

Rationale

The proposed degree programs and curricula represent over a decade of evolution in the Department of Kinesiology. During this time, FAS approved changing the department name to Kinesiology & Health Sciences in 2009 and to the Department of Health Sciences in 2019. These changes included a revised degree program and corresponding name. Since these changes, we have seen the second greatest percent increase in graduating majors of any department in A&S (2009-2022). Last year the Department of Kinesiology graduated the 4th largest number of majors, and we represent one of the most diverse student body of majors in A&S. These name and curricular changes went through internal processes but did not go to SCHEV for various reasons beyond the department's control. In response to the most recent external review (2022) identifying the department's areas of strength in physiology, nutrition, and public health, and to meet the criteria for SCHEV approval, we propose two new degree programs in Health Sciences and Public Health. These proposals include the curricular changes for 1) the BS in Health Sciences, which is aligned with the [National Center for Education CIP Code 26.0908](#) and 2) the BA/BS degree in Public Health, which is aligned with the [National Center for Education CIP Code 51.2201](#). Both degree programs present strong core curricula with clear pathways for students to gain exposure to the most current material in our respective fields. Although there are no new courses proposed, the new curriculum represents changes to prefixes (HSCI and PBHL, which already exist in Banner from the previous proposals), numbering sequences, and additional prerequisites which provide a logical progression through the majors, ensuring that students will be well prepared for careers or graduate school in health sciences and public health related fields.

The B.S. In Health Sciences:

A B.S. degree in Health Sciences prepares students for a wide variety of academic and professional pursuits in fields that specialize in human health. The program places specific emphasis on the scientific study of the physiological processes involved in human health including physical and motor activity, response mechanisms, and the effects of injury, disease, and disability as well as contemporary issues and ethics in health sciences and statistical methods for studying these phenomena. The degree program includes instruction in muscular and skeletal anatomy; molecular and cellular basis of muscle contraction; nutrition; neurophysiology of motor mechanics; systemic physiological responses (respiration, blood flow, endocrine secretions, etc.); fatigue and exhaustion; muscle and body training; physiology of specific exercises and activities; physiology of injury; and the effects of disabilities and disease on humans.

Required Credit Hours: 35

Requirements for Major

Major Computing Requirement:

- [HSCI 300 \(KINE 394\) – Statistical and Data Analysis in Health Sciences](#) *Credits: (3)*

Major Writing Requirement:

The major writing requirement in Health Sciences may be satisfied by obtaining a C- or better in one of the following courses:

- Health Sciences CAPSTONE courses (*see below*)

Required Courses:

Students must pass the following required courses; prerequisites noted in parentheses (23 credits):

- [HSCI 101 \(KINE 200\) - Introduction to the Human Body](#) - *Credits: (3)*
- [HSCI 130 \(KINE 350\) – Introduction to Nutrition](#) - *Credits: (3)*
- [HSCI 210 \(KINE 303 - Human Anatomy](#) + [HSCI 210L \(KINE 315\)](#) or [HSCI 211L \(KINE 314\)](#) (prerequisite HSCI 101) - *Credits (4)*
- [HSCI 300 \(KIN394\) –Statistical and Data Analysis in health Sciences](#) (prerequisite two courses n HSCI or PBHL) - *Credits: (3)*
- [HSCI 320 \(KINE 304\) - Human Physiology](#) + [HSCI 320L \(KINE 305\)](#) (prerequisite HSCI 210) - *Credits (4)*
- [HSCI 325 \(KINE 442\) - Exercise Physiology](#) (prerequisite HSCI 320) - *Credits: (3)*
- CAPSTONE (pick one)
 - HSCI 410 – Advanced Topics in Applied Health Sciences (prerequisite HSCI 320 and HSCI 300) - *Credits: (3)*
 - This course covers advanced topics in applied health sciences. Students will engage in an advanced topic that integrates the knowledge gained through their progression in the degree curriculum. The course will satisfy the C400 requirements as well as the major writing requirement.
 - HSCI 420 – Advanced Topics in Physiology (prerequisite HSCI 320 and HSCI 300) - *Credits: (3)* (examples [KINE 455 – Physiology of Obesity](#), [KINE 458R – Cellular Basis of Neuromuscular Physiology](#), [KINE 401 – Neurophysiology of Aging](#))
 - This course covers advanced topics in physiology. Students will engage in an advanced topic that integrates the knowledge gained through their progression in the degree curriculum. The course will satisfy the C400 requirements as well as the major writing requirement.

- HSCI 430 - Advanced Topics in Nutrition (prerequisite HSCI 320 and HSCI 300) - *Credits: (3)*
 - This course covers advanced topics in nutrition. Students will engage in an advanced topic that integrates the knowledge gained through their progression in the degree curriculum. The course will satisfy the C400 requirements as well as the major writing requirement.
- [HSCI 490 \(KINE 480 + KINE 490\)– Advanced Research in Health Sciences](#) (delinked; prerequisite HSCI 480) - *Credits: (3)*
 - In this course students will engage in intensive research training with the instructor for at least 3 hours during the semester and may also include 1h per week laboratory meeting with the instructor (15h). Additional independent research conducted by the student typically includes ~3h per week/per credit hour in the laboratory (45h per semester for 1 credit, 135h for 3 credits). In addition, students will be expected to write a research paper presenting their results in a scientific manner to an informed audience. In addition, students' research findings will be presented in poster format using lay language and intended for a general audience, to be presented at the Health Sciences Research Symposium held at the end of each semester. The course will satisfy the C400 requirements as well as the major writing requirement.
- [HSCI 498 \(KINE 498\) - Internship](#) *Credits: (3)*

1 Course – Contemporary Issues or Ethics (3 credits)

Students must pass 1 of the following classes:

- [PBHL 340 \(KINE 320\) - Issues in Health](#)
- [HSCI 342 \(KINE 393\) – Ethics in Health Sciences](#)

Electives (9 credits)

- [HSCI 310 \(KINE 308\) - Biomechanics of Human Movement](#)
- [HSCI 314 \(KINE 240\) - Medical Terminology](#)
- [HSCI 315 \(KINE 295\) - Health-Related Exercise Prescription](#)
- [HSCI 316 \(KINE 359\) - Medical Pharmacology](#)
- [HSCI 317 \(KINE 422\) - Motor Control, Learning, and Development](#)
- [HSCI 326 \(KINE 310\) - Microbes in Human Disease](#)
- [HSCI 326L \(KINE 311\) - Microbes in Human Disease Laboratory](#)
- [HSCI 330 \(KINE 353\) - Nutrition and Human Performance](#)
- [HSCI 331 \(KINE 357\) - Nutrition Across the Lifespan](#)
- [HSCI 411 \(KINE 450\) - Cardiovascular Physiology](#)
- [HSCI 412 \(KINE 458\) - Cellular Basis of Neuromuscular Physiology](#)
- [HSCI 414 \(KINE 360\) - Physiology of Aging](#)
- [HSCI 430 \(KINE 354\) - Nutrition in Health & Disease](#)

- [HSCI 470 \(KINE 470\) - Independent Study in Health Sciences](#)
- [HSCI 480 \(KINE 480\) - Research in Health Sciences](#)

TOTAL Credits = 35 BA/BS in Public Health

The BA in Public Health provides students a broad-based exploration of Public Health issues, tools, and concepts, with an emphasis on the social, psychological, and political factors that influence health. This degree is appropriate as preparation for graduate study or employment in Public Health, Global Health, or other health professions. It may be of particular interest to students wishing to pursue careers related to health promotion and education, public health nutrition, public health policy, and community-based approaches to population health.

The BS in Public Health provides students a broad-based exploration of Public Health issues, tools, and concepts, with an emphasis on the biological aspects of public health including physiological and nutritional factors that influence health. This degree is appropriate as preparation for graduate study or employment in Public Health, Global Health, or other health professions. It may be of particular interest to students wishing to pursue careers related to epidemiology, clinical health research, environmental health, and the overlap between public health and clinical practice.

Required Credit Hours: 36

Major Computing Requirement:

- [HSCI 300 \(KINE 394\) – Statistical and Data Analysis in Health Sciences](#) *Credits: (3)*

Major Writing Requirement:

The major writing requirement in Public Health may be satisfied by obtaining a C- or better in one of the following courses:

- Public Health (PBHL) CAPSTONE courses (*see below*)

The B.A. in Public Health:

Students must pass the following required courses; prerequisites noted in parentheses (24 credits):

- [PBHL 101 \(KINE 280\) – Introduction to Public Health](#) Credits (3)
- [PBHL 201 \(KINE 270\) - Foundations of Epidemiology](#) (prerequisite PBHL101) – Credits (3)
- [PBHL 212 \(KINE 290\) - Global Health](#) (prerequisite PBHL101) – Credits (3)
- [HSCI 300 \(KINE 394\) – Statistical and Data Analysis in health Sciences](#) (prerequisite two courses in HSCI or PBHL) - Credits: (3)
- [PBHL 323 \(KINE 323\) - Health Policy](#) (prerequisite PBHL 201) Credits: (3)
- [PBHL 325 \(KINE 325\) - Environmental Issues in Public Health](#) (prerequisite PBHL 201) - Credits: (3)
- [PBHL 350 \(KINE 300\) - The Social and Behavioral Sciences in Health](#) (prerequisite PBHL 201) - Credits: (3)
- CAPSTONE pick one
 - [PBHL 410 – Advanced Topics in Public Health](#) (prerequisite PBHL 323, 325, or 350 and PBHL 300) – Credits (3) (example [KINE 406 – Public Health Research Issues](#))
 - This course covers advanced topics in public health. Students will engage in an advanced topic that integrates the knowledge gained through their progression in the degree curriculum. The course will satisfy the C400 requirements as well as the major writing requirement.
 - [PBHL 490 \(KINE 480 + KINE 490\) – Advanced Research in Public Health](#) (delinked; prerequisite PBHL 480) - Credits (3)
 - In this course students will engage in intensive research training with the instructor for at least 3 hours during the semester and may also include 1h per week laboratory meeting with the instructor (15h). Additional independent research conducted by the student typically includes ~3h per week/per credit hour in the laboratory (45h per semester for 1 credit, 135h for 3 credits). In addition, students will be expected to write a research paper presenting their results in a scientific manner to an informed audience. In addition, students' research findings will be presented in poster format using lay language and intended for a general audience, to be presented at the Health Sciences Research Symposium held at the end of each semester. The course will satisfy the C400 requirements as well as the major writing requirement.
 - [PBHL 498 – Internship](#) – Credits (3)

1 Course – Contemporary Issues or Ethics (3 credits)

Students must pass 1 of the following classes:

- [PBHL 340 \(KINE 320\) - Issues in Health](#)
- [HSCI 342 \(KINE 393\) – Ethics in Health Sciences](#)

Electives – Choose 3 courses in PBHL at or above the 300 level, or HSCI with approval of major advisor (9 credits)

- [PBHL 330 \(KINE 358\) - Community Nutrition](#) (no prerequisite)
- [PBHL 331 \(KINE 356\) - Public Health Nutrition: Concepts & Controversies](#) (no prerequisite)
- [PBHL 332 \(KINE 361\) - Population Nutrition, Policy, and Programs](#) (no prerequisite)
- [PBHL 351 \(KINE 403\) - The Social Determinants of Health: Living and Dying in the USA](#) (prerequisite PBHL 350)
- [PBHL 362 \(KINE 301\) - Public Health and Physical Activity](#) (prerequisite PBHL 201)
- [PBHL 412 \(KINE 404\) - Global Health Issues](#) (prerequisite PBHL 212)
- [PBHL 461 \(KINE 405\) - Maternal, Neonatal, and Child Health](#) (prerequisite PBHL 201)
- [PBHL 440 \(KINE 415\) - Public Health: Health Equity, Sustainability, and Well-Being in a Global Age](#) (prerequisite PBHL 212 and PBHL 340 or HSCI 342)
- [PBHL 470 \(KINE 470\) - Independent Study in Public Health](#)
- [PBHL 480 \(KINE 480\) - Research in Public Health](#)

TOTAL Credits = 36

The B.S. in Public Health:

Students must pass the following required courses; prerequisites noted in parentheses (24 credits):

- [PBHL 101 \(KINE 280\) – Introduction to Public Health](#) *Credits (3)*
- [PBHL 201 \(KINE 270\) - Foundations of Epidemiology](#) (prerequisite PBHL101) – *Credits (3)*
- [PBHL 212 \(KINE 290\) - Global Health](#) (prerequisite PBHL101) – *Credits (3)*
- [HSCI 300 \(KINE 394\) –Statistical and Data Analysis in health Sciences](#) (prerequisite two courses in HSCI or PBHL) - *Credits: (3)*
- [PBHL 323 \(KINE 323\) - Health Policy](#) (prerequisite PBHL 201) *Credits: (3)*
- [PBHL 325 \(KINE 325\) - Environmental Issues in Public Health](#) (prerequisite PBHL 201) - *Credits: (3)*
- [PBHL 350 \(KINE 300\) - The Social and Behavioral Sciences in Health](#) (prerequisite PBHL 201) - *Credits: (3)*
- CAPSTONE pick one
 - PBHL 410 – Advanced Topics in Public Health (prerequisite PBHL 323, 325, or 350 and PBHL 300) – *Credits (3)* (example [KINE 406 – Public Health Research Issues](#))
 - This course covers advanced topics in public health. Students will engage in an advanced topic that integrates the knowledge gained through their progression in the degree curriculum. The course will satisfy the C400 requirements as well as the major writing requirement.

- [PBHL 490 \(KINE 480 + KINE 490\) – Advanced Research in Public Health](#) (delinked; prerequisite PBHL 480) - *Credits (3)*
 - In this course students will engage in intensive research training with the instructor for at least 3 hours during the semester and may also include 1h per week laboratory meeting with the instructor (15h). Additional independent research conducted by the student typically includes ~3h per week/per credit hour in the laboratory (45h per semester for 1 credit, 135h for 3 credits). In addition, students will be expected to write a research paper presenting their results in a scientific manner to an informed audience. In addition, students' research findings will be presented in poster format using lay language and intended for a general audience, to be presented at the Health Sciences Research Symposium held at the end of each semester. The course will satisfy the C400 requirements as well as the major writing requirement.
- [PBHL 498 \(KINE 498\) – Internship](#) – *Credits (3)*

1 Course – Contemporary Issues or Ethics (3 credits)

Students must pass 1 of the following classes:

- [PBHL 340 \(KINE 320\) - Issues in Health](#)
- [HSCI 342 \(KINE 393\) – Ethics in Health Sciences](#)

Choose 3 additional NQR classes at or above the 200 level within the Health Sciences (9 credits)

- [HSCI 210 \(KINE 303\) - Human Anatomy](#) (prerequisite HSCI 101) - *Credits (4)*
- [HSCI 310 \(KINE 308\) - Biomechanics of Human Movement](#)
- [HSCI 314 \(KINE 240\) - Medical Terminology](#)
- [HSCI 315 \(KINE 295\) - Health-Related Exercise Prescription](#)
- [HSCI 316 \(KINE 359\) - Medical Pharmacology](#)
- [HSCI 317 \(KINE 422\) - Motor Control, Learning, and Development](#)
- [HSCI 320 \(KINE 304\) - Human Physiology](#) (prerequisite HSCI 210) - *Credits (4)*
- [HSCI 325 \(KINE 442\) -Exercise Physiology](#)
- [HSCI 326 \(KINE 310\)- Microbes in Human Disease](#)
- [HSCI 326L \(KINE 311\) - Microbes in Human Disease Laboratory](#)
- [HSCI 330 \(KINE 353\) - Nutrition and Human Performance](#) (add NQR)
- [HSCI 331 \(KINE 357\) - Nutrition Across the Lifespan](#) (add NQR)
- [HSCI 411 \(KINE 450\) - Cardiovascular Physiology](#)
- [HSCI 412 \(KINE 458\) - Cellular Basis of Neuromuscular Physiology](#)
- [HSCI 414 \(KINE 360\) - Physiology of Aging](#)
- [HSCI 430 \(KINE 354\) - Nutrition in Health & Disease](#) (change CSI to NQR)
- [HSCI 470 \(KINE 470\)- Independent Study in Health Sciences](#)
- [HSCI 480 \(KINE 480\) - Research in Health Sciences](#)

TOTAL Credits = 36