Department of Kinesiology, Health, and Nutrition

The Department of Kinesiology, Health, and Nutrition offers the Master of Science degree in Health and Kinesiology and the Master of Dietetics Studies; as well as three online certificates – the Certificate in Applied Health Research, the Certificate in Community Nutrition, and the Certificate in Health.

- M.S. in Health and Kinesiology (p. 1)
- Master of Dietetics Studies (p. 2)

Master of Science Degree in Health and Kinesiology

The Master of Science degree in Health and Kinesiology is designed for students seeking advanced skills and professional development in Health and Kinesiology. The program is also designed for students who wish to pursue a research career in Health and Kinesiology or to continue their studies at other universities at the doctoral level.

There are three specializations (Health, Exercise Science, and Sport Pedagogy) each with a thesis (33 credit hours) or non-thesis (36 credit hours) option.

- The Health Specialization provides advanced training in public health education and community health promotion.
- The Exercise Science Specialization provides advanced training to students who are interested in kinesiology-related research, and careers in therapeutic professions and wellness/fitness.
- The Sport Pedagogy Specialization prepares future leaders in physical education and coaching.

Program Admission Requirements

Admission to the program is based on the following criteria:

1. Applicants must hold a baccalaureate degree from a regionally accredited college or university in the United States or have proof of equivalent training at a foreign institution.
2. Acceptance to the M.S. program is contingent on having a grade point average (GPA) of at least 3.0 (on a 4.0 scale) in the last 60 semester credit hours of coursework for the baccalaureate degree, as well as in all graduate-level work taken.
3. Applicants without adequate preparation in education may be required to complete preparatory courses as a condition of admission. Individuals who do not meet the University-wide graduate admission grade point average standard may be required to submit Graduate Record Examination (GRE) scores for consideration in admission decisions.
4. Applicants whose native language is not English must have a score of at least 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 79 on the Internet-based TOEFL or a score of 6.5 on the IELTS.
5. Applicants whose undergraduate major was not in Kinesiology or Health may be required to take 6 semester credit hours of undergraduate leveling courses.
6. Applicants are required to submit two professional references to the Graduate Committee.
7. A professional résumé and Statement of Purpose are required of all applicants. The Statement of Purpose cannot be longer than one single-spaced, typed page and must list the interest of specialization.
8. Students who are admitted with leveling courses must take the following undergraduate courses: HTH 3503 Theories of Health Behavior Theories of Health Behavior (Health Specialization) or KIN 2303 Foundations of Kinesiology Cultural and Scientific Foundations (Exercise Science and Sport Pedagogy Specializations), and one additional course at the discretion of the student’s faculty advisor.

Degree Requirements

Thesis Option

Thesis option: Minimum 33 semester credit hours, including: 6 hours of core courses, 12 required specialization hours, 9 prescribed KAH elective hours, and 6 thesis hours.

A. Core Courses. 6 semester credit hours required:
   - KAH 5093 Statistics and Research in Health and Kinesiology
   - KAH 5123 Research in Health and Kinesiology

B. Specialization Courses. Select one of the following specializations:

   Health Specialization
   - KAH 5063 Health Behavior Theory
   - KAH 5083 Epidemiology
   - KAH 5133 Health Program Planning and Implementation
   - KAH 5383 Health Program Evaluation

   Exercise Science Specialization
   - KAH 5053 Principles of Exercise Physiology
   - KAH 5103 Biomechanics
   - KAH 5403 Applied Cardiovascular Physiology
   - KAH 6203 Psychological Perspectives of Motor Learning and Control

   Sport Pedagogy Specialization
   - KAH 5173 Measurement and Evaluation in Physical Education
   - KAH 5313 Adapted Physical Activity
   - KAH 6033 Sport Psychology
   - KAH 6213 Motor Development

C. Prescribed KAH Electives. Select 9 semester credit hours of the following courses:
   - KAH 5053 Principles of Exercise Physiology
   - KAH 5063 Health Behavior Theory
   - KAH 5083 Epidemiology
   - KAH 5103 Biomechanics
   - KAH 5133 Health Program Planning and Implementation
   - KAH 5173 Measurement and Evaluation in Physical Education
   - KAH 5243 Learning and Teaching Styles in Physical Education
   - KAH 5303 Community Health
   - KAH 5323 Community Nutrition
   - KAH 5333 Nutrition through the Lifecycle
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAH 5343</td>
<td>Public Policy and Nutrition</td>
</tr>
<tr>
<td>KAH 5373</td>
<td>Inferential Statistics</td>
</tr>
<tr>
<td>KAH 5403</td>
<td>Applied Cardiovascular Physiology</td>
</tr>
<tr>
<td>KAH 6033</td>
<td>Sport Psychology</td>
</tr>
<tr>
<td>KAH 6043</td>
<td>Applied Sport Psychology</td>
</tr>
<tr>
<td>KAH 6053</td>
<td>Nutrition in Health and Disease</td>
</tr>
<tr>
<td>KAH 6063</td>
<td>Obesity and Health</td>
</tr>
<tr>
<td>KAH 6203</td>
<td>Psychological Perspectives of Motor Learning and Control</td>
</tr>
<tr>
<td>KAH 6213</td>
<td>Motor Development</td>
</tr>
<tr>
<td>KAH 6953</td>
<td>Independent Study</td>
</tr>
<tr>
<td>KAH 6961</td>
<td>Comprehensive Examination</td>
</tr>
<tr>
<td>KAH 6973</td>
<td>Special Problems</td>
</tr>
</tbody>
</table>

D. Thesis. 6 semester credit hours required: 6

E. Comprehensive Examination
Students must successfully pass a comprehensive examination.

Total Credit Hours 33

**Nonthesis Option**

Nonthesis option: Minimum 36 semester credit hours, including: 6 hours of core courses, 12 required specialization hours, 9 prescribed KAH elective hours, and 9 free elective hours.

A. Core Courses. 6 semester credit hours required: 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAH 5093</td>
<td>Statistics and Research in Health and Kinesiology</td>
</tr>
<tr>
<td>KAH 5123</td>
<td>Research in Health and Kinesiology</td>
</tr>
</tbody>
</table>

B. Specialization Courses. Select one of the following specializations: 12

**Health Specialization**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAH 5063</td>
<td>Health Behavior Theory</td>
</tr>
<tr>
<td>KAH 5083</td>
<td>Epidemiology</td>
</tr>
<tr>
<td>KAH 5133</td>
<td>Health Program Planning and Implementation</td>
</tr>
<tr>
<td>KAH 5383</td>
<td>Health Program Evaluation</td>
</tr>
</tbody>
</table>

**Exercise Science Specialization**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAH 5053</td>
<td>Principles of Exercise Physiology</td>
</tr>
<tr>
<td>KAH 5103</td>
<td>Biomechanics</td>
</tr>
<tr>
<td>KAH 5403</td>
<td>Applied Cardiovascular Physiology</td>
</tr>
<tr>
<td>KAH 6203</td>
<td>Psychological Perspectives of Motor Learning and Control</td>
</tr>
</tbody>
</table>

**Sport Pedagogy Specialization**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAH 5173</td>
<td>Measurement and Evaluation in Physical Education</td>
</tr>
<tr>
<td>KAH 5313</td>
<td>Adapted Physical Activity</td>
</tr>
<tr>
<td>KAH 6033</td>
<td>Sport Psychology</td>
</tr>
<tr>
<td>KAH 6213</td>
<td>Motor Development</td>
</tr>
</tbody>
</table>

C. Prescribed KAH Electives. Select 9 semester credit hours of the following courses: 9

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAH 5053</td>
<td>Principles of Exercise Physiology</td>
</tr>
<tr>
<td>KAH 5063</td>
<td>Health Behavior Theory</td>
</tr>
<tr>
<td>KAH 5083</td>
<td>Epidemiology</td>
</tr>
<tr>
<td>KAH 5103</td>
<td>Biomechanics</td>
</tr>
<tr>
<td>KAH 5133</td>
<td>Health Program Planning and Implementation</td>
</tr>
</tbody>
</table>

D. Graduate Free Electives 9

9 semester credit hours (nonthesis option); 6 semester credit hours of KAH 6983 Master’s Thesis (thesis option)

E. Comprehensive Examination
Students must successfully pass a comprehensive examination.

Total Credit Hours 36

**Master of Dietetics Studies**

The Master of Dietetics Studies is an advanced professional degree which together with the Bachelor of Science in Nutrition and Dietetics is known as the Coordinated Program in Dietetics (CPD). Students who successfully complete the dual degree within the CPD receive a verification statement that certifies their eligibility to take the Commission on Dietetics Registration national examination to become a Registered Dietitian (RD). The graduate level coursework and advanced practicum are designed to meet knowledge and competencies to practice as an entry-level practitioner in nutrition and dietetics.

Students in the Master of Dietetics Studies (MDS) will be enrolled in a non-thesis option with an emphasis in Health Promotion and Disease Prevention and Treatment.

**Program Admission Requirements**

Admission to the program is based on the following criteria:

1. Students who have been admitted into the UTSA Coordinated Program in Dietetics as undergraduate students are guaranteed acceptance into the Master of Dietetics Studies program if they have maintained a grade point average (GPA) of at least 3.0 (on a 4.0 scale) in their coursework.

2. Students from other institutions will be considered for the Master of Dietetics Studies if openings are available in the Coordinated Program in Dietetics. The number of students in the program is determined by the number approved through the accreditation process and the number of placement available for the advanced
Nonthesis option: Minimum of 30 semester credit hours including 28 hours of the core courses, and 2–3 hours of free electives.

A. Core Courses (28 semester credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>NDT 5313</td>
<td>3</td>
</tr>
<tr>
<td>NDT 5323</td>
<td>3</td>
</tr>
<tr>
<td>NDT 5333</td>
<td>3</td>
</tr>
<tr>
<td>NDT 5343</td>
<td>3</td>
</tr>
<tr>
<td>NDT 5947</td>
<td>3</td>
</tr>
<tr>
<td>NDT 5957</td>
<td>3</td>
</tr>
<tr>
<td>NDT 5901</td>
<td>3</td>
</tr>
<tr>
<td>NDT 5911</td>
<td>1</td>
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</tbody>
</table>

Students must successfully pass a comprehensive examination under the capstone course NDT 5901 Seminar in Dietetics.

B. Graduate Free Elective (Select a minimum of 2 semester credit hours of the following): 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDT 5851</td>
<td>1</td>
</tr>
<tr>
<td>KAH 5063</td>
<td>3</td>
</tr>
<tr>
<td>KAH 5073</td>
<td>3</td>
</tr>
<tr>
<td>KAH 6063</td>
<td>3</td>
</tr>
<tr>
<td>KAH 6223</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 30

1 Other courses under KAH with the approval of the graduate advisor.

- Graduate Certificate in Applied Health Research (p. 3)
- Graduate Certificate in Community Nutrition (p. 4)
- Graduate Certificate in Health (p. 4)

Graduate Certificate in Applied Health Research

The Graduate Certificate in Applied Health Research is designed to meet the needs of students who want to develop skills related to community and applied public health research. These students include those with a general background in health education, health promotion, psychology, nutrition, or other related field. The certificate provides students with an understanding of the scope and skills associated with applied health research, especially community-based participatory research. The certificate is offered 100% online and provides the opportunity to gain critical skills in responsibilities and competencies related to both health educator certification and public health research.

The certificate coursework allows students to develop skills to identify potential data sources and determine appropriate study designs. In addition, the coursework will expose students to utilizing data collection methods that yield reliable and valid data; conducting descriptive and inferential analysis of data; interpreting epidemiological studies and using epidemiological findings to inform community health research projects.

The following departmental requirements are applicable to the Graduate Certificate in Applied Health Research:

- Bachelor’s degree in Health Education, Health Promotion, Public Health, Psychology, Nutrition, or Dietetics. Closely related degrees will be considered based on completed coursework.
- Minimum grade point average (GPA) of 3.0, though students with a 3.0 GPA in their last two years will be considered.
- To maintain enrollment in the certificate program, students should maintain a 3.0 GPA throughout tenure in the program.
- Two professional letters of recommendation with specified criteria to address.
- Statement of Purpose in pursuing the certificate.

Certificate Program Requirements

To meet the curricular requirements for the Graduate Certificate in Applied Health Research, students must complete the following 12 semester credit hours with a grade point average of 3.0 or above:

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAH 5083</td>
<td>3</td>
</tr>
<tr>
<td>KAH 5353</td>
<td>3</td>
</tr>
<tr>
<td>KAH 5363</td>
<td>3</td>
</tr>
<tr>
<td>KAH 5373</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 12

Students seeking admission to the certificate program who are not enrolled in a graduate degree program will be required to apply to the Graduate School as special graduate students and indicate that they are seeking admission to the Graduate Certificate in Applied Health Research.
Research. All other requirements for admission as a special graduate student described in Chapter 1, Admission, of this catalog are applicable.

All other requirements for certificate programs described in Chapter 3, Certificate Programs, of this catalog apply to this program.

Graduate Certificate in Community Nutrition

The 12-hour Graduate Certificate in Community Nutrition is designed to meet the needs of students who want to contribute to the emerging field of community and public health nutrition. The certificate provides students with an understanding of both the scope and skills associated with community nutrition education and promotion. Specifically, this certificate is offered to equip students to fill the growing need for community nutrition practitioners, especially in south Texas.

The Graduate Certificate in Community Nutrition is offered 100% online and will provide critical knowledge regarding nutrition needs across lifespans. The certificate addresses the growing need for community and public health professionals with nutrition backgrounds. The certificate coursework provides students with a strong foundation in community nutrition content, evidence-based practices, and exposure to the professional roles associated with nutrition programs and policy in dietary behaviors.

The following departmental requirements are applicable to the Graduate Certificate in Community Nutrition:

- Bachelor's degree in Health Education, Health Promotion, Public Health, Psychology, Nutrition, or Dietetics. Closely related degrees will be considered based on completed coursework.

- Minimum grade point average (GPA) of 3.0, though students with a 3.0 GPA in their last two years will be considered.

- To maintain enrollment in the certificate program, students should maintain a 3.0 GPA throughout tenure in the program.

- Two professional letters of recommendation with specified criteria to address.

- Statement of Purpose in pursuing the certificate

Certificate Program Requirements

To meet the curricular requirements for the Graduate Certificate in Community Nutrition, students must complete the following 12 semester credit hours with a grade point average of 3.0 or above:

<table>
<thead>
<tr>
<th>Required courses:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>KAH 6053 Nutrition in Health and Disease</td>
<td>3</td>
</tr>
<tr>
<td>KAH 5323 Community Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>KAH 5343 Public Policy and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>KAH 5333 Nutrition through the Lifecycle</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 12

Students seeking admission to the certificate program who are not enrolled in a graduate degree program will be required to apply to the Graduate School as special graduate students and indicate that they are seeking admission to the Graduate Certificate Program in Community Nutrition. All other requirements for admission as a special graduate student described in Chapter 1, Admission, of this catalog are applicable.

Graduate Certificate in Health

The 12-hour Graduate Certificate in Health is designed to meet the needs of students who want to contribute to the emerging field of community health. The certificate provides students with an understanding of both the scope and skills associated with community health across a variety of settings. The certificate is offered 100% online and will provide critical skills in responsibilities and competencies related to health educator certification and public health practice, and evaluation. It is designed to equip students interested in meeting the need for community health practitioners, especially in underserved areas like South Texas.

The Health certificate allows students to expeditiously engage in both community and public health collaborations to address the urgent health needs of South Texas and beyond. This training is critical to addressing the problem of increasing rates of chronic health-related diseases along the Texas-Mexico border. Students earning the certificate will be trained to contribute to health promotion projects and engage and mobilize communities in promoting health.

The following departmental requirements are applicable to the Graduate Certificate in Health:

- Bachelor's degree in Health Education, Health Promotion, Public Health, Psychology, Nutrition, or Dietetics. Closely related degrees will be considered based on completed coursework.

- Minimum grade point average (GPA) of 3.0, though students with a 3.0 GPA in their last two years will be considered.

- To maintain enrollment in the certificate program, students should maintain a 3.0 GPA throughout tenure in the program.

- Two professional letters of recommendation with specified criteria to address.

- Statement of Purpose in pursuing the certificate

Certificate Program Requirements

To meet the curricular requirements for the Graduate Certificate in Health, students must complete the following 12 semester credit hours with a grade point average of 3.0 or above:

<table>
<thead>
<tr>
<th>Required courses:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>KAH 5063 Health Behavior Theory</td>
<td>3</td>
</tr>
<tr>
<td>KAH 5303 Community Health</td>
<td>3</td>
</tr>
<tr>
<td>KAH 5133 Health Program Planning and Implementation</td>
<td>3</td>
</tr>
<tr>
<td>KAH 5383 Health Program Evaluation</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 12

Students seeking admission to the certificate program who are not enrolled in a graduate degree program will be required to apply to the Graduate School as special graduate students and indicate that they are seeking admission to the Graduate Certificate Program in Health. All other requirements for admission as a special graduate student described in Chapter 1, Admission, of this catalog are applicable.

All other requirements for certificate programs described in Chapter 3, Certificate Programs, of this catalog apply to this program.
Kinesiology and Health (KAH) Courses

KAH 5003. Current Trends in Kinesiology and Health Education. (3-0) 3 Credit Hours.
Students have the opportunity to examine current development in theories and practices of physical education. Recent research and literature are examined for causes and consequences of today's issues, trends, and problems.

KAH 5053. Principles of Exercise Physiology. (3-0) 3 Credit Hours.
Prerequisite: KIN 3433 or an equivalent. A survey of exercise physiology, examining muscular, metabolic and cardiorespiratory adaptations to acute and chronic exercise.

KAH 5063. Health Behavior Theory. (3-0) 3 Credit Hours.
A study of the determinants of human behavior as they relate to current health issues. Health behavior models and underlying rationales for prevention and intervention strategies will be examined. For teachers and counselors, as well as kinesiology and health professionals.

KAH 5073. Essential Concepts in Health Promotion. (3-0) 3 Credit Hours.
The purpose of this course is to introduce students to the field of health promotion and to show how epidemiology, social and behavioral science theory, organization change, administration, and evaluation are related to the design and implementation of health education programs. This course serves as a foundation for other courses in health education and provides an overview of the field to the student from related areas. (Formerly titled "Health and Wellness/Health Promotion").

KAH 5083. Epidemiology. (3-0) 3 Credit Hours.
Prerequisites: KAH 5063 and KAH 5073. The overall goal of this course is to increase the health professional's ability to analyze problems and make decisions based on applications of epidemiologic concepts and methods in a variety of settings, with a particular focus on applications from studies in health promotion. Social, psychological, and biological determinants of disease will be examined. Epidemiologic tools to be presented include use of vital statistics and rates, descriptive studies, observational studies, and experimental studies.

KAH 5093. Statistics and Research in Health and Kinesiology. (3-0) 3 Credit Hours.
This course is designed to provide students with knowledge of experimental designs and the statistical tools necessary for analyzing research data in the fields of Health and Kinesiology.

KAH 5103. Biomechanics. (3-0) 3 Credit Hours.
Prerequisite: KIN 3323 or an equivalent. A survey of principles and procedures related to mechanical analysis of human motion, with emphases on both kinematic and kinetic analysis.

KAH 5123. Research in Health and Kinesiology. (3-0) 3 Credit Hours.
Prerequisite: KAH 5093. Students have the opportunity to review various quantitative and qualitative research methods as well as conduct a review of the literature for a specific topic of interest. The final project will be a research proposal.

KAH 5133. Health Program Planning and Implementation. (3-0) 3 Credit Hours.
Prerequisites: KAH 5063, KAH 5073, and KAH 5093. This course is designed for students interested in planning, implementing, and evaluating health promotion/education programs in school, community, healthcare, and worksite settings. Students enrolled in this course should have prior knowledge of health behavior theories and general foundations of health promotion. (Credit cannot be earned for both KAH 5133 and PSY 7213).

KAH 5173. Measurement and Evaluation in Physical Education. (3-0) 3 Credit Hours.
Prerequisite: KIN 4113 or an equivalent. Overview of measurement theory, item analysis, reliability and validity studies, and factor analysis of tests.

KAH 5243. Learning and Teaching Styles in Physical Education. (3-3) 3 Credit Hours.
Prerequisite: KAH 5003. Techniques for analyzing and enhancing the learning environment to promote and improve physical and sport performance.

KAH 5303. Community Health. (3-0) 3 Credit Hours.
Prerequisites: KAH 5063 and KAH 5073. Study of community health problems, the function of public, private, and voluntary health agencies, and administration and supervision of health programs in the community, school, business, or industry setting.

KAH 5313. Adapted Physical Activity. (3-0) 3 Credit Hours.
This course is designed to provide an introduction to adapted physical activity, including sport and leisure, for persons with disabilities across school, community, and clinical based programs. This course will also provide you with information and knowledge on how to teach physical activities to persons with disabilities in various settings. Current legislation requires that sport, recreation and exercise programs provide reasonable access for persons with disabilities. Thus, the course is important for future education, recreation, sport, and exercise professionals, as employment in such areas now increasingly involves contact with individuals with disabilities.

KAH 5323. Community Nutrition. (3-0) 3 Credit Hours.
Nutrition-related issues in public health, various community resources, agencies, and programs involved in health promotion and disease prevention.

KAH 5333. Nutrition through the Lifecycle. (3-0) 3 Credit Hours.
This course provides the basic nutritional knowledge required to discuss the nutritional needs during various stages of the lifecycle as influenced by physiological, socio-economic, cultural, and environmental factors.

KAH 5343. Public Policy and Nutrition. (3-0) 3 Credit Hours.
The role of public health policy in managing nutrition related chronic health disease and health promotion. This course will discuss the social, economic and environmental policies impacting food access and healthy eating behaviors.

KAH 5353. Research Methods in Community and Public Health. (3-0) 3 Credit Hours.
Inferential Statistics. Introduction to fundamentals of research methods in health education and promotion in community settings. Topics will include principles of research investigation, research design, sampling methods, and measurements. Issues and problems that are commonly encountered in community-based research will be discussed using real-world examples.

KAH 5363. Data Management and Descriptive Statistics. (3-0) 3 Credit Hours.
This course will introduce students to the commonly used data management software in community and public health. The focus of this course will be to familiarize students with processes of data management such as data monitoring, data cleaning and descriptive analysis for the purpose of research and evaluation. Additionally, information will be provided regarding institutional, state and federal protections regarding the use and storage of health-related data.
KAH 5373. Inferential Statistics. (3-0) 3 Credit Hours.
This course will introduce students to the methods commonly used in inferential statistics. The course will provide skills related to sampling procedures, hypothesis testing, and interpreting and disseminating results.

KAH 5383. Health Program Evaluation. (3-0) 3 Credit Hours.
Study of health program evaluation methodology and application in community, school, business, or industry settings. This course is designed to provide graduate health students with an overview of the evaluation process including formative and summative evaluation methods and procedures. We will examine evaluation for intrapersonal, interpersonal and macro-level programs and we will discuss critical issues associated with rigorous evaluation.

KAH 5403. Applied Cardiovascular Physiology. (3-0) 3 Credit Hours.
Prerequisite: KIN 3433, KIN 3443, or an equivalent, or a human physiology course. This course covers the physiology used for obtaining, maintaining, and rehabilitating the health of the cardiovascular system. Recent research findings in the areas of exercise and nutrition, related cardiovascular disease prevention and rehabilitation, weight control, and blood lipids are emphasized. (Formerly titled "Cardiovascular Fitness").

KAH 6013. The Role of Sport in Society. (3-0) 3 Credit Hours.
Examination of sport and physical activity, sport’s impact on society, and the affective roles sport takes as part of our social structure and the institution of education. (Formerly KAH 5013. Same as COU 6013. Credit cannot be earned for more than one of the following: KAH 6013, KAH 5013, or COU 6013).

KAH 6033. Sport Psychology. (3-0) 3 Credit Hours.
A study of cognition and behaviors related to the participation in sport. This course will have a theoretical focus and will include topics such as self-efficacy, performance enhancements, cohesion, arousal and anxiety. Contemporary research will be discussed. (Formerly KAH 5033. Same as COU 6033. Credit cannot be earned for more than one of the following: KAH 6033, KAH 5033, or COU 6033).

KAH 6034. Applied Sport Psychology. (3-0) 3 Credit Hours.
Prerequisite: KAH 6033. This course will provide a practical and comprehensive introduction to somatic, cognitive and behavioral interventions used in athletics to improve performance. Theoretical bases of psychological stress and performance will be explored and appropriate interventions discussed. Research findings related to athletics will be applied. (Same as COU 6034. Credit cannot be earned for both KAH 6034 and COU 6034).

KAH 6053. Nutrition in Health and Disease. (3-0) 3 Credit Hours.
Study of basic nutrients, nutritional needs at various stages of life, and therapeutic diets for selected disease states.

KAH 6063. Obesity and Health. (3-0) 3 Credit Hours.
The spread of obesity has touched virtually every aspect of daily life at every corner of the world and led to unforeseen health and economic burdens at every population level. This seminar will address issues related to the obesity epidemic and explore effective prevention strategies for child, adult, and high-risk populations.

KAH 6203. Psychological Perspectives of Motor Learning and Control. (3-0) 3 Credit Hours.
Study of the individual processes of skill acquisition, including the involvement of transfer, timing, feedback, practice, and retention as well as the processes of central and peripheral mechanisms involved in implementing physical and perceptual skills. (Formerly KAH 5203. Same as COU 6203. Credit cannot be earned for more than one of the following: KAH 6203, KAH 5203, or COU 6203).

KAH 6213. Motor Development. (3-0) 3 Credit Hours.
Prerequisite: KIN 3103 or an equivalent. The study of motor, physical, and neuromuscular development across the human life span (from prenatal periods to old age); stages of development, motor system and development of specific movement patterns.

KAH 6223. Exercise Nutrition. (3-0) 3 Credit Hours.
A scientific evidence-based study of the nutritional aspects of exercise performance and health-related fitness. This course will focus on nutrition-related support of various modes, training, and competition, as well as nutritionally-relevant diseases. Included in the course is an examination of macronutrients, water/hydration, ergogenic aids, and supplements.

KAH 6953. Independent Study. (0-0) 3 Credit Hours.
Prerequisites: Graduate standing and permission in writing (form available) of the instructor and the student’s Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the Master’s degree.

KAH 6961. Comprehensive Examination. (0-0) 1 Credit Hour.
Prerequisite: Approval of the appropriate Graduate Program Committee to take the Comprehensive Examination. Independent study course for the purpose of taking the Comprehensive Examination. May be repeated as many times as approved by the Graduate Program Committee. Enrollment is required each term in which the Comprehensive Examination is taken if no other courses are being taken that term. The grade report for the course is either “CR” (satisfactory performance on the Comprehensive Examination) or “NC” (unsatisfactory performance on the Comprehensive Examination).

KAH 6973. Special Problems. (3-0) 3 Credit Hours.
Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Problems courses may be repeated for credit when topics vary, but not more than 6 hours, regardless of discipline, will apply to the Master’s degree.

KAH 6983. Master’s Thesis. (0-0) 3 Credit Hours.
Prerequisites: Permission of the Graduate Advisor of Record and thesis director. Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the Master’s degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress.

KAH 7893. Doctoral Research. (0-0) 3 Credit Hours.
Prerequisites: Doctoral student standing; consent of the instructor and of the Graduate Advisor of Record. Under the direction of a faculty advisor, this course consists of independent and original research skill building, preparation and writing of dissertation proposal. May be repeated for a maximum of 30 credit hours.
KAH 7991. Doctoral Dissertation. (0-0) 1 Credit Hour. 
Prerequisites: Admission to candidacy and consent of student’s faculty advisor. This course consists of independent and original research skill building under the direction of a faculty advisor. May be repeated for credit, but not more than 10 hours may be applied toward the Doctoral degree.

KAH 7993. Doctoral Dissertation. (0-0) 3 Credit Hours. 
Prerequisites: Admission to candidacy and consent of student’s faculty advisor. Must be a Ph.D. candidate. Preparation, writing, and successful defense of Doctoral dissertation. May be repeated for credit, but not more than 18 hours may be applied toward the Doctoral degree.

Nutrition and Dietetics (NDT) Courses

NDT 5313. Public Health Nutrition and Policy. (3-0) 3 Credit Hours. 
Concepts in nutritional epidemiology and public policy; and community-based interventions, resources, and research.

NDT 5323. Nutrition Pathophysiology. (3-0) 3 Credit Hours. 
Prerequisites: Human physiology and advanced nutrition. Concepts related to nutrigenomics, immunology, pharmacology, fluid and electrolyte balance, acid-based balance, response to injury, complex diseases, and metabolic aberrations.

NDT 5333. Nutritional Supplements and Functional Foods. (3-0) 3 Credit Hours. 
Fundamentals of complementary and alternative medicines, nutritional supplement, ergogenics, herbs, and functional foods; and issues related to their use in health and physical performance.

NDT 5343. Integration of Metabolism. (3-0) 3 Credit Hours. 
Prerequisite: NDT 3413 or equivalent course. An in-depth study of the metabolism of nutrients, energy utilization at the cellular level, and role of coenzymes and cofactors.

NDT 5581. Independent Study. (0-0) 1 Credit Hour. 
Independent reading, research, discussion, project, and/or writing under the guidance of a faculty member. May be repeated for credit, but not more than 6 semester credit hours, regardless of discipline, will apply to a master’s degree.

NDT 5582. Independent Study. (0-0) 2 Credit Hours. 
Independent reading, research, discussion, project, and/or writing under the guidance of a faculty member. May be repeated for credit, but not more than 6 semester credit hours, regardless of discipline, will apply to a master’s degree.

NDT 5583. Independent Study. (0-0) 3 Credit Hours. 
Independent reading, research, discussion, project, and/or writing under the guidance of a faculty member. May be repeated for credit, but not more than 6 semester credit hours, regardless of discipline, will apply to a master’s degree.

NDT 5901. Seminar in Dietetics. (1-0) 1 Credit Hour. 
Prerequisites: Concurrent enrollment in NDT 5957; must be in good academic standing. Capstone course. An in-depth analysis of knowledge of and skills required for entry-level practice. Successful completion includes standardized testing and approval of a professional portfolio by program faculty. To be taken during the last semester of the Coordinated Program.

NDT 5911. Research Seminar. (1-0) 1 Credit Hour. 
Discussion of current research topics, use of databases, and evaluation of research articles. May be repeated for credit.

NDT 5941. Advanced Dietetics Practicum I. (0-0) 1 Credit Hour. 
Prerequisites: Successful completion of all dietetics knowledge core requirements; must be in good academic standing. Supervised practice in dietetics in different settings including acute and long term care facilities, rehabilitation and outpatient clinics, community programs, and foodservice operations; includes weekly seminar.

NDT 5942. Advanced Dietetics Practicum I. (0-0) 2 Credit Hours. 
Prerequisites: Successful completion of all dietetics knowledge core requirements; must be in good academic standing. Supervised practice in dietetics in different settings including acute and long term care facilities, rehabilitation and outpatient clinics, community programs, and foodservice operations; includes weekly seminar.

NDT 5943. Advanced Dietetics Practicum I. (0-0) 3 Credit Hours. 
Prerequisites: Successful completion of all dietetics knowledge core requirements; must be in good academic standing. Supervised practice in dietetics in different settings including acute and long term care facilities, rehabilitation and outpatient clinics, community programs, and foodservice operations; includes weekly seminar.

NDT 5944. Advanced Dietetics Practicum I. (0-0) 4 Credit Hours. 
Prerequisites: Successful completion of all dietetics knowledge core requirements; must be in good academic standing. Supervised practice in dietetics in different settings including acute and long term care facilities, rehabilitation and outpatient clinics, community programs, and foodservice operations; includes weekly seminar.

NDT 5945. Advanced Dietetics Practicum I. (0-0) 5 Credit Hours. 
Prerequisites: Successful completion of all dietetics knowledge core requirements; must be in good academic standing. Supervised practice in dietetics in different settings including acute and long term care facilities, rehabilitation and outpatient clinics, community programs, and foodservice operations; includes weekly seminar.

NDT 5946. Advanced Dietetics Practicum I. (0-0) 6 Credit Hours. 
Prerequisites: Successful completion of all dietetics knowledge core requirements; must be in good academic standing. Supervised practice in dietetics in different settings including acute and long term care facilities, rehabilitation and outpatient clinics, community programs, and foodservice operations; includes weekly seminar.

NDT 5947. Advanced Dietetics Practicum I. (0-0) 7 Credit Hours. 
Prerequisites: Successful completion of all dietetics knowledge core requirements; must be in good academic standing. Supervised practice in dietetics in different settings including acute and long term care facilities, rehabilitation and outpatient clinics, community programs, and foodservice operations; includes weekly seminar.

NDT 5951. Advanced Dietetics Practicum II. (0-0) 1 Credit Hour. 
Prerequisites: NDT 5947; must be in good academic standing. Advanced supervised practice in dietetics with culminating experiences leading to entry-level competency; includes weekly seminar.

NDT 5952. Advanced Dietetics Practicum II. (0-0) 2 Credit Hours. 
Prerequisites: NDT 5947; must be in good academic standing. Advanced supervised practice in dietetics with culminating experiences leading to entry-level competency; includes weekly seminar.

NDT 5953. Advanced Dietetics Practicum II. (0-0) 3 Credit Hours. 
Prerequisites: NDT 5947; must be in good academic standing. Advanced supervised practice in dietetics with culminating experiences leading to entry-level competency; includes weekly seminar.

NDT 5954. Advanced Dietetics Practicum II. (0-0) 4 Credit Hours. 
Prerequisites: NDT 5947; must be in good academic standing. Advanced supervised practice in dietetics with culminating experiences leading to entry-level competency; includes weekly seminar.
NDT 5955. Advanced Dietetics Practicum II. (0-0) 5 Credit Hours.
Prerequisites: NDT 5947; must be in good academic standing. Advanced supervised practice in dietetics with culminating experiences leading to entry-level competency; includes weekly seminar.

NDT 5956. Advanced Dietetics Practicum II. (0-0) 6 Credit Hours.
Prerequisites: NDT 5947; must be in good academic standing. Advanced supervised practice in dietetics with culminating experiences leading to entry-level competency; includes weekly seminar.

NDT 5957. Advanced Dietetics Practicum II. (0-0) 7 Credit Hours.
Prerequisites: NDT 5947; must be in good academic standing. Advanced supervised practice in dietetics with culminating experiences leading to entry-level competency; includes weekly seminar.