**PUBLIC HEALTH (PH)**

### 400 Level Courses

**PH 432: Healthy Aging. 3 credits.**
Offers a broad perspective of normal aging in the older adult, and the impact of chronic disease and psychosocial and cultural factors on the aging process. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). Limited to three attempts.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Undergraduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**PH 440: Independent Study in Public and Population Health. 1-3 credits.**
Individualized study of selected area of public and population health under the direction of faculty. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May be repeated within the degree for a maximum 9 credits.

**Specialized Designation:** Topic Varies

**Recommended Prerequisite:** Departmental approval.

**Schedule Type:** Independent Study

**Grading:**
This course is graded on the Satisfactory/No Credit scale. (http://catalog.gmu.edu/policies/academic/grading/)

**PH 450: Study Abroad in Public and Population Health. 0-6 credits.**
Study abroad under supervision of George Mason University faculty. Course topics, content and locations vary. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May be repeated within the degree for a maximum 12 credits.

**Specialized Designation:** Topic Varies

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Undergraduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**PH 451: Foundations of Clinical Research. 1 credit.**
Provides students with fundamental concepts and basic analytic methods pertaining to the design, analysis, and interpretation of clinical research. Outlines the research process by introducing the components of research - from beginning a literature search, to designing an experiment, to selecting appropriate outcome measures, and collecting data. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). Limited to three attempts. Equivalent to HHS 491.

**Schedule Type:** Seminar

**Grading:**
This course is graded on the Undergraduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**PH 492: RS: Internship in Clinical Research. 3 credits.**
Provides students with experiential learning in a research laboratory that focuses on clinical health research. Students are matched with a clinical research supervisor that provides both research and professional development mentorship. Through this opportunity, students enhance their research, critical thinking, problem-solving and presentation skills. An application must be submitted in the semester prior to enrollment in the course. During the semester prior to entry, students may be asked to acquire certain competencies/certifications in order to fully participate at their research site (e.g., human subjects research protections training, lab safety, certification, HIPAA training). Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). Limited to three attempts.

**Recommended Prerequisite:** Course is open to honors college students only.

**Schedule Type:** Internship

**Grading:**
This course is graded on the Undergraduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**PH 493: Research Internship in Public and Population Health. 3 credits.**
Students will acquire selected research skills and develop introductory research writing and presentation skills. Engage as a member of a team in public and population health research and attends a bi-weekly research seminar. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). Limited to three attempts.

**Recommended Prerequisite:** Open only to students in the College of Public Health.

**Schedule Type:** Internship

**Grading:**
This course is graded on the Undergraduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**PH 495: Internship in Public and Population Health. 1-3 credits.**
Professional experience under supervision of qualified professional in public and population health agencies or other acceptable organizations. Supervision and approval of this course must be arranged with department before registering. Students are expected to understand the the roles and functions of health organizations, integrate and apply critical-thinking, project-planning, and communication skills in the internship experience and towards completion of an approved project. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May be repeated within the degree for a maximum 9 credits.

**Recommended Prerequisite:** Departmental approval.

**Schedule Type:** Internship

**Grading:**
This course is graded on the Satisfactory/No Credit scale. (http://catalog.gmu.edu/policies/academic/grading/)

**PH 496: Directed Research in Public and Population Health. 1-3 credits.**
Engages students in a directed research project under the guidance of a faculty member. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May be repeated within the degree for a maximum 6 credits.
Recommended Prerequisite: Departmental approval.

Schedule Type: Independent Study

Grading: This course is graded on the Satisfactory/No Credit scale. (http://catalog.gmu.edu/policies/academic/grading/)

500 Level Courses

PH 550: Study Abroad in Public and Population Health. 3 credits.
Study abroad under supervision of George Mason University faculty on relevant public and population health topics. Course content and locations vary. Available to all College of Public Health students. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May be repeated within the degree for a maximum 6 credits.

Specialized Designation: Topic Varies

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading: This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

600 Level Courses

PH 601: Research Design and Methods I. 3 credits.
Explores quantitative and qualitative research methods, principles and techniques necessary for implementation of public and population health research. Students will develop basic theoretical and practical knowledge of methodological principles and techniques necessary for implementation of research endeavors. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading: This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

PH 602: Research Design and Methods II. 3 credits.
Explores advanced experimental and quasi-experimental research methods frequently utilized in public and population health research. Students will develop theoretical and practical knowledge necessary to conduct independent research. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May not be repeated for credit.

Recommended Prerequisite: PH 601 or permission of instructor.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading: This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

PH 603: Approaches to Quantitative Data Analysis in Public and Population Health Research. 3 credits.
Examine univariate and bivariate statistical procedures appropriate for analyzing quantitative public and population health research data. Includes selecting, applying, and interpreting data analysis procedures. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading: This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

PH 646: Social Gerontology. 3 credits.
Examines physical, psychological, sociological, cultural, spiritual, and economic aspects of aging and explores the challenges of service delivery to older persons. Considers the impact of aging populations on the social structure, economy, demography, and social policy of society and identifies social and cultural forces that influence older persons and their families, with special regard to caregiving, institutionalization, and social roles in retirement. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading: This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

PH 648: Aging and Health. 3 credits.
Provides an overview of normal aging and explores factors that affect health and well being in older adults; demonstrates strategies for maintaining health and managing chronic illness in older adults; examines common misconceptions about aging and healthcare issues; and explores the process of normal aging and the presentation of common health conditions in older adults. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

PH 695: Practicum in Public and Population Health. 1-3 credits.
Applied experience with an approved public or population health agency, organization, health system, or private entity under the supervision of a College of Public Health faculty sponsor. Students complete a pre-determined project such as a community needs assessment, field study, focus-group, program plan, secondary data analysis, survey, policy brief, white paper, social media communication campaign, or public presentation. Practicum site and project must be approved the faculty sponsor before registering. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May be repeated within the degree for a maximum 6 credits.

Recommended Prerequisite: Departmental approval.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Internship

Grading:
This course is graded on the Satisfactory/No Credit scale. (http://catalog.gmu.edu/policies/academic/grading/)

700 Level Courses

PH 702: Public Health Promotion and Disease Prevention. 3 credits.
Prepares students to address public health needs of individuals or groups through health promotion and disease prevention. Emphasis is placed on research evidence and motivational interviewing to improve healthy lifestyle, prevent disease and manage chronic conditions. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May not be repeated for credit.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate or Non-Degree.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

PH 720: Principles of Clinical Trials. 3 credits.
Provides a practical overview of the fundamental principles of clinical trial design and management, ethical and regulatory factors in the conduct of clinical trials, and their role in clinical practice, public health and decision making. Topics include clinical trial design, biostatistics, ethics and regulatory affairs, study management and oversight, and current concepts. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May not be repeated for credit.

Recommended Prerequisite: Graduate level statistics and research methods course(s).

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy, Graduate or Non-Degree.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

800 Level Courses

PH 810: Systematic Reviews of Health Research. 3 credits.
Applies systematic methods for evaluating current research in order to develop empirically-based decisions about the next major research questions that need to be addressed in the students’ selected area of inquiry. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May not be repeated for credit.

Recommended Prerequisite: Master’s degree in a health-related discipline.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

PH 816: Efficacy and Effectiveness Research. 3 credits.
Applies systematic methods for evaluating current research in order to develop empirically-based decisions about the next major research questions that need to be addressed in the students’ selected area of inquiry. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May not be repeated for credit.

Recommended Prerequisite: Graduate level statistics/methods course(s) or permission of instructor.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)
PH 818: Advanced Ethics of Health Research. 3 credits.
Analyze ethical issues associated with designing and conducting public health research in diverse populations and settings. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May not be repeated for credit.

Recommended Prerequisite: Master's degree in a health-related discipline.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar
Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

PH 825: Conducting and Publishing Health Research. 3 credits.
Apply scientific and ethical principles of inquiry by participating in a guided public health research practicum and seminars. Apply principles of writing for scientific publication. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May not be repeated for credit.

Recommended Prerequisite: Master's degree in a health-related discipline.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Internship
Grading:
This course is graded on the Graduate Special scale. (http://catalog.gmu.edu/policies/academic/grading/)

PH 850: Teaching Practicum in Public and Population Health. 0-3 credits.
Provides supervised teaching experience of selected public and population health courses. Focuses on effective strategies for facilitating student learning, methods of assessment and testing, and using student and peer feedback for self-improvement. Examines the principles and practices of effective classroom management. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May be repeated within the degree for a maximum 6 credits.

Recommended Prerequisite: Minimum of 18 graduate hours in health-related field.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Schedule Type: Internship
Grading:
This course is graded on the Satisfactory/No Credit scale. (http://catalog.gmu.edu/policies/academic/grading/)

900 Level Courses

In-depth study of selected area of public and population health under the direction of faculty. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May be repeated within the degree for a maximum 12 credits.

Recommended Prerequisite: Departmental approval.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Independent Study
Grading:
This course is graded on the Satisfactory/No Credit scale. (http://catalog.gmu.edu/policies/academic/grading/)

Research on a pertinent topic in public and population health under the direction of faculty. Offered by College of Public Health (http://catalog.gmu.edu/colleges-schools/public-health/). May be repeated within the degree for a maximum 12 credits.

Recommended Prerequisite: Requires departmental approval.

Registration Restrictions:
Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Independent Study
Grading:
This course is graded on the Satisfactory/No Credit scale. (http://catalog.gmu.edu/policies/academic/grading/)