



MEMORANDUM

**To:** Donna E. Shalala, President

**From:** Richard L. Williamson  
Chair, Faculty Senate

A handwritten signature in blue ink, appearing to read 'Richard L. Williamson'.

**Date:** September 21, 2012

**Subject:** Faculty Senate Legislation #2012-10(B) – Establishment of The Master of Science degree track in Exercise Physiology entitled "Nutrition for Health and Human Performance" in the Exercise Physiology Master's Degree Program in the School of Education and Human Development

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At its September 19, 2012 meeting, the Faculty Senate unanimously approved the proposal to establish the Master of Science degree track in Exercise Physiology entitled "Nutrition for Health and Human Performance" in the Exercise Physiology Master's Degree Program in the School of Education and Human Development. The goal of this two-year, 36-39 credit program is to prepare graduates to take leadership roles in providing nutrition services that interface with current practices in Exercise Physiology. This effort will help to promote improvements in health and well-being in the setting of a physically active lifestyle.

The supporting materials are enclosed for your reference.

This legislation is now forwarded to you for your action.


RW/rh

Enclosure

cc: Thomas LeBlanc, Executive Vice President and Provost  
Isaac Prilleltensky, Dean, School of Education and Human Development  
Arlette Perry, Chair, Department of Kinesiology and Sport Sciences

CAPSULE: Faculty Senate Legislation #2012-10(B) – Establishment of The Master of Science degree track in Exercise Physiology entitled "Nutrition for Health and Human Performance" in the Exercise Physiology Master's Degree Program in the School of Education and Human Development

PRESIDENT'S RESPONSE

APPROVED:  DATE: 9/26/12  
(President's Signature)

OFFICE OR INDIVIDUAL TO IMPLEMENT: DEAN PRILLELTENSKY

EFFECTIVE DATE OF LEGISLATION: IMMEDIATELY  
(if other than June 1 next following)

NOT APPROVED AND REFERRED TO: \_\_\_\_\_

REMARKS (IF NOT APPROVED): \_\_\_\_\_

Department of Kinesiology and Sports  
Sciences

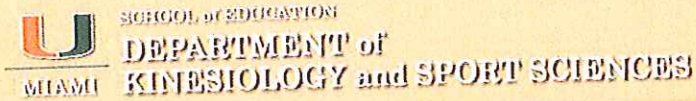
Memo

To: Members of the Faculty Senate  
From: Arlette Perry, Chair Kinesiology and Sport Sciences Department  
Date: 9/1/2012  
Re: Request for approval of the Nutrition for the Health and Human Performance track

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Since the August 2011 meeting of the Faculty Senate, my faculty and I have been working diligently to produce a document responsive to the excellent feedback we received. We have met with appropriate faculty and administration during the past several months to produce the revised document. Furthermore, the guidelines from the Dietetics and Nutrition Practice Council were recently revised. As a result of the revisions we met with a council representative to ensure that upon graduation from this track, students would be eligible to sit for the exam to become a Licensed Dietitian/Nutritionist in the State of Florida.

At this time the department is prepared to move forward with the new track within the M.S. Ed. in Exercise Physiology entitled, "Nutrition for Health and Human Performance" in the School of Education and Human Development. Included in the materials is the initial letter of support from the Dean of the School of Nursing, letters of support from the Lucille P. Markey Chair of the Department of Biochemistry and Molecular Biology, the Chair of the Department of Public Health and Epidemiology (Appendix A), and a list of other institutions which integrate Nutrition and Exercise Physiology into their graduate degree curriculum (Appendix B).



## Nutrition for Health and Human Performance track in the Exercise Physiology Masters Degree Program

### Mission

The Master's of Science degree track in Exercise Physiology entitled "Nutrition for Health and Human Performance" was designed to develop an interface between Exercise Physiology and Nutrition Science. It is a two-year, 36-39 credit program. Graduates are prepared to take leadership roles in providing nutrition services that interface with current practices in Exercise Physiology. This effort will help to promote improvements in health and well-being in the setting of a physically active lifestyle.

Specifically, students in the graduate program will be prepared to:

1. Plan and program sport-specific nutrition services for individuals, teams, and groups.
2. Screen, assess, follow up, and monitor athletes and active individuals in a variety of settings, integrating both nutrition and exercise science principles and skills.
3. Guide athletes as to the appropriate nutritional practices for their sport.
4. Effectively integrate nutritional interventions into the annual exercise training and competition plan of athletes at the recreation, collegiate and professional level.
5. Provide sport-specific nutrition education to active youth in community settings (e.g., schools, after-school programs, and clubs).
6. Provide sport nutrition and exercise-related services and programs to university recreation centers, active students, faculty, staff, and student athletes.
7. Provide nutrition education and exercise-related services to active community groups with focus on health promotion, fitness, weight maintenance and loss, and disease prevention.
8. Counsel athletes and active individuals on nutritional guidelines in a variety of settings.
9. Work as part of the multi-disciplinary team in a variety of sport-related and clinical health-related services.
10. Effectively use scientific knowledge and evidence-based principles in evaluating and analyzing educational programs that enhance healthy lifestyle behaviors.
11. Take certification examinations such as a Sports Nutritionist, (provided by the International Society of Sports Nutritionists), or as a Licensed Dietitian/Nutritionist from the State of Florida.

### Rationale

Past student evaluations had revealed a tremendous interest for more nutrition courses in the exercise physiology program. This interest was reiterated in our student focus groups. In researching different institutions around the country, we found nine schools that have an integrated graduate curriculum in nutrition and exercise physiology (See Appendix B).

### Program Description

The degree is rooted in a scientific background in the applied sciences with an emphasis in either human performance or health promotion/disease prevention. The idea is to integrate both nutrition and exercise physiology concepts so that students can take leadership roles in providing nutritional services to high school, collegiate, recreation, elite and professional level athletes, and active men and women of all sports. The program will also enable students to plan, develop, and implement sound nutritional practices for active and athletic communities on a national and international level.

The Kinesiology and Sport Sciences department already possesses a large cohort of over 180 undergraduate majors in Exercise Physiology and approximately 60 minors in Exercise Science and Sports Medicine that would easily feed into this graduate track. Aforementioned students will have an excellent opportunity to pursue their knowledge base in a track that enhances the integration of Nutrition and Exercise Physiology.

Those who are already dietitians will have a chance to learn how nutritional science can work with exercise science to improve health and sport performance. For those interested in gaining a background relevant to nutrition education and evaluation, this program will promote their ability to apply sound nutritional and science-based exercise physiology principles into their professional practice. Graduates of the program may practice independently, conduct nutritional, health and fitness education seminars, and/or tailor nutrition programs for:

- Medical Practices/Rehabilitation Centers
- Professional and amateur sport teams and organizations; coaches and athletes
- Diabetes treatment and cardiac rehabilitation centers
- Hospitality industry-hotels, spas, cruise ships, resorts
- Health Clubs/Spas/Gyms
- Summer camps, youth organizations
- Community Wellness Centers
- Corporate Wellness Programs
- Health Maintenance Organizations
- Weight Management Programs
- Media and Internet
- Culinary cooking schools
- The military and police forces
- Functional medicine research and practice
- Non-profit Health Centers
- Community and faith-based organizations

Upon graduation, students will be able to take the exam to become a Sports Nutritionist under the auspices of the International Society of Sports Nutritionists. They will also be able to sit for the exam to become a Licensed Dietitian/Nutritionist as approved by the Dietetics and Nutrition Practice Council in the State of Florida. Knowledge gained from the completion of the track along with acquired credentials will enable graduates to assess the dietary needs of individuals or groups of individuals and make appropriate nutritional recommendations.

#### **Program Requirements**

This program is administered by the School of Education and Human Development, Department of Kinesiology and Sports Sciences with assistance from faculty in the School of Nursing and the Miller School of Medicine.

#### **Graduation Requirements**

Students must complete the 36-39 credit M.S. Ed. track in Exercise Physiology entitled "Nutrition for Health and Human Performance".

Before graduation, students must pass a comprehensive examination that demonstrates mastery of the theory and application of nutrition and exercise physiology as it relates to Human Performance and/or Health Promotion/Disease Prevention. The comprehensive exam is a written examination supervised by three members of the faculty on the graduate studies committee of the Department of Kinesiology and Sports Sciences. The comprehensive examination is designed to measure a student's ability to conceptualize, critically analyze, and present knowledge in a succinct and cogent manner.

### **Admission Procedures**

Applicants must apply to and be accepted into the University of Miami Graduate School before they can be accepted into the Nutrition for Health and Human Performance track.

#### **All new applicants should possess:**

- A Bachelor of Science in the Applied Sciences (Kinesiology, Nutrition, Athletic Training or its equivalent); Health Sciences, (Nursing, Pre-Physical Therapy or its equivalent); and/or Basic Sciences (Chemistry, Biochemistry, Biology or its equivalent).
- A GPA of 3.0 or higher on a 4.0 scale in the last 60 hours of undergraduate coursework in their major.
- Evidence of completing the GRE's with a preferred combined score of at least 297.
- Three letters of recommendation from the school, work, or community/religious/volunteer internships and a 1-2 page statement of intent providing evidence of work and/or volunteer experience related to intended field of study and goals.
- A statement of professional goals
- Official transcripts that provide evidence of prerequisites or the equivalent of undergraduate courses in:
  - a. Quantity Food Service/Preparation
  - b. Basic Nutrition (KIN 150 or KIN 202 or the equivalent)
  - c. Exercise Physiology (KIN 321 or KIN 421 or the equivalent)
  - d. Human anatomy and physiology (KIN 233/234 and KIN 232 or the equivalent)
  - e. One-two years of a combination of chemistry, organic chemistry, biology, biochemistry, microbiology and laboratories.

Applicants may take all pre-requisite courses at the University of Miami. The only exception is Quantity Food Service/Preparation which may be taken elsewhere i.e., Miami Dade College or Florida International University.

### **Curriculum Overview**

The graduate degree track in Nutrition for Health and Human Performance has two options: one in Human Performance, the other in Health Promotion/Disease Prevention.

#### **Option 1: Human Performance**

The Human Performance option emphasizes sports nutrition, enabling students to meet the responsibilities of the sports dietitian in practice. According to the Sports Cardiovascular and Wellness Nutritionists Dietetic Practice Group of the Academy of Nutrition and Dietetics, this includes:

- Providing individual and group/team nutrition counseling and education to enhance the performance of competitive and recreational athletes, on-site and during travel;

- Counseling individuals and groups on daily nutrition for performance and health;
- Translating the latest scientific evidence into practical sports nutrition recommendations; ; this can be done by evaluating the latest scientific evidence in the literature, making decisions about the validity of this information, and applying relevant findings into one's nutritional plan;
- Tracking and documenting outcomes of nutrition services, serving as a food and nutrition resource for coaches, trainers, and parents;
- Providing sports nutrition education for health wellness programs, athletic teams, and community groups; and
- Maintaining professional competency and skills required for professional practice.

According to the Collegiate and Professional Sports Dietitians Association:

*"Having an advanced degree provides additional options in education, research, and administration. A focus on healthy body weight and treating and preventing obesity offers extensive opportunities to combine nutrition expertise with physical activity. Beyond a strong base in clinical nutrition, exercise science, and counseling, an entrepreneurial attitude and practical experience are keys to establishing a solid career in sports dietetics."*

### **Option 2: Health Promotion/Disease Prevention**

The Health Promotion/Disease Prevention option will incorporate principles of both traditional and integrative/functional medicine, which involves understanding nutritional information in the context of the origin, prevention, and treatment of complex chronic disease.

According to the Dietitians in Integrative and Functional Medicine Practice Group of the Academy of Nutrition and Dietetics:

*"The advanced level dietetics practitioner: demonstrates the ability to effectively communicate using a variety of media; directs/leads/organizes other professionals; critically assesses the research literature pertaining to health promotion and disease prevention, health and fitness, etc. in order that nutrition services are provided to individuals and groups resulting in enhanced nutrition status. The practitioner promotes the integration of conventional medical nutrition practices with evidence-based alternative therapies through education, research and practice. The practitioner is an expert in a particular focused area of dietetics practice such as, but not limited to, maternal and child nutrition, nutrition and sports, nutrigenomics, complementary and alternative medicine, nutraceuticals, nutrition supplements. These experts engage in a practice that is evidence based and are competent to develop/direct accredited education programs for dietetic practitioners studying in a focus area of dietetics practice."*

Find below the requirements for the Nutrition for Health and Human Performance track in the graduate Exercise Physiology Master's of Science degree

### NUTRITION FOR HEALTH AND HUMAN PERFORMANCE

Total Credits for Graduate Program: 36-39 credits

#### Core Courses

Course Title	Credit	Professor
KIN 550 Nutritional Biochemistry and Integrative Metabolism	3	J. Kressler
KIN 549 Nutrition Assessment and Laboratory	3	L. Dorfman
KIN 543 Professional Training and Counseling for Integrative Health	3	L. Dorfman/F. Yahia
KIN 538 Nutrition and Health Issues Across the Lifecycle	3	S. Rarback
KIN Food Science and Application*	3	L. Dorfman
KIN 579 Principles of Exercise Prescription/Assessment: Cardiovascular	3	K. Jacobs
KIN 586 Exercise Prescription Assessment Laboratory	3	K. Jacobs
KIN 646 Research Methods	3	K. Jacobs
KIN Graduate Seminar in Nutrition*	3	L. Dorfman
<b>Subtotal</b>	<b>27 credits</b>	

\* KIN number pending

#### Option 1- Human Performance- choose 2 out of 4

Course Title	Credit	Professor
KIN Dietary Supplements and Human Performance	3	W. Smith/ J. Kressler
KIN Sport-Specific Nutrition*	3	L. Dorfman
KIN 577 Advanced Nutrition Planning for Sports and Fitness	3	K. Jacobs
KIN 683 Sports Medicine for the Female Athlete	3	A. Perry
<b>Subtotal</b>	<b>6 credits</b>	

\* KIN number pending



**Option 2-Health Promotion/Disease Prevention-Choose 2 out of 4**

Course Title	Credit	Professor
KIN Medical Nutrition Therapy *	3	S. Rarback
KIN 527 Global Health and Nutrition	3	L. Parker
KIN 681 Issues Specific to Women's Health and Aging	3	A. Perry
KIN 534 Integrative and Functional Nutrition	3	F. Yahia
<b>Subtotal</b>	<b>6 credits</b>	

\* KIN number pending

**Electives - Students will select an elective from the following**

Course Title	Course#	Credit	Professor
Graduate Field Experience in Nutrition*	KIN 696	3	L. Dorfman
Supervised Practicum**	KIN 600	3-6	L. Dorfman
Public Health Nutrition	EPH 561	3	TBA
Chronic Disease Epidemiology	EPH 621	3	TBA
Introduction to Preventive Health	EPH 614	3	Dr. Prado
Principles of Biochemistry and Molecular Biology	BMB 506	3	TBA
Food Science and Application	KIN 553	3	L. Dorfman
Research Problems in Biochemistry and Molecular Biology	BMB 545	3	TBA
Proteins and Enzymes	BMB 507	3	TBA
<b>Subtotal</b>	<b>3-6 credits</b>		

\*This includes a three-credit field experience in the area of nutrition at a minimum of 180 hours total time (12 hours per week for one semester) conducted either within the University of Miami or community setting.

\*\*This includes a more comprehensive supervised practical experience in nutrition for 900 hours over the course of two semesters (450 hours per semester) for a total of 6 credits. This practicum is required to become a Licensed Dietitian/Nutritionist in the State of Florida.

**Total Credits for the Graduate Program (Two Years): 36-39 credits**

# Appendix A

UNIVERSITY OF MIAMI  
SCHOOL of NURSING  
& HEALTH STUDIES



Nilda (Nena) P. Peragallo, DrPH, RN, FAAN  
Dean and Professor

June 1, 2011

Faculty Senate  
University of Miami  
1252 Memorial Drive  
325 Ashe Administration Building  
Coral Gables, FL 33124

Dear Faculty Senate,

I have reviewed the graduate program in "Nutrition for Health & Human Performance" in the School of Education, and fully support its approval. I am cognizant of the fact that Dr. Perry is collaborating with one of my faculty members in the School of Nursing and I wish her continued success with her Nutrition track in the future.

Regards,

Nilda (Nena) P. Peragallo, DrPH, RN, FAAN  
Dean and Professor  
University of Miami  
School of Nursing and Health Studies

UNIVERSITY OF MIAMI  
MILLER SCHOOL  
of MEDICINE



José Szapocznik, Ph.D.  
April 23, 2012

Dr. Arlette Perry  
Professor and Chairperson, Department of Kinesiology & Sports Sciences  
Director, Laboratory of Clinical & Applied Physiology  
University of Miami School of Education  
Merrick Bldg. 315  
Coral Gables, FL 33146

Dear Dr. Perry,

As the Chair of the Department of Epidemiology and Public Health, I commend you on your efforts to develop the Nutrition for Health and Human Performance Track as part of the Exercise Physiology Master's of Science degree program at the University of Miami School of Education.

I am heavily invested in the need for public health education and practice in the area of nutrition and overall health and I am a strong advocate of bringing this to the University of Miami and the community at large.

Our mission is to *provide educational programs to practicing health professionals and students newly entering the field; to conduct, stimulate, and guide research activities relevant to local, statewide, and national health needs.* It is only natural that we support your Nutrition for Human Health Performance track, which will aid in health promotion and disease prevention at a population level.

I am honored you have selected my department's classes as part of your curriculum, and I know that our faculty will be thrilled to have your students in our program.

Sincerely,

José Szapocznik, Ph.D.  
Chair, Department of Epidemiology and Public Health  
Director, Clinical & Translational Science Institute

Chair, Department of Epidemiology and Public Health  
1120 NW 14th Street, Suite 1010 | Miami, FL 33136  
Ph: 305-243-8331 | Fax: 305-243-5585  
jszapocz@med.miami.edu

**SYLVIA DAUNERT**  
**PROFESSOR AND LUCILLE P. MARKEY CHAIR**



UNIVERSITY OF MIAMI  
**MILLER SCHOOL**  
**of MEDICINE**

Department of Biochemistry and Molecular Biology • R. Bunn Gautier Bldg. • 1011 NW 15th Street  
Miller School of Medicine • University of Miami • Miami FL 33136 • (305) 243-4005 •

April 13, 2012

Dr. Arlette Perry  
Professor and Chair, Department of Kinesiology & Sports Sciences  
Director, Laboratory of Clinical & Applied Physiology  
University of Miami School of Education  
Merrick Bldg. 315  
Coral Gables, FL 33146

Dear Arlette,

This letter is to express the support of the Department of Biochemistry and Molecular Biology of the Miller School of Medicine for your proposal to create the Nutrition for Health and Human Performance Track as part of the Exercise Physiology Master's of Science degree program at the University of Miami School of Education. As you know, this past year the Department of Biochemistry and Molecular Biology launched a BS track in Nutritional Biochemistry. Our commitment to educating students in this field highlights our firm belief in the importance of Nutrition as an essential component of human health and fitness. In that regard, I appreciated that you and Dean Prilleltensky took the initiative to consult with Dean Goldschmidt, Dr. Nawaz, Director of Graduate Studies of Biochemistry and Molecular Biology, and me when developing the curriculum. As agreed, we will be happy to help support your program with the inclusion of two courses offered by Biochemistry and Molecular Biology in the proposed curriculum.

I view this MS Nutrition for Health and Human Performance Track as the beginning of an exciting collaboration between the School of Education and the Department of Biochemistry and Molecular Biology, and look forward to future joint educational programs and research projects.

Best wishes for a very successful program,

Sylvia Daunert  
Professor and Lucille P. Markey Chair  
Department of Biochemistry and Molecular Biology  
Associate Director, Biomedical Nanotechnology Institute  
Editor, Analytical and Bioanalytical Chemistry  
Executive Editor, Analytical Biochemistry

cc: Dr. Pascal J. Goldschmidt, Senior Vice President for Medical Affairs and Dean, Miller School of Medicine  
Dr. Zafar Nawaz, Director of Graduate Studies, Department of Biochemistry and Molecular Biology, Miller School of Medicine

# Appendix B

## Institutions with Integrative Graduate Degrees in Nutrition and Exercise Physiology

University	School Name	Department Name	Masters (MS) Degree	Type
Florida State University	College of Human Sciences	Dept of Nutrition, Food and Exercise Sciences	MS in Nutrition and Food Science-Sports Performance	Public
Saint Louis University	Doisy College of Health Sciences	Nutrition and Dietetics	MS in Nutrition and Dietetics: Nutrition and Physical Performance	Private
Long Island University	School of Health Professions and Nursing	Dept of Nutrition	MS in Nutrition: Nutrition and Exercise Physiology	Private
University of Buffalo	School of Public Health and Health Professions	Dept of Exercise and Nutrition Sciences	MS in Exercise and Nutrition	Public
Columbia University	Teachers College	Movement Sciences and Education/Kinesiology	MS in Applied Physiology and Nutrition	Private
Ohio University	Coaching Education	The Patton College of Education	MS in Nutrition: Sports and Fitness	Public
University of Pittsburgh	School of Health and Rehabilitation Sciences	Sport Medicine and Nutrition	MS in Nutrition: Wellness and Human Performance	Public
Texas Women's University	College of Health Sciences	Nutrition and Food Sciences	MS in Exercise and Sports Nutrition	Public
James Madison University	College of Integrated Science and Technology	Dept of Health Sciences	MS in Health Sciences: Nutrition and Physical Activity	Public

On Aug 28, 2012, at 1:08 PM, Larsson, Peter wrote:

Dear Dr. Arlette Perry,

It was a pleasure to meet with you and discuss your Nutrition track Master's program and your Exercise Physiology Ph.D. program and how it relates to our Physiology and Biophysics Ph.D. program. Your students are welcome to take any of the courses in our Physiology and Biophysics Ph.D. program. I will also inform our students about your curriculum and your courses. As we discussed, our courses might be most relevant for your Ph.D. students. The most relevant courses for these students would be the introductory PIBS 601 course and the PHS 641/642 membrane biophysics courses. If you need any more information about our program, please feel free to contact me again.

Sincerely,

Peter

H. Peter Larsson, Associate Professor  
Department of Physiology and Biophysics  
University of Miami, Miller School of Medicine  
1600 NW 10th Avenue, RMSB 5123  
Miami, FL 33136  
ph: 305-243-1021  
fax: 305-243-5931



UNIVERSITY OF MIAMI  
SCHOOL of EDUCATION  
& HUMAN DEVELOPMENT



Education  
5202 University Drive  
Coral Gables, FL 33146

Phone: 305-284-3711  
Fax: 305-284-3003  
miami.edu

## MEMORANDUM

**DATE:** September 6, 2012

**TO:** Richard Williamson, Chair  
Faculty Senate

**FROM:** Dr. Arlette Perry, Chair *a.p.*  
Department of Kinesiology and Sport Sciences

**SUBJECT:** New Track in Exercise Physiology

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I am delighted to inform you that the track in "Nutrition for Health and Human Performance" was unanimously approved by faculty in the Kinesiology and Sport Sciences department, April 2011. None of the faculty members in the department of Kinesiology and Sport Sciences expressed any concerns.

UNIVERSITY OF MIAMI  
GRADUATE SCHOOL



Terri A. Scandura, Ph.D.  
Dean of the Graduate School

Graduate School  
P.O. Box 248125  
Coral Gables, FL 33124-3220

Phone: 305-284-4154  
Fax: 305-284-5441  
graduateschool@miami.edu

MEMORANDUM

DATE: April 28, 2011

TO: Richard Williamson  
Chair, Faculty Senate

FROM: Terri A. Scandura *Terri A. Scandura*  
Dean, The Graduate School

SUBJECT: New Track in Exercise Physiology

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The School of Education has submitted a request to add a new track in Exercise Physiology: Nutrition for Health and Human Performance. The addition of the new track was discussed at the meeting of the Graduate Council on Thursday, April 21, 2011, and none of the Graduate Council members expressed any concerns.

cc: Isaac Prilleltensky, Dean  
Arlette Perry, Chair  
Office of Planning, Institutional Research and Assessment