

THE UNIVERSITY OF NORTH CAROLINA ASHEVILLE
FACULTY SENATE

Senate Document Number 3420S
Date of Senate Approval 04/09/20

Statement of Faculty Senate Action:

APC Document 31 (HWP): **Delete HWP 294, Human Physiology, replacing with HWP 234, Anatomy and Physiology I;**
 Delete HWP 295, Functional Anatomy, replacing with HWP 235, Anatomy and Physiology II;
 Add new course: HWP 342, Advancing Health Equity: Domestic and Global Contexts;
 Delete HWP 345, Research Methods in Health and Wellness Promotion, replacing with HWP 245, Research Methods in Health and Wellness Promotion;
 Delete HWP 350, Service Learning in Health Promotion;
 Delete HWP 355, Exercise Prescription, Fitness and Lifestyle Assessment replacing with HWP 425, Exercise Prescription, Fitness and Lifestyle Assessment
 Reinstate previously deleted HWP 401, Nutrition and Metabolism;
 Add new course: HWP 440, Epidemiology and the Environment

Effective Date: Fall 2020

1. Delete: On page 156, the entry for **HWP 294, Human Physiology:**

294 Human Physiology (4)

An introductory study of human physiology. Topics include an introduction to cells, tissues, systems organization, osteology, circulatory system, body defense systems, muscular system, renal system, respiratory system, digestive system, nervous system and endocrine system. Laboratory involves experimentation and demonstration of physiological principles. Fall.

Add: On page 156, replacement course, **HWP 234, Anatomy and Physiology I:**

234 Anatomy and Physiology I (4)

An introductory study of human anatomy and physiology. Topics include an introduction to cells, tissues, systems organization, circulatory system, body defense systems, respiratory system, nervous system and endocrine system. Laboratory involves experimentation and demonstration of physiological principles. No credit given to students with credit for HWP 294. Pre- or corequisite: HWP 223, 224, or 225. Fall and Spring.

Impact: This change will not affect major requirements for any HWP majors as the course is currently required by all Health and Wellness Promotion majors, and all 3 concentrations will continue to require it. Similarly, it will not affect minor, or university requirements. Changing the course description is not anticipated to impact our staffing needs. We currently teach 4 lecture sections and 4-to-6 lab sections per year. Two instructors are able to teach this course. Class size for lecture will cap at 45 with labs capping at 15. We anticipate needing a

similar number of sections yearly in future years. However, this change to A&P I and II may increase interest from pre-health professions students (a few per year) and may slightly decrease the number of students taking anatomy and physiology classes in BIOL. For students under the old curriculum and those who may need to retake/replace the grade received in HWP 294, HWP 234 will align in the first three years after this change with Human Physiology, HWP 294. Concurrence from the Biology Department has been received for this change.

Rationale: The Health and Wellness Department is shifting to offering Anatomy and Physiology in a combined, 2-course series to better align with the requirements for graduate programs. In addition, it makes pedagogical sense to teach the anatomy and physiology of human biological systems concurrently. We plan to pursue the lab science designation for this course so that HWP majors in all concentrations will fulfill their lab science through a required course in the major. Because the course is required for HWP majors, we are adding the pre- or corequisite of 223, 224, or 225 in order to slow the influx of students from other majors simply looking for a lab science.

2. Delete: On page 156, the entry for **HWP 295, Functional Anatomy:**

295 Functional Anatomy (4)

The study of the structure and function of the human body and human muscular system as related to sports and fitness activities. Anatomical, kinesiological, biomechanical and physiologic principles related to sport and fitness activity will be examined. The laboratory portion of the course emphasizes practical applications. Prerequisite: HWP 294. Spring.

Add: On page 156, replacement course, **HWP 235, Anatomy and Physiology II:**

235 Anatomy and Physiology II (4)

A continuation of the study of human anatomy and physiology. Topics will build on HWP 234 to include metabolism, osteology, and the muscular, renal, and digestive systems. Laboratory involves experimentation and demonstration of physiological principles. No credit given to students with credit for HWP 295. Prerequisite: HWP 234. Spring.

Impact: HWP 235 will be a required course for students opting for the Health Sciences concentration. This course is currently designated as a lab science and we plan to continue this designation. We currently teach 1 lecture and lab section of this course per year. Two instructors are able to teach this course. Class size for lecture will cap at 45 with labs capping at 15. If additional pre-health professions students choose the anatomy and physiology series, we may need to add 1 additional lab section of this course each year, but won't need an additional lecture section. HWP majors in the General and Public Health concentrations will not be required to take this course, but may choose to use it to fulfill their lab science requirement. For students under the old curriculum and those who may need to retake/replace the grade received in HWP 295, HWP 235 will align in the first three years after this change with Functional Anatomy, HWP 295. Concurrence from the Biology Department has been received for this change.

Rationale: The Health and Wellness Department is shifting to offering Anatomy and Physiology in a combined, 2-course series to better align with the requirements for graduate programs. In addition, it makes pedagogical sense to teach the anatomy and physiology of human biological systems concurrently. The subjects of kinesiology and biomechanics (no longer a focus in HWP 235) will be implemented over time into an elective course.

3. Add: On page 158, new course, **HWP 342, Advancing Health Equity: Domestic and Global Contexts**

342 Advancing Health Equity: Domestic and Global Contexts (4)

Investigates the historic and present-day social, economic, and political influences on health around the world. exploring the ways that health is conceived of and measured at various levels, from local, to national and international. Considering the contributors to health of populations, available resources, and priorities, we will examine ways to effectively advance health equity. We will explore questions around at what points and in what ways health and our human rights are threatened, and discuss approaches for promoting and sustaining health justice, from the personal to the global. No credit given to students with credit for HWP 250. Prerequisite: HWP 310. Spring.

Impact: This course is one of 2 updated courses and 3 courses overall that will serve as the core public health courses of the proposed public health concentration within the HWP department, and is not a requirement for all HWP majors. The expectation is that one section will be necessary each year. Students in the public health concentration will be required to take HWP 342 and other HWP students may choose to take the course as an elective. Students will develop an in-depth understanding of disparities facing many sub-groups in the USA and in other countries and the health promotion, policy, and other approaches to increase equity. The anticipated class size is 20-25 and the scheduled class time will be 3 hours and 10 minutes each week (consistent with a 4-credit-hour course). The instructional format will include various approaches, including lecture and discussion and an applied research project. There are no special material or space needs. At least 2 faculty members in the department can teach this course. Though this course is new in design, we had a similar course as a required course for the major for several years and that course, or another course on Health Justice, has been available at least once a year recently.

Rationale: This course is an updated version of HWP 250, Health Parity: Domestic and Global Contexts that was deleted effective Fall 2019. Since basic content of the health parity course was folded into a course required of all majors - HWP 310 - we would like to offer a course that builds on the basic concepts and supports learning about the complexities of health disparities and advancing health equity. This course will include an emphasis on global health in order to ensure that students gain a global perspective and learn about relevant measures, challenges, and approaches. We also have taught a version of this course at the higher level (Health Justice: From Data to Action) that was successful, and that course will serve as a foundation for this new course.

4. Delete: On page 158, the entry for **HWP 345, Research Methods in Health and Wellness Promotion:**

345 Research Methods in Health and Wellness Promotion (3)

Students evaluate clinical studies, identify weaknesses in study design, interpret statistics, and apply evidence from clinical research to areas of interest. Topics include reliability, validity, statistical significance, research design, and program assessment. The student will sharpen analytical skills and learn to evaluate studies using a variety of discipline-specific methods. Prerequisite: STAT 185. See department chair.

Add: On page 156, replacement course, **HWP 245, Research Methods in Health and Wellness Promotion:**

245 Research Methods in Health and Wellness Promotion (4)
Exploration of both quantitative and qualitative research methodologies to evaluate clinical studies, identify weaknesses in study design, interpret statistics, and apply evidence from clinical research to areas of interest. Students will understand the theoretical basis behind various research methods, delineate select methodological approaches, formulate a unique problem statement and allied research question(s), develop a literature review to substantiate their research question(s), design a research study to evaluate the proposed research question(s), and implement a research study. The student will sharpen analytical skills and learn to critique studies and program evaluation plans using a variety of discipline-specific methods. No credit given to students with credit for HWP 345. Prerequisite: STAT 185. Fall and Spring.

Impact: This course is moving from an elective course to a required course, and as such it will increase the major requirements by 4 credits. This change will impact our staffing needs, as making it a requirement will necessitate that the department offer and staff multiple sections per year. However, multiple faculty in the department are capable and open to teaching HWP 245. Furthermore, changing the credit hours from 3 hours to 4 hours will allow this course to fit within the new departmental standards for course credit hours and allow for study implementation in addition to planning.

Rationale: Making this course a requirement reflects the departmental emphasis on the ability to critically evaluate scientific sources and effectively translate that information to clinical practice with future clients. The increase from 3 to 4 credits will provide an opportunity for an applied component to be added to the course, whereby students will have an opportunity to collect and analyze data and better understand each aspect of the research process. The change in course number reflects the department's belief that this course should be a foundation of the student's education in Health and Wellness, the content of which will be emphasized and expanded in higher level courses.

5. Delete: On page 158, the entry for **HWP 350, Service Learning in Health Promotion:**

350 Service Learning in Health Promotion (3)
A structured learning experience that combines community service with preparation and reflection. Students apply the course material in health promotion and diversity to meet the actual health needs of children, teens and seniors from various backgrounds in our community. Experiences include regular university classroom sessions, attendance at cultural events, on-site work in local organizations and project team meetings. Prerequisite: Junior standing. See department chair.

Impact: No significant impact to students or faculty is anticipated due to deletion of this course. It has only been taught a few times in the last 5 years. Students who have taken it will still be able to count it towards the HWP major as an elective.

Rationale: This course is no longer necessary as we have more structured and varied opportunities for students to gain service learning experience through the HWP curriculum. The course is rather redundant with HWP 380, Internship in Health and Wellness Promotion.

6. Delete: On page 158, the entry for **HWP 355, Exercise Prescription, Fitness and Lifestyle Assessment:**

355 **Exercise Prescription, Fitness and Lifestyle Assessment (4)**
Prepares the student to recognize and implement appropriate strategies to enhance fitness and exercise performance based on sound physiological principles. Topics include strength, flexibility and cardiovascular conditioning as well as body composition and nutrition for fitness. The course will cover principles of exercise program design, fitness and lifestyle assessment techniques. Students will have the option to sit for the ACSM Personal Training Certification exam at the end of the course. Prerequisite: HWP 223. See department chair.

Add: On page 159, replacement course, **HWP 425, Exercise Prescription, Fitness and Lifestyle Assessment:**

425 **Exercise Prescription, Fitness and Lifestyle Assessment (4)**
Prepares the student to recognize and implement appropriate strategies to enhance fitness and exercise performance based on sound physiological principles. Topics include strength, flexibility and cardiovascular conditioning as well as body composition and nutrition for fitness. The course will cover principles of exercise program design, fitness and lifestyle assessment techniques. Students will have the option to sit for the ACSM Personal Training Certification exam at the end of the course. No credit given to students with credit for HWP 355. Prerequisite: HWP 420. See department chair.

Impact: This change in prerequisites will not significantly impact major, minor, or university requirements; however, it will likely reduce the number of non-HWP majors who choose this course. Two faculty members are able to teach this course. Class size will be kept at 15 students given lab space.

Rationale: This change in prerequisites will ensure that students taking HWP 425 will be adequately prepared for the material and assignments, which require foundational knowledge in exercise physiology. While HWP 223 provides very basic information on exercise science, students who are being asked to carry out appropriate strategies to enhance fitness and exercise performance should have the foundational knowledge of exercise physiology principles found in HWP 420. The level of detail in HWP 223 does not adequately provide this foundation.

7. Add: On page 159, reinstate previously deleted course, **HWP 401, Nutrition and Metabolism:**

401 **Nutrition and Metabolism (3)**
An advanced course covering nutrition at the cellular level. Students are introduced to nutritional biochemistry and provided with a mechanistic look at nutritional strategies for health promotion. Topics include energy transformation, metabolism, the role of macro- and micro-nutrients in chronic disease promotion and prevention, homeostatic balances, and research methodologies in nutrition science. Prerequisites: HWP 225; HWP 235 or BIOL 328; STAT 185. See department chair.

Impact: This course can be used to fulfill required elective credits for HWP majors, but it is not required. It is in a specified list of electives for the Health Sciences concentration. Anticipated class size is 15. Format is lecture with discussion and applied practice. Currently, 2 departmental faculty can teach the course. The course will be offered once in alternate years, semester and year TBD. Because this elective will be offered

infrequently and is an elective, it is not anticipated to have a significant impact on our ability to deliver our existing or proposed curriculum.

Rationale: For years, students have been requesting additional course offerings in nutrition science. This particular offering is an especially good fit for students who wish to continue their studies in health science and deepen their knowledge of the mechanisms involved in the interaction of food/nutrients eaten and health.

8. Add: On page 159, new course, **HWP 440, Epidemiology and the Environment:**

440 Epidemiology and the Environment (4)

Epidemiology is the study of health, disease, risk factors, and determinants of health in populations. This course includes basic concepts of epidemiology and application to multiple domains of public health. Students will learn to use epidemiology to better understand, characterize, and promote health. This course focuses on utilizing epidemiological principles to understand how the health of humans, animals, and the environment are intertwined and how scientific research can support sound environmental health policy. HWP 245; STAT 185. Fall.

Impact: HWP 440 is one of 3 courses that will serve as the core public health courses of the proposed public health concentration within the HWP department, and is not a requirement for all HWP majors; the expectation is that one section will be necessary each year. Students in the public health concentration will be required to take HWP 440, and other HWP students may choose to take the course as an elective. Students will develop an understanding of patterns of disease, health, risk factors, and determinants of health in populations. Students will utilize mathematical and statistical knowledge and skills to calculate and communicate various measures of occurrence and association, particularly around environmental health concepts. The anticipated class size is 20-25 and the scheduled class time will be 3 hours and 10 minutes each week (consistent with a 4-credit-hour course). The instructional format will include lecture and discussion. There are no special material or space needs. At least 2 faculty members in the department can teach this course. The course will be offered once a year in the fall, so that concentration students are able to take it in their junior or senior year.

Rationale: Epidemiology, biostatistics, and environmental health are fundamental public health topics and an essential part of public health curricula. This course incorporates introductory concepts into a 400-level course that will prepare students for graduate programs and/or entry-level work in public health. Students will be able to build on knowledge from required courses STAT 185 and HWP 245, and they may decide to take additional courses in environmental sciences and health.