minor has the same rigor and content as the fundamental courses taken by business majors, yet preserves the flexibility in student schedules. For most students, the *Business* minor as a total package is far more valuable than a similar number of courses in one or two areas.

FPM is housed in the Department of Nutrition and Exercise Physiology (NEP) within the College of Human Environmental Sciences. The NEP mission at the University of Missouri is to improve the health of Missourians and the larger population through research, teaching and outreach related to nutrition and physical activity. NEP strives to be a diverse set of leaders, innovators and educators who promote improved human health through our focus on nutrition and physical activity. NEP seeks to train individuals across the nation to be resources for healthy and active lives to improve the health and well-being of our citizens. By creating a state-of-the-art online training, a network of graduates from across the nation will be able to tackle the issue of physical inactivity and chronic disease.

Undergraduates who earn this degree often pursue careers in such fields as:

- fitness centers
- college and university wellness and health promotion, schools
- community health agencies
- fitness manufacturing companies
- hospitals and medical facilities
- insurance companies
- nonprofit disease prevention agencies
- private health care organizations
- state and county health departments
- wellness centers
- worksite wellness and health promotion

2. Fit with University Mission and Other Academic Programs

2.A. Alignment with Mission and Goals

The University of Missouri's mission statement state:

Our distinct mission, as Missouri's only state-supported member of the **Association of American Universities**, is to provide all Missourians the benefits of a world-class research university. We are stewards and builders of a priceless state resource, a unique physical infrastructure and scholarly environment in which our tightly interlocked missions of teaching, research, service and economic development work together on behalf of all citizens. Students work side by side with some of the world's best faculty to advance the arts and humanities, the sciences and the professions. Scholarship and teaching are daily driven by a commitment to public service — the obligation to produce and disseminate knowledge that will improve the quality of life in the state, the nation and the world.

The proposed FPM degree program is in clear alignment with Missouri's mission of benefiting all Missourians through teaching, research, and service. FPM is also in alignment with the latest strategic plan for the University of Missouri to enhance academic opportunities for online and distance learners (*Excellence in Student Success, Goal 1A and 1B.*). The online program will make Mizzou education accessible to those who cannot be on campus and will enroll students who would not otherwise attend Mizzou.

The proposed program also meshes with the mission of the Department of Nutrition and Exercise Physiology to improve the health of Missourians and the larger population through research, teaching and outreach related to nutrition and physical activity. Graduates will be leaders in exercise delivery and will promote improved human health through physical activity. This objective additionally aligns with the University's greater mission of improving quality of life within Missouri through improved health.

2.B. Duplication and Collaboration Within Campus and Across System

Currently, *FPM* is not being offered at MU or any other system campus. In Missouri, Exercise Science is offered at Truman State, St. Louis University, Missouri Baptist, Westminster College, Drury University, Avila University, Rockhurst University, Lindenwood University, William Woods University, Missouri Valley, University of Central Missouri, and

Missouri State. These degrees are offered on campus only. FPM is different from these because it is offered completely on line, contains a Business minor as part of the degree, and is focused on practical applications of exercise technique. The program is thus unique and marketable.

At MU, the Department of Nutrition & Exercise Physiology's Physical Activity, Nutrition, and Human Performance (PANHP) (formerly Nutrition and Fitness) emphasis area is offered on campus only. It is designed to prepare students for advanced learning and certification as an Exercise Physiologist, as opposed to the online *FPM* degree which prepares students to work specifically as Personal Trainers and Group Exercise Leaders. The proposed online degree gives students the skills and knowledge to design, implement, administer and teach exercise programs and is uniquely positioned to attract and fill the fitness professional niche. Through new technologies such as video conferencing, students will learn and practice exercise technique, coaching skills, and advanced movements. In their last semester, students will attend a "virtual" workshop focusing on advanced techniques. The ability to teach exercise will be assessed through submitted videos, written papers, and online projects. Students in PANHP or any other program in Missouri do not learn these advanced training techniques and skills or are they assessed on their ability to demonstrate these teaching skills.

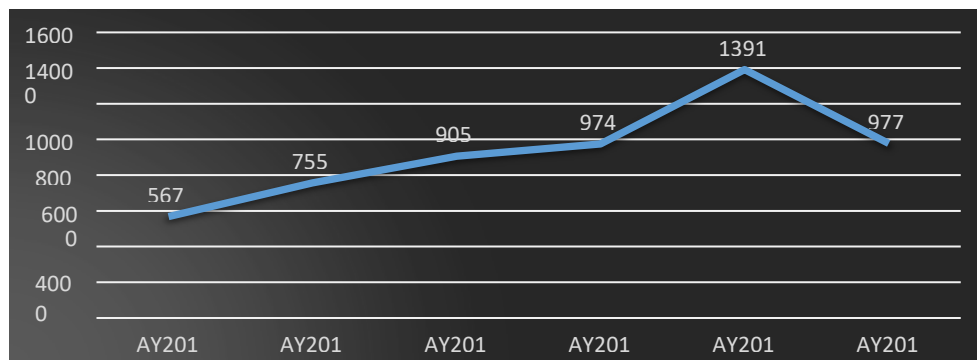
FPM is not duplicating any existing MU program and will not compete for students within the University of Missouri system. The program is designed for and targeted to non-traditional students. One hundred percent of *FPM* students will be distance students. Campus based students will be denied access to this program including MU campus transfers. MU Registrar processes and systems have been implemented which ensure only distance students access to the program. The program will not poach students from current programs and is not competing or duplicating any current program in Missouri. The FPM degree was specifically designed to be different than our normal departmental offerings on campus. Our normal offerings are anchored in the hard sciences; all either have the pre-med required courses or can be configured with minimal changes to fill all pre-med requirements. This involves courses in chemistry, physics, organic chemistry, biochemistry and more. Students on the MU campus have access to these core STEM courses. Online students often are not able to take organic chemistry with lab or biochemistry online. We designed an applied version of a degree for students without access to key STEM courses and laboratories.

3. Business-Related Criteria and Justification

3.A. Market Analysis

A market research analysis for an online Bachelor's in Human Environmental Sciences with an emphasis in Fitness Programming and Management was conducted by Mizzou Online, University of Missouri. According to Burning Glass Labor Insights, the six year demand for Bachelors' recipients with fitness skills increased from 5,677 postings in 2011 to 13,912 postings in 2016 (145% increase). These data are derived from the Bureau of Labor Statistics' SOC and O*NET codes. Based on analysis of real-time job titles and skill and education requirements, Burning Glass more accurately reflects current employer demand—separating out distinct occupations and consolidating similar occupations where real-time employer requirements do not vary significantly between job categories.

6-Year Demand for Recipients of Bachelor's or Higher With Fitness Skills (Sept 1, 2011 to Aug 31, 2017)

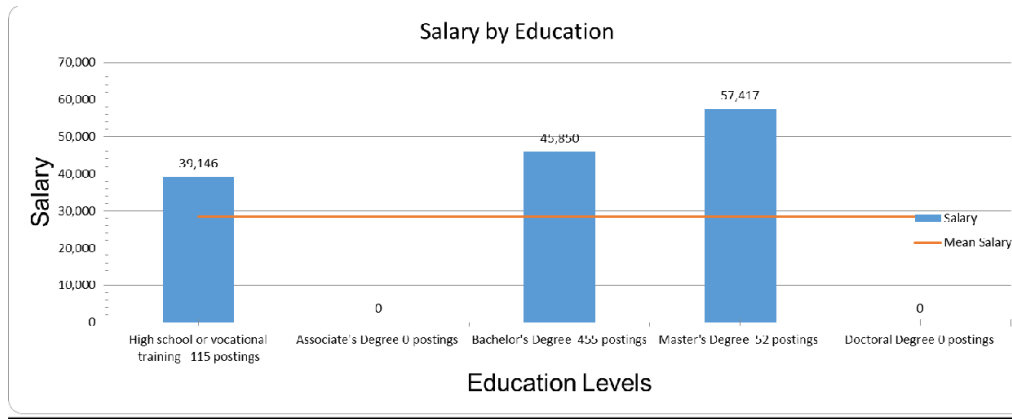


There is no question the demand for graduates with the proposed degree is high. Between 2012- 2017 the trend is significantly upward (74% annual average increase), despite the downward dip from 2016-2017, when the demand hit an enormous 145% increase over 2012.

Supporting the data presenting from Burning Glass Labor Insights, the U.S. Department of Labor expects employment in the field to increase by 13% from 2012 to 2022. Furthermore, O*NET Online indicates employment in the areas of exercise and wellness, kinesiology, and healthy lifestyle promotion will increase from 19-37% from 2010 to 2020 ⁽³⁾.

In addition, it is important to note that “Fitness” was listed first of the top 25 specialized skills in greatest demand using these occupations. The report indicates that the average salary for graduates with similar skills and degree is approximately \$46,572.

Salary by Education for Those with Fitness Skills (Sept 1,
2016 to Aug 31, 2017)



3.A.1. Need for Program

An abundance of research over the last 30 years has linked regular physical activity to better health, longevity, and overall improved quality of life ⁽⁴⁾. And yet, more than 60% of adults do not achieve the recommended amount of physical activity and an astounding 25% are not active at all. Also, nearly half of our young people age 12-21 are not vigorously active on a regular basis ⁽⁵⁾. Graduates from our program will be trained professionals improving the health of Missourians and beyond through exercise/physical activity. Our graduates will be the go-to exercise practitioners who will have the training and knowledge to benefit a wide range of populations spanning the globe. Students will be required to pass a national recognized personal training certification exam as part of their five hour exercise practicum course.

Growth will be driven by efforts to reduce health care costs by teaching people about healthy habits and behaviors. Graduates with a degree in “FMP” have developed the skills and strategies needed to teach safe exercise, promote physical activity and health in community, rehabilitation, academic, business, and agency settings. They are prepared for careers in roles such as personal trainers, group fitness instructors, fitness specialists, health coaches, wellness directors, and physical activity and fitness leaders. Currently, there is no online degree program similar to this in Missouri or nationally. Our program will reach the non-traditional student (military, working adults, veterans, caregivers) and offer quality education to those that otherwise would not be able to attend Mizzou.

3.A.2. Student Demand for Program

Given the growing evidence for and acceptance of exercise in the prevention and treatment of chronic disease, the timing has never been better for the role of the “Fitness Professional”. The proposed degree not only helps students develop the necessary skills and abilities to contribute to global health, but it prepares them to be able to develop a business model and increase the impact on the population. The market analysis (Burning Glass) presented here clearly demonstrates there is a strong need for the proposed program.

For the non-traditional, working adult, and single parent, this degree program will afford an opportunity to enhance their knowledge and skills in fitness and program management. They will be able to complete the degree while still maintaining a home, job, and family. The demand for individuals and quality businesses in the Fitness Industry continues to expand and this degree will improve the potential for successful careers as Fitness Professionals.

One key target population is military personnel. Soldiers enrolled in college courses earn points towards promotion and higher pay. Thus, online education is a means towards a degree and advancement. With the implementation of the G.I. Bill, online education has never been more attractive to this audience. There are currently 2.5 million military personnel eligible for the G.I. Bill. The state of Missouri has over 35,000 military members.

Service members are inherently interested in fitness, as it is part of their daily routine and job. Service members are required to carry heavy equipment, navigate diverse terrain, swim, run, jump out of planes, and pass fitness assessments. FPM is therefore an attractive degree option. In addition, the timing of this degree has never been more relevant. Just recently, the Army has placed a new focus to fundamentally change the culture of fitness⁽⁶⁾. The Army’s resurgent focus on fitness is happening on multiple fronts. Officials are developing new doctrine regulations and policies related to fitness. The antiquated assessments of pushups, sit-ups, and a two-mile run have been replaced by more contemporary functional fitness assessments. New and more rigorous standards have been developed for all Soldiers and recruits. In addition, the Army is instituting the *Holistic Health and Fitness Initiative*, which includes the creation of Soldier Performance Readiness Centers. Not only will this new military fitness focus help us recruit students, the Performance Readiness Centers will need more fitness experts, such as FPM graduates.

A niche market within the larger military market are those Soldiers in the Master Fitness Trainer (MFT) program. In order to become a MFT, Soldiers are sent to Fort Jackson, South Carolina for several weeks (142 hours) of instruction. Instruction includes the science of exercise, physical fitness assessment, exercise training principles, exercise prescription, exercise leadership, and program development. These are the key pillars of the FPM program. MFT candidates must pass multiple exams in order to receive a MFT certificate. After graduation, these soldiers, now referred to MFTs, return to their home battalion to serve as unit advisors on physical readiness and physical training. A close comparison of the MFT and FPM curricula, indicates three FPM introductory courses (9hrs) would be credited to MFT graduates. The head start will give MU the recruitment edge over competitors. In addition, the new military fitness push will require MFTs to learn new progressive training techniques not taught in the MFT curriculum. FPM will provide these Soldiers with the additional skills and knowledge they need to implement these innovative training methods.

In March 2017, Dr. Chris Hardin and Dr. Steve Ball visited Fort Leonard Wood Military Base to nurture relationships with base faculty and staff. They met with several MFTs and other officials. Although anecdotal, all four MFTs were excited about the possibility of an online FPM degree. There was a consensus that soldiers, not just MFTs, seeking online education would be attracted to a degree like FPM. NEP has the support of Lieutenant Colonel Gary Kerr, Chair Department of Military Science at MU (Appendix 6.C.). Conversations with Colonel Kerr indicate FPM will attract a significant number of military personnel from all over the world. MU Mizzou Online’s Military and Veteran Specialist, Derek Collier will make a minimum of twenty presentations annually promoting FPM.

Specific student projections are presented in tables 1a-c.

Table 1a. Student Enrollment Projections (anticipated total number of students enrolled in program during the fall semester of given year).

Year	1	2	3	4	5
Full-Time	30	60	90	120	120
Part-Time	15	30	45	60	75
Total	45	90	135	180	195

Table 1c. Projected Number of Degrees Awarded

Year	1	2	3	4	5
# of degrees awarded	0	0	0	30	30

3.B. Financial Projections

Our model assumes a modest enrollment of 40 full time students and 20 half time students each Fall. We also assume it will take a full time student four years to complete the program and a part time student six to eight years to complete the program. In reality, most online degree seeking students transfer in around 50 credits and take longer to complete their degree. We recognize the projected enrollment numbers also assume zero attrition. Our modest expectations are taking these factors into account and give an overall big picture view of the profitability of the program.

3.B.1. Expenses

The proposed budget (in the financial projections spreadsheet) includes initial laptop purchases and replacement laptop purchases every two to three years. In addition, we anticipate an annual expense through the Academic Support Center for initial costs associated with video production, editing, etc. As we plan on keeping the courses current and state-of-the-art, we also budgeted revision costs through the Academic Support Center for updates to videos and other production features of the courses (revisions every three years on average). Staffing for the new courses will include one new full-time assistant teaching professor (including benefits) and adjunct faculty salaries for five three credit hour courses. Currently the Department of Nutrition and Exercise Physiology pays \$2,000 per student credit hour to adjunct faculty. Because student outcomes and four-year completion rate depend on quality advising, also included in the budget is a half time (0.5 FTE) academic advisor (including benefits since we expect this person to be split with another program). Once the program exceeds the projected numbers, the increased revenue can fund additional advisor capacity for the program. Finally, to ensure the success of our students and of the program we have budgeted \$10,000 a year for advertising the program and an annual allotment of \$1,000 to each of five faculty for continuing professional development to keep the faculty at the forefront of the discipline and online teaching.

3.B.2. Revenue

Mizzou Online allocates \$2 million each fiscal year to support the development of new online programs that provide a stand-alone credential and that will attract new students to the University of Missouri. FPM is exactly that program. NEP will apply for the maximum award of \$250,000 to cover initial costs of FPM. In fact, a proposal for these funds is complete and will be submitted if FPM receives Board of Curators approval. Mizzou Online has funded approximately 75% of proposals over the past five years.

Revenue will be derived from a combination of tuition sharing with campus, along with the College of Human Environmental Sciences supplemental fees generated by the program. The HES Dean is dedicating 100% of the generated fees from this program back into this program. Below is a budget justification describing proposed expenditures and revenue generation found in the required “Expenses Worksheet.”

Budget Justification

3.B.3. Net Revenue The revenue projections are based on a modest enrollment of 40 full time and 20 part time students per year. We include part time because this is a 100% online degree and many fully online students are working towards a degree while working full time. The break-even projections require only 12 full time and 8 part time students per year. The undergraduate credit hours estimated from these enrollments (see the financial projections spreadsheet for details) are based only on the Nutrition and Exercise Physiology courses required in the program and NOT any of the other online courses at Mizzou. Therefore, this program will contribute significant revenue to other departments that is not accounted for in this projection.

3.B.3. Financial and Academic Viability

Table 2
Enrollment End Year 5 for Program to
Financially and Academically Viable

Viability	Minimum Enrollment
Financial	12 full time plus 8 part time
Academic	10

Table 3
Financial Projections for Proposed Program for Years 1 Through 5

	Year 1	Year 2	Year 3	Year 4	Year 5
1. Expenses per year					
A. One-time					
<i>New/Renovated Space</i>					
<i>Equipment</i>	6,000	2,000	2,000	2,000	2,000
<i>Library</i>					
<i>Consultants</i>					
<i>Other (course develop)</i>	10,000	20,000	30,000	5,000	10,000
Total one-time	16,000	22,000	32,000	7,000	12,000
B. Recurring					
<i>Faculty</i>	55,000	55,000	68,100	87,222	88,366
<i>Staff</i>	30,000	30,000	30,600	31,212	31,836
<i>Benefits</i>	30,277	30,277	30,883	31,722	32,130
<i>Equipment</i>					
<i>Library</i>					
<i>Other (PD plus Advert)</i>	15,000	15,000	15,000	15,000	15,000
Total recurring	115,277	115,277	129,583	150,156	152,332
Total expenses (A+B)	146,271	152,277	176,583	172,780	179,332
2. Revenue per year					
<i>Tuition/Fees</i>	95,314	212,414	367,369	511,971	544,650
<i>Institutional Resources</i>					
<i>State Aid -- CBHE</i>					
<i>State Aid -- Other</i>					
Total revenue	95,314	212,414	367,369	511,971	544,650
3. Net revenue (loss) per year	(79,557)	(3,588)	80,765	185,599	201,923
4. Cumulative revenue (loss)	(79,557)	(83,145)	(2,380)	183,219	385,142

3.C. Business and Marketing Plan: Recruiting and Retaining Students

NEP will work with the Mizzou Online marketing team to develop and implement a strategic marketing plan. If awarded Mizzou Online Program Development funds, a minimum of 20%, (up to \$50,000) of those funds will be dedicated to marketing. Our audience will be the non-traditional student, working adults, single parents, military, veterans, and caregivers. In particular, Mizzou Online's Military and Veteran Specialist, Derek Collier will make a minimum of twenty presentations annually at Yellow Ribbon events and Education Fairs. Yellow Ribbon events are to promote higher education to Missouri National Guard. Education Fair presentations promoting FPM will be delivered at Fort Leonard Wood, Whiteman Air Force Base, Scott Air Force Base, and Offutt Air Force Base. Specialist Collier will reach approximately 5000 service members and families annually. In addition, he will work directly with Military Education Directors from all Missouri Bases to promote FPM.

Besides traditional marketing, NEP faculty will use their reputation and connections within the exercise field and the fitness industry to help recruit both US and international students.

Relationships with other universities and even other countries are being cultivated. We are cautiously optimistic that NEP will offer a high quality product creating an internationally recognized degree program.

As the program grows, we expect to develop an international reputation for high quality training. Additionally, we expect that our faculty will make significant contributions through scholarship (presentations, publications, and grants) related to online fitness training. This increased exposure will further enhance the reputation of our proposed program and MU.

In order to help retention, faculty will engage with students developing strong working knowledge of applied fitness and program management through coursework and practicum. Student will work closely with faculty to develop a capstone project. This interaction and hands on experience will increase engagement and retention. Use of virtual classroom technology and simulation will be employed to bring our world-class faculty directly to students. For example, if faculty wanted to assess a student's proficiency at body fatness testing via skinfolds (pinching skin and fat), a student could visually be observed working with a client. The instructor can see and hear the student and the student can see and hear the instructor for immediate or delayed feedback. NEP faculty have experience and expertise in this type of "simulation" education and learning since 2015. Simulation bridges the gap between classroom and clinical experience. In addition to providing simulation-based assessments to determine competency, these experiences can be applied to learn, practice and hone fitness assessment techniques and fitness delivery.

4. Institutional Capacity

NEP faculty have extensive experience with online delivery. Dr. Stephen Ball (*FPM Program Director*) is a Kemper Teaching Fellow who has been teaching online since 2013. He is well known across campus for his course, *NEP 1340 Introduction to Exercise and Fitness* which recently received the 2017 Mizzou Online Course Design. *NEP 1340* is being used as a model for other online courses campus wide. Dr. Ball has also served on several online course committees and advisory teams including the *Online Course and Quality Program Campus Committee*, *Quality Course Online Advisory Committee* for MU Extension, and the *Self-Paced Online Advisory Committee*. NEP faculty will work directly with Dr. Ball and Mizzou Online instructional designers to create courses in the curriculum not offered online. Currently, NEP offers 7/13 courses online in the proposed curriculum online accounting for 19/39 student credit hours. All required courses outside of NEP are already offered online except Kinesiology which is currently being developed. The capacity to implement this program is unquestionable. Our goal is to create a high quality internationally recognized program that attracts non-traditional students worldwide.

5. Program Characteristics

5.A. Program Outcomes

Students are required to show proficiency in coursework and to complete a practicum. Upon completion, students will have mastered all topics in the core curriculum. This includes basic concepts and principles of health and fitness, the practice/application of fitness programming, and the basic principles behind starting a business. We expect that the graduate will take the knowledge learned in the course and apply it to improving the health and fitness in a variety of populations.

Upon completion of this degree, our students will be qualified to take a national certification from the American College of Sports Medicine as a Certified Personal Trainer (ACSM-CPT) or Group Exercise Instructor (ACSM-GEI). The Job Task Analysis (JTA) for the ACSM CPT describes what exercise professionals and our graduates will be able to do on a daily basis. It serves as a blueprint for our program. The comprehensive list of learning objectives can be found in Appendix 6.A.

The core Fitness program learning objectives are based on four performance domains.

Domain I: Initial Client Consultation and Assessment
Domain II: Exercise Programming and Implementation
Domain III: Exercise
Leadership & Client Education
Domain IV: Legal &
Professional Responsibilities

For each Domain, students will have knowledge “of” and skill “in “applying that knowledge.

Learning objectives for the Minor in Business also focus around multiple domains (Business Functions, Management and Leadership, Financial Intelligence). Graduates will have a basic understanding of business functioning and how to apply management concepts and approaches to business, including the fitness industry, using critical thinking and problem solving skills. The combination of fitness and business is novel and will be attractive to multiple audiences. The Business Minor Courses and Requires are found in Appendix 6.D.

5.B. Program Structure

This degree program is 100% on line, asynchronous, and semester based. Students can enter the program at the beginning of any semester. General Education requirements and approved courses from other institutions and entities may be able to be transferred for credit. An example of a four year curriculum planning outline is provided in Appendix 6.E. Upon completion of this academic program and as part of the student’s Capstone project, the student will be required to sit for, and pass, the ACSM Personal Training Certification. Upon graduation, the student also will receive a Minor in Business.

1. Total credits required for graduation: 120

2. Residency requirements, if any: 30 of last 36 hrs must be MU courses.

3. General education

Total credits for general education courses: 42

Courses (specific course or distribution area and credit hours):

Course Distribution	Hrs
Bio/Phys/Math Sci	9
Behavioral Soc Sci	9
Humanities/Fine Art	9
TOTAL	27

Course	Hrs
Math 1000	3
English 1000	3
1 st WI	3
Am Hist or Gov	3*
Math Reas Prof	3*
TOTAL	15

College of HES	Hrs
HES Foundation	3
HES Foundation	3
Comm 1200	3*
TOTAL	9

*Double Dip General Education

4. Major requirements

Total credits specific to degree: 67

Courses (specific course or distribution area and credit hours):

Major Courses	Hrs	Supporting Area	Hrs	Business Minor	Hrs
NEP 1340	3	MPP Physio3xxx	5	Econ 1014/1015	3
NEP 1485	1	HP Kines 4250	3	Acct 2010/2027	3
NEP 1034	3	Chem 1000	2	Marketing 3000	3
NEP 2380	3			Mgmt 3000	3
NEP 3450	3			Finance 2000	3
NEP 2xxx	3			Business 3000	3
NEP 3550	3				
NEP 2450	3				
NEP 4200	3				
NEP 3450	3				
NEP 3xxx	3				
NEP 4xxx WI	3				
NEP 4xxx CAP	5				
TOTAL	39	TOTAL	10	TOTAL	18

5. Free elective credits: 11

6. Requirement for thesis, internship or other capstone experience: Must pass ACSM or equivalent personal training certification exam.

7. Any unique features such as interdepartmental cooperation: None.

5.C. Program Design and Content

This program is designed as a 100% online degree program leading to a BS in Fitness Programming and Management. It is specifically designed for non-traditional students, including those already working in fitness settings, military personnel, and prospective students with an interest in the field, who are unable to attend traditional on-campus classes.

The degree program requires a minimum of 120 total credit hours to be completed in eight semesters. Requirements include credit hours from General Education courses, College of HES courses, Science Foundation courses, Core Curriculum courses, and Business courses. A sample curriculum and four year plan is attached (Appendix 6.E.)

5.D. Program Goals and Assessment

The goal of this degree program is to educate and train students to be experts at teaching physical activity and fitness to a diverse population. Graduates will be leaders in exercise delivery and will promote improved human health through physical activity. Graduates will be qualified to provide appropriate fitness programming and management to assist individuals across the lifespan in adopting healthy lifestyle behaviors. By creating a state-of-the-art online training, a network of MU graduates from across the nation will be able to tackle the issue of physical inactivity and chronic disease.

Students will achieve a national certification from the American College of Sports Medicine as a Certified Personal Trainer (ACSM-CPT) or Group Exercise Instructor (ACSM-GEI). These certifications, along with obtaining a Minor in Business, will allow our students opportunities to find employment in a variety of areas in the fitness industry.

Objective metrics will assess the effectiveness of FPM including, enrollment, time to degree completion, number of states/countries students represented, pass rates of the ACSM-CPT certification, number of working MFTs, employer satisfaction, and graduate satisfaction. . A FPM community website will be created for graduates to interact, share ideas, and network.

5.E. Student Preparation

Prospective students will meet University admittance qualifications. No prerequisites are required for admittance into the program.

5.F. Faculty and Administration

Dr. Steve Ball and Teaching Professor Dan Smith will serve as Co-Directors. Dr. Ball and Professor Smith will share teaching and

mentorship responsibilities with one full-time hire and six current faculty. One hundred percent of the new hire will be dedicated to this program. In addition to teaching courses, Dr. Ball, Professor Smith, and the new faculty member will supervise student practicum experiences.

5.G. Alumni and Employer Survey

The program will track and collect information from alumni. A one-year alumni post-graduation survey will be administered in July. The survey will be administered electronically using Survey Monkey. Expected satisfaction rates would be 80% to start. The program will include employer feedback. A survey will be administered one-year post graduation. It will be administered electronically using Survey Monkey.

5.H. Accreditation

N/A

Appendix A.

LEARNING OBJECTIVES

The core fitness program learning objectives are based on four performance domains, 1) Initial Client Consultation and Assessment, 2) Exercise Programming and Implementation, 3) Exercise Leadership & Client Education, and 4) Legal & Professional Responsibilities. For each Domain, students will have knowledge “of” and skill “in “applying that knowledge.

Domain I: Client Consultation and Assessment

A. Interview and provide client with clear documentation and instructions.

1) Knowledge of:

- a. components of and preparation for the initial client consult.
- b. components and limitations of a health/medical history, pre-participation screening. informed consent, and trainer-client contract.

2) Skill in:

- a. effective communication.
- b. obtaining a health history, medical clearance, and informed consent.
- c. utilizing multimedia resources (internet, email, phone, text).

B. Review and analyze client data to identify risk, formulate a plan, and conduct physical assessments.

1) Knowledge of:

- a. risk factors and signs and symptoms of disease.
- b. process of determining medical clearance.
- c. contraindications of exercise.

2) Skill in:

- a. teaching clients about risk reduction.
- b. determining fitness assessments based on consultation.
- c. fitness assessment administration.

C. Assess the components of health and/or skill related physical fitness to establish baseline values, set goals, and develop programs.

1) Knowledge of:

- a. human anatomy.
- b. kinesiology.
- c. physiological basis for improvements in fitness.
- d. the language of exercise.
- e. the health and skill related components of fitness.
- f. interpretation of fitness assessments.
- g. mechanisms for referral to a physician.

2) Skill in:

- a. accurately measuring heart rate and ratings of perceived exertion.
- b. selecting and administering cardiovascular fitness assessments.
- c. selecting and administering skinfold measurements.
- d. selecting and administering muscular strength/endurance assessments.
- e. establishing a plan and timeline for reassessing physical fitness, goals, and behaviors

Domain II: Exercise Programming and Implementation

- A. Select exercise modalities to achieve the desired adaptation based on the client's goals, medical history, and assessment results.

1) Knowledge of:

- a. selecting exercises and training programs based on client's age, functional capacity, and exercise test results.
- b. the principles of specificity and program progression.
- c. the advantages and disadvantage of interval, continuous and circuit training.
- d. advanced resistance training principles (e.g., super sets, Olympic lifting, pyramid training).
- e. the benefits, risks, and contraindications for a wide variety of resistance training, cardiovascular, and flexibility exercises.

B. Determine initial Frequency, Intensity, Time, Type, Volume and Progression (i.e., FITT Principle) of exercise based on client's goals, medical history, and assessment results.

1) Knowledge of:

- a. the recommended FITT principle for cardiovascular and musculoskeletal fitness in healthy adults, older adults, children, adolescents, pregnant women, and clients with stable chronic disease who are cleared.
- b. the components of an exercise training session.
- c. periodization for cardiovascular, resistance training, and conditioning program design and progression of exercises.
- d. adaptations of strength, functional capacity, and motor skills.

2) Skill in:

- a. demonstrating exercises to enhance cardiovascular endurance, muscular strength and endurance, balance, and range of motion.
- b. demonstrating a wide variety of functional training exercises (e.g., stability balls, balance boards, kettlebells, static resistance devices).
- c. establishing and monitoring levels of exercise intensity, including heart rate, RPE, pace and METs.
- d. using results from repetition maximum tests to determine resistance training loads.
- e. proper spotting positions and techniques for injury prevention and exercise assistance.
- f. designing and implementing exercise programs.

Domain III: Exercise Leadership and Client Education

A. Optimize participant adherence by using effective communication, motivational techniques and behavior strategies.

1) Knowledge of:

- a. verbal and nonverbal behaviors that communicate positive reinforcement.
- b. learning preferences and how to apply to teaching and training.
- c. applying health behavior change models that support adherence.
- d. barriers to exercise adherence and compliance.

2) Skill in:

- a. applying active listening techniques.
- b. using feedback to optimize training sessions.

C. Educate clients using scientifically sound resources.

1) Knowledge of:

- a. lifestyle factors, including physical activity and nutrition habits.
- b. the following terms: body composition, body mass index, lean body mass, anorexia, bulimia, and body fat distribution.
- c. the effectiveness of diet, exercise, and behavior modification for altering body composition.
- d. the Dietary Guidelines for Americans.
- e. the Physical Activity Guidelines for Americans.
- f. industry guidelines.
- g. the female athlete triad.
- h. myths and consequences associated with various weight loss methods.
- i. kilocalories in one gram of carbohydrate, fat, protein, and alcohol.
- j. accessing and disseminating scientifically-based, relevant, fitness-and wellness-related resources and information

Domain IV. Legal and Professional Responsibilities

A. Collaborate with health care professionals and organizations to create a network of providers who can assist in maximizing the benefits and minimizing the risk of an exercise program.

1) Knowledge of:

- a. professional resources and referral sources to ensure client safety and program effectiveness.
- b. the scope of practice for the Certified Personal Trainer and the need to practice within this scope.
- c. Identifying individuals requiring referral to a physician or allied health services (e.g., physical therapy, dietary counseling, stress management, weight management, psychological and social services).

B. Develop a comprehensive risk management program consistent with industry standard of care.

1) Knowledge of:

- a. resources available to obtain basic life support, automated external defibrillator, and cardio pulmonary resuscitation certification.
- b. emergency procedures.
- c. precautions taken to ensure participant safety.
- d. contraindicated exercises/postures and risks associated with certain exercises.
- e. potential musculoskeletal injuries, cardiovascular/pulmonary complications, and metabolic abnormalities.
- f. basic first aid procedures for exercise-related injuries.

2) Skill in:

- a. demonstrating and carrying out emergency procedures during exercise testing and/or training.
- b. assisting, spotting, and monitoring clients safely and effectively during exercise testing and/or training.

C. Safeguard client confidentiality and privacy rights unless formally waived or in emergency situations.

1) Knowledge of:

- a. practices/systems for maintaining client confidentiality.
- b. the importance of client privacy (i.e., client personal safety, legal liability, client credit protection, client medical disclosure).
- c. the Family Educational Rights and Privacy Act (FERPA), and the Health Insurance Portability and Accountability Act (HIPPA) laws.

2) Skill in:

- a. rapidly accessing client emergency contact information.

Appendix B.



Robert J. Trulaske, Sr.
College of Business
University of Missouri–Columbia

Jeffrey A. Wiese, PhD Assistant
Dean of Undergraduate Programs
and Student Services

110 Cornell Hall
Columbia, MO 65211-2600
Telephone: (573) 884-2823
wiesej@missouri.edu

September 19, 2019

Latha Ramchand, Provost
Matthew Martens, Associate Provost for Academic Programs 110 Jesse Hall

Dear Provost Ramchand and Associate Provost Martens:

Please accept this letter of endorsement for the Bachelor of Science in Fitness Programming and Management, with a minor in Business proposed by Department of Nutrition and Exercise Physiology (NEP). As Assistant Dean of Undergraduate Programs and Student Services in the Trulaske College of Business, I am aware of the proposal and welcome the potential increase in student credit hours in our online business courses. The interdisciplinary training with business broadens graduates potential job opportunities.

Please do not hesitate to contact me if you have concerns. Best,

A handwritten signature in cursive script that reads "Jeffrey A. Wiese".

Jeffrey A. Wiese, PhD
Assistant Dean of Undergraduate Programs and Student Services
Robert J. Trulaske, Sr. College of Business

Appendix C.



Department of Military Science Leadership

University of Missouri- Columbia

Columbia, Missouri 65211-4080

August 28, 2019

SUBJECT: Letter of Endorsement for the Fitness Programming and Management Bachelor's Degree Dear Provost Ramchand and Associate

Provost Martens

I am writing this letter in support of Dr. Stephen Ball's proposal for the Fitness Programming and Management Bachelor of Science Degree. I reviewed Dr. Ball's proposal and have spoken to him at length regarding the value, application, and marketing potential of this degree for service members.

Now more than ever the services and in particular the Army, are focused on training functional fitness and expanding fitness based services to our Soldiers and their families. In an effort to better prepare our Soldiers for the physical rigors of combat while keeping them injury free the Army is incorporating elements from CrossFit, yoga, and other non - military centric fitness training into its physical readiness program. The services are not only concerned with developing programs for functional fitness, but they are focused on the full spectrum of physical readiness to include injury prevention and recovery, mental health and toughness, nutrition, sleep, flexibility, and strength.

With a reinvigorated focus on physical readiness, the Army is investing millions of dollars into our fitness programs. During fiscal year 2020, the army is transitioning from the Army Physical Fitness Test to the new Army Combat Fitness Test, which focuses on functional combat fitness. With the new testing, the Army is expanding formal fitness training through the Master Fitness Program. The Army is also increasing the number of contracted and government employed strength coaches, trainers, physical therapist, nutritionals, and sports phycologists.

After reviewing the Fitness Programming Management degree, I believe that this program ties in directly with what the Army is doing to increase our fitness culture and that the program will be of great interest to Soldiers and other service members. This program will serve to enhance what our Soldiers do on a daily basis and provide them with the ability to continue within the fitness industry after their term of service is over. The online nature of this program will meet the needs of our service members and allow them to work on their classes from any location, at any time, around the globe. This degree has the potential to dramatically increase access, interest, and ultimately change the nature of how the University of Missouri provides educational opportunities to our service members.

Please feel free to contact me at 573-882-7721 or kerr_ga@missouri.edu.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary A. Kerr", written over a printed name.

Gary A. Kerr
Lieutenant Colonel,
US Army Professor
of Military Science



Appendix D.

10/24/19

Latha Ramchand, Provost
Alexander Cartwright, Chancellor

Dear Provost Ramchand and Chancellor Cartwright:

The Department of Nutrition and Exercise Physiology in the College of Human Environmental Sciences has submitted the full degree proposal for the BS in Fitness Programming and Management, Minor in Business. Included in the proposal are letters of support from the HES dean, Trulaske College of Business, and Mizzou Online.

For further information or clarification, please contact me directly.

Sincerely,

Matthew P. Martens
Associate Provost for Academic Programs

MPM: jb

Latha Ramchand, Ph.D. Date
Provost

Alexander N. Cartwright, Ph.D. Date
Chancellor

Appendix E.
Business Minor

REQUIRED COURSES	CREDIT HOURS
Introduction to Accounting (ACCTCY 2010)* OR Accounting I (ACCTCY 2026)** OR Accounting I (ACCTCY 2036)	3
Microeconomics (ECONOM 1014) OR	3
General Economics (ECONOM 1000) OR Applied Microeconomics (ABM 1041 - Formally AG ECON 1041) OR	
Fundamentals of	
Microeconomics	
(ECONOM 1024) OR	
General Economics	
(ECONOM 1051H)	
Survey of Business Finance (FINANC 2000) OR Corporate Finance (FINANC 3000)	3
Fundamentals of Management (MANGMT 3000)	3
Principles of Marketing (MRKTNG 3000)	3
Business Elective***	3
Total Business Minor Hours:	18

***Accountancy 2026 (Accounting I) is a 6-month self-paced online course offered through Mizzou Online. *Accountancy 2010 (Introduction to Accounting) is a one- semester survey class designed for non-business majors.*

****A Business Elective is any Accountancy (ACCTCY), Economics (ECONOM), Finance (FINANC), Management (MANGMT) or Marketing (MRKTNG) course above the 3000 level beyond what is already required for the minor.*

Appendix F.

CURRICULUM PLANNING SHEET

FALL I

BIO 1010/1020 (5)

HES Foundation (3)

MATH 1100 Algebra (3)

*NEP 1340 Intro to fitness (3)

*(Consider changing NEP 1xxx Ex Fit 1)

Humanities (3)

FALL II

Business Econ (3)

COMM 1200 Public Speaking (3)

PTH Anatomy (3)

NEP 2380 Diet Therapy (3)

Social/Behavioral Sci (3) WI

FALL III

HES Foundation (3)

NEP 4xxx Corp,Com, Per Fit (3)

Humanities (3)

Stat 1200 Intro (3)

Business Marketing (3)

FALL IV

HTH PR 4250 Kines (3)

NEP 4xxx Ex Eval & Implementation (3)

ESC PS 4200 Positive Psych (3)

Business Management (3)

Electives (4)

SPRING I

Am Gov (3)

Gen Chem (2)

English (3)

NEP 1485 Careers in Ex Sci (1)

NEP 1034 Intro to Nutr (3)

SPRING II

Business Acct (3)

MPP 3202 Elements of Phys (3)

NEP 3450 Act Thru Life (3)

Social/Behavioral Sci (3)

NEP 2xxx Exercise Techniques (3)

SPRING III

NEP 2450 Nutr Thru Life (3)

NEP 4200 Spts Perf (3)

NEP 3xxx Ex & Fitness II (3)

Business Finance (3)

Electives (3)

SPRING IV

Capstone (5)

Business 3000+ (3)

NEP 3xxx Eating To Win (Spts Nutrition) (3)

Electives (4)

Appendix G. UNIVERSITY of MISSOURI

OFFICE OF THE DEAN

COLLEGE OF HUMAN ENVIRONMENTAL SCIENCES

August 21, 2019

Latha Ramchand, Provost

Matthew Martens, Associate Provost for Academic Programs 110 Jesse Hall

Dear Provost Ramchand and Associate Provost Martens:

I am writing to express my unqualified endorsement of the proposed Bachelor of Science in Fitness Programming and Management, which is being put forward by the Department of Nutrition and Exercise Physiology (NEP). As you know, NEP is “headquartered” in the College of Human Environmental Sciences but is a collaboration between HES, CAFNR, and the School of Medicine.

The proposed undergraduate has a great many things to recommend it, from the holistic nature of its interdisciplinary training to the use of on-line instruction to attract non-residential students, and from its positioning to fill a gap in our academic programs to the clear case for market need. As an advocate of interdisciplinary training, I am thrilled to see this program draw heavily upon both HES and Trulaske College of Business course offerings. I am equally pleased that graduates of this program will receive integrated training in exercise and nutrition and thus able to offer well-rounded advice to the populations they serve. The cross-training with business will further enhance graduates’ ability to earn professional accreditations and enter into the widening arenas in which exercise professionals are needed and hired.

I believe this program will further enhance the national prominence of NEP, HES, and Mizzou. The fact that there are no existing online programs like this one in the state or nation should both bring great opportunities and visibility. In essence the proposed degree serves to further many of the critical objectives for “Excellence in Student Success” in *The Flagship of the Future* strategic planning document while at the same time enhancing our brand nationally. That it does all of this while serving a public good—considering national epidemic rates of obesity and related health problems—makes it a win-win situation.

Finally, I believe you will find that the proposal makes a great case about practical benefits and identification of the resources needed to develop and maintain a successful program. NEP has done a fantastic job assessing need and career opportunities, and their business plan for success is very compelling. I hope you will see the merit in this proposal and signal your readiness to allow it to go forward to next steps.

I am happy to answer any questions that come up in your review of this proposal.

With regards,



Sandy Rikoon

Dean, College of Human Environmental Sciences

Appendix H.

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