Physical Education Major

Overview
Note: Effective Fall 2015, the School of Kinesiology will no longer offer the undergraduate major or minors in Physical Education (PE) OR Health Education. All current students pursuing the PE major or PE/Health Education minors will be able to complete their degree(s) and certification(s). Please consult the Bulletin and/or record sheet (refer to PE record sheet) from the appropriate year for detailed requirements and procedures.

Additionally, in order for a current Physical Education student to be considered for the option to graduate without student teaching, a student must:
- Be a student in good academic standing (2.5 GPA or above)
- Provide a written petition to the Associate Dean for Academic Programs. The petition should:
  1. State the reason(s) for the request
  2. Indicate how a positive response to the request will impact the expected date of graduation
  3. Include a list of appropriate classes for faculty to reference, to select the classes the student will need to reach both the career goal and 130 credits
- Earn 130 credits to graduate
- If a student has not taken EDUC 392 or 402, the student may request to waive those classes and substitute classes approved by the faculty
- Students who return to U of M in the future to obtain teaching certification may be required to take additional classes that have been added to the major or the certification requirements

Health and Fitness Major

Overview
The Health and Fitness program provides a science-based curriculum, focusing on physical activity across the lifespan. Our program prepares students for careers and advanced learning in health promotion, while addressing the health and wellness need for people of all ages and abilities.

The Health and Fitness major offers students the knowledge and skills required for successfully entering the growing field of Health and Fitness. Physical activity/inactivity and obesity have become a national focus. The School of Kinesiology has adapted to better accommodate this trend in physical awareness by transforming the Physical Education major into the Health and Fitness major, providing knowledge of activity beyond the scope of K-12 individuals. Students majoring in Health and Fitness learn how to communicate to members of the public of varying ages, abilities, and backgrounds, behaviors that can prevent diseases, injuries, and other health problems by encouraging healthy lifestyles and wellness. The Health and Fitness Leadership curriculum includes courses required for American College of Sports Medicine (ACSM) Health and Fitness Specialist Certification as well as business and legal courses necessary for those wishing to establish new businesses or work in corporate settings.

Students who complete the Health and Fitness program will receive a Bachelor of Science (B.S.) degree. Students should consult the Health and Fitness Chair within Kinesiology for further information about Health and Fitness Leadership Program requirements, admissions procedures, and application deadlines.

The Kinesiology Office of Student Services and the Health and Fitness Chair are the two main sources of information and support for Health and Fitness Leadership students.
Curriculum Objectives/Outcomes

1. Exercise Prescription & Exercise Adaptation
   Exercise training & Conditioning
   o Understand the physiologic adaptations to exercise and strength conditioning.
   o Be able to apply exercise, strength training and conditioning in a safe and responsible manner.
   Health & Nutrition
   o Understand the bioenergetics of food and how it applies to exercise and physical activity.
   o Understand and apply energy balance.
   o Administer assessments of physical fitness.
   o Understand and administer tests of physical health e.g. body composition.
   o Understand the effects of ergogenic aids and the concepts of pharmacokinetics.
   o Apply modern applications and trackers for activity and health behaviors.
   Psychology & Exercise
   o Recognize the psychological factors which influence involvement in sport and exercise.
   o Apply this knowledge as it relates to physical activity educators.

2. Community, Social and Corporate Health
   Physical Activity & Inactivity
   o Identify activity level behaviors by age, population and socioeconomic level.
   o Describe the pathways by which socioeconomic indicators influence health behaviors.
   o Describe the socioeconomic disparities in physical activity participation.
   o Ethics
   o Develop knowledge of the theoretical approaches used to address the wide range of ethical issues faced by professionals in both community and workplace wellness.
   o Apply the epidemiological information gained to evaluate and develop public health intervention programs.

3. Exercise Research Techniques
   Scientific method
   o Study design i.e. methods, results & conclusions.
   o Qualitative and quantitative statistics.
   o Collaborative writing.

4. Business
   Identify, analyze and discuss legal aspects of sport
   o Contracts, constitutional law, labor employment and IP rights.
   o Conduct marketing analysis.
   o Use current communication tools to enhance learning and professional development.
   o Demonstrate knowledge of laws governing individuals with physical disabilities.
   o Understand the ramifications of banned substances in sport.

5. Disease prevention, Injury prevention & Special populations
   o Recognizing the contributors to heart disease.
   o Identify and manage common injuries and apply injury prevention techniques.
   o Understand the relationship between PT, OT and adapted PE.
   o Distinguish factors that contribute to atypical motor development and function.
Requirements

To declare the HF major, all students will need to:

· Complete MATH 105*, HF/AT 220 and HF/AT 221 with a grade of C or higher
· Have a Cumulative GPA of 2.5 or higher

*Effective Fall 2014, incoming HF-Interest freshmen must complete MATH 105 at the University of Michigan; it cannot be transferred. However, AP credit for MATH 115 will be accepted.

Students who test out of Math 105 must still elect either Math 105 or Math 115 if they are planning to major in Health and Fitness Leadership. Before enrolling in Math 105 or Math 115, students are strongly encouraged to utilize the Math Lab’s resources, including practice math problems, to gauge their own level of math proficiency. Students who receive the Calculus Definite Math Placement recommendation are not required to take MATH 105.

Kinesiology students who wish to graduate in Health and Fitness Leadership must complete an academic plan of study (shown below).

■ HF 218 – Emergency Response (3 cr.)
■ HF 220 – Applied Human Anatomy and Physiology (3 cr.) (NS) – Must be taken concurrently with HF 221.
■ HF 221 – Applied Human Anatomy and Physiology Lab (1 cr.) (NS) – Must be taken concurrently with HF 220.
■ MOVESCI/HF 241 – Exercise, Nutrition and Weight Control (3 cr.)
■ HF 242 – Essentials of Exercise Physiology (3 cr.)
■ HF 251 – Technology in Health & Fitness (3 cr.) (NS)
■ HF 313 – Physical Activity Across Lifespan (3 cr.)
■ HF 313 – Exercise Prescription & Testing (3 cr.)
■ HF 331 – Biomechanics of Sport & Exercise (3 cr.)
■ HF 332 – Principles of Motor Behavior (3 cr.)
■ HF 333 – Legal Issues in Sport & Fitness (3 cr.)
■ HF 403 - Internship (3 cr.)
■ HF/MOVESCI 425 – Physical Act and Pediatric Disabilities (3 cr.)
■ SM/HF 434 – Managerial Ethics in the Sport & Fitness Industries (3cr.)
■ SM/HF 437 – Psychological Aspects of Sport & Exercise (3 cr.) (SS)
■ AT 115 – Prevent & Care – Athletic Injuries (3cr.)
■ AT/PHYSED 326 – Fundamentals of Strength & Conditioning (3 cr.)
■ AT 420 – Pharmacology for the Allied Health Professions (3 cr.)
■ MOVESCI/KIN 413 or MOVESCI/HF/KINESLGY 446 – Social Factors in PA Behavior (3 cr.)
■ SM 101 - Public and Small Group Communication (3 cr.) (HU)
■ SM 111 – Historical & Sociological Bases of Human Movement (3 cr.) (SS)
■ SM 217 – Business Communications (3 cr.) (HU) OR MOVESCI 219 – Scientific Writing (3 cr.)
■ SM 249 – Research Methods (4 cr.) (NS) OR MOVESCI 250 – Statistics (3 cr.) (NS)
■ SM 346 – Principles of Marketing (3 cr.)

Requirements Outside of Kinesiology

■ FYWR – (4 cr.) Must achieve a C or better.
■ MATH 105 - Data, Functions, and Graphs (4 cr.) (NS)
■ PSYCH 111 or 112 - Introduction to Psychology (4 cr.) (SS or NS)
Distribution Requirements
Students must complete the Distribution Requirement of a minimum of 12 credits in Natural Science, Humanities, and Social Science. To see which required courses count toward distribution, students should refer to HF record sheet. For general distribution information, go to the Appendix.

Internship Requirements
Students must complete an approved internship in the field of Health and Fitness to earn their degree. To be eligible for the internship you must have junior standing and a cumulative GPA of 2.5 or higher. Students may repeat the internship for credit if content and summary of work differs.

Study Abroad
Credit from Kinesiology-sponsored and non-Kinesiology-sponsored study abroad programs can be used as general credit toward graduation and to fulfill Distribution requirements. With prior approval by the HF Faculty Committee, students can use study abroad credit to fulfill certain HF requirements. See general policies and procedures for study abroad below.

Required Certifications
Students must obtain American Red Cross Certification in First Aid/CPR/AED prior to graduation.

Cross Campus Transfer Requirements

Sophomore – Cumulative GPA of 3.0 and completion of the following:
- *MATH 105
- MOVESCI/HF 241
- *HF/AT 220, HF/AT 221
- AT 115

Junior – Cumulative GPA of 3.0 and completion of the following:
- *MATH 105
- MOVESCI/HF 241
- *HF/AT 220, HF/AT 221
- AT 115
- MOVSCI 250 or STATS 250 or SM 249
- HF 332
- HF 242
- SM 249