

**Course Competency Booklet  
for  
Colorado School of Public Health at  
Colorado State University**

**Updated: November of 2024**

**AGRI 5000 – Advanced Issues in Agriculture**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

**AGRI 5460 – Principles of Cooperative Extension**

CN-APE 4: Develop strategies for optimal communication and collaboration between human, animal, and environmental health professionals.

**AGRI 5470 – Delivery of Cooperative Extension Programs**

CN-APE 4: Develop strategies for optimal communication and collaboration between human, animal, and environmental health professionals.

**AGRI 6950 – Agriculture Independent Study**

Varies based on individual student

**ANEQ 5670 – HAACP Meat Safety**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

**ANEQ 6760 – Molecular Approaches to Food Safety**

CN-APE 1 - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

**ANTP 5050 – Resilience, Well-Being and Social Justice**

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

**ANTP 5200 – Women, Health and Culture**

CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

**ANTP 5320 – The Culture of Disaster**

CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

**ANTP 5380 – Food, Hunger and Culture**

CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

**ANTP 5400 – Medical Anthropology**

CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

**ANTP 5450 – Culture and Mental Health (Global Mental Health: Theory and Method)**

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

**ANTP 5710 – Anthropology and Global Health**

CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

**ANTH 6950 – Anthropology Independent Study**

Varies based on individual student

**AREC 5720 – Social Benefit-Cost Analysis**

FN-MPH 2: Select quantitative and qualitative data collection methods appropriate for a given public health context.

FN-MPH 11: Select methods to evaluate public health programs.

FN-MPH 15: Evaluate policies for their impact on public health and health equity.

**CBHS 6614 – Childhood Obesity (CU-Anschutz)**

CN-PAHL 4: Identify and analyze historic and current trends, guidelines, recommendations, and research in the field of physical activity.

**CBHS 6628 – Tech-Based Health Promotion (CU-Anschutz)**

CN-APE 4: Develop strategies for optimal communication and collaboration between human, animal, and environmental health professionals.

CN-HCOM 3: Identify and analyze fundamental properties of the intended audience for a communication based intervention, including demographic, psychological, sociological and cultural elements at all levels from interpersonal to mass.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

CN-PAHL 7: Incorporate a variety of approaches for physical activity or healthy lifestyle promotion programs that anticipate and respect diverse values, beliefs, and cultures in the community

**CHBH 5050 – Health Communications and the Media (UNC)**

CN-HCOM 5: Develop a communication plan to reach relevant professional groups, the public, or policy-makers.

**CHBH 5250 – Contemporary Issues in School Health (UNC)**

CN-PAHL 1: Use public health data to assess the healthy lifestyle needs of a population and prioritize community-based interventions aimed at promoting physical activity or other healthy lifestyle behaviors.

**CHBH 5330 – Physical Activity Interventions in the Community (UNC)**

CN-PAHL 3: Apply nationally-recognized, evidence-based physical activity promotion approaches to the implementation and evaluation of community health promotion programs.

**EDRM 7010 – Applied Linear Models – Educational Research**

CN-EPID 7: Use computer software for data entry, database management, and summarizing, analyzing and displaying data.

**EDRM 7030 – Applied Longitudinal Data Analysis**

CN-EPID 8: Apply and interpret the concepts of effect modification, confounding, and bias in research design and analysis approaches.

**EHOH 6622 – Public Health Emergency Prep – Community Resilience (CU-Anschutz)**

CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

**EHOH 6625 – International Disasters and Global Humanitarianism (CU-Anschutz)**

CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

**EHOH 6635 – Climate Change and Health (CU-Anschutz)**

CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

**EPID 6634 – Applied Global Health Epidemiology (CU-Anschutz)**

CN-EPID 1: Compare and prioritize public health issues within and across populations, using epidemiologic methods including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.

CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

**EPID 6635 – Infectious Disease Epidemiology (CU-Anschutz)**

CN-EPID 6: Describe best practices for design of data collection forms and protocols, instrument reliability and validity, data monitoring and quality assurance, and data archiving for analysis and use of data by other investigators.

CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

**EPID 6636 – Chronic Disease Epidemiology (CU-Anschutz)**

CN-EPID 1: Compare and prioritize public health issues within and across populations, using epidemiologic methods including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.

**EPID 6637 – Injury and Violence Epidemiology and Prevention (CU-Anschutz)**

CN-EPID 5: Design studies to address public health topics, taking into account the strengths, limitations, and feasibility of study designs for addressing specific topics, as well as the practical aspects of their uses.

**EPID 6638 – Cardiovascular Epidemiology (CU-Anschutz)**

CN-EPID 4: Translate investigator ideas into answerable research questions.

**EPID 6640 – Investigation of Disease Outbreaks (CU-Anschutz)**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

CN-APE 5: Incorporate the principles of safe and secure food systems into public health problem solving.

CN-EPID 7: Use computer software for data entry, database management, and summarizing, analyzing and displaying data.

CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

**EPID 6644 – Maternal Child Health Epidemiology (CU-Anschutz)**

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

**ERHS 5010 – Biological Bases of Public Health**

CN-EPID 1: Compare and prioritize public health issues within and across populations, using epidemiologic methods including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.

CN-EHOH 8: Explain the scientific characteristics, including exposure and mode of action, of major biological, chemical, physical hazards that result in human health risk.

FN-MPH 4: Interpret results of data analysis for public health research, policy or practice.

**ERHS 5350 – R Programming for Research**

CN-EPID 7: Use computer software for data entry, database management, and summarizing, analyzing and displaying data.

**ERHS 5380 – Geographic Information Systems and Health**

CN-APE 2: Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social well-being and environmental health.

CN-EPID 7: Use computer software for data entry, database management, and summarizing, analyzing and displaying data.

**ERHS 5600 – Health Impact Assessment**

CN-EPID 1: Compare and prioritize public health issues within and across populations, using epidemiologic methods including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.

FN-MPH 15: Evaluate policies for their impact on public health and health equity.

FN-MPH 4: Interpret results of data analysis for public health research, policy or practice.

**ERHS 5730 – Design and Conduct of Epidemiologic Research**

FN-MPH 2: Select quantitative and qualitative data collection methods appropriate for a given public health context.

FN-MPH 10: Explain basic principles and tools of budget and resource management.

FN-MPH 16: Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making.

### **ERHS 6380 – Geospatial Analysis for Environmental Health**

FN-MPH 3: Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate

FN-MPH 4: Interpret results of data analysis for public health research, policy or practice

CN-EPID 4: Translate investigator ideas into answerable research questions.

CN-EPID 7: Use computer software for data entry, database management, and summarizing, analyzing and displaying data.

### **ERHS 6400 – Analytical Epidemiology**

CN-EPID 1: Compare and prioritize public health issues within and across populations, using epidemiologic methods including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.

CN-EPID 2: Critically review and evaluate public health and other scientific literature to identify threats to internal validity, strengths and weaknesses of individual studies, and assess for overall strength of evidence.

CN-EPID 5: Design studies to address public health topics, taking into account the strengths, limitations, and feasibility of study designs for addressing specific topics, as well as the practical aspects of their uses.

CN-EPID 6: Describe best practices for design of data collection forms and protocols, instrument reliability and validity, data monitoring and quality assurance, and data archiving for analysis and use of data by other investigators.

CN-EPID 7: Use computer software for data entry, database management, and summarizing, analyzing and displaying data.

CN-EPID 8: Apply and interpret the concepts of effect modification, confounding, and bias in research design and analysis approaches.

### **ERHS 6580 – Environmental/Occupational Epidemiology**

CN-EPID 3: Synthesize evidence in a research area to identify gaps in evidence and to demonstrate relevance of current knowledge to the practice of public health.

CN-EPID 5: Design studies to address public health topics, taking into account the strengths, limitations, and feasibility of study designs for addressing specific topics, as well as the practical aspects of their uses.

### **ERHS 6930 – Research Seminar-Epidemiology**

CN-EPID 2: Critically review and evaluate public health and other scientific literature to identify threats to internal validity, strengths and weaknesses of individual studies, and assess for overall strength of evidence.

### **ERHS 6950 – Epidemiology Independent Study**

Varies based on individual student

### **ERHS 7320 – Advanced Epidemiological Analysis**

CN-EPID 1: Compare and prioritize public health issues within and across populations, using epidemiologic methods including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.

CN-EPID 7: Use computer software for data entry, database management, and summarizing, analyzing and displaying data.

CN-EPID 8: Apply and interpret the concepts of effect modification, confounding, and bias in research design and analysis approaches.

### **ERHS 7400 – Advanced Epidemiology Methods II**

CN-EPID 2: Critically review and evaluate public health and other scientific literature to identify threats to internal validity, strengths and weaknesses of individual studies, and assess for overall strength of evidence.

CN-EPID 4: Translate investigator ideas into answerable research questions.

CN-EPID 8: Apply and interpret the concepts of effect modification, confounding, and bias in research design and analysis approaches.

### **ETHS 5020 – Research Methods**

FN-MPH 2: Select quantitative and qualitative data collection methods appropriate for a given public health context.

### **ETHS 6950 – Ethnic Studies Independent Study**

Varies based on individual student

### **FSHN 5000 – Food Systems, Nutrition and Food Security**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

CN-APE 2: Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social well-being and environmental health.

CN-APE 3: Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.

CN-APE 5: Incorporate the principles of safe and secure food systems into public health problem solving.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

CN-PAHL 1: Use public health data to assess the healthy lifestyle needs of a population and prioritize community-based interventions aimed at promoting physical activity or other healthy lifestyle behaviors.

CN-PHN 6: Apply evidence-based public health planning strategies to design nutrition programs.

### **FSHN 5200 – Advanced Medical Nutrition Therapy**

CN-PAHL 2: Utilize field-specific assessment tools to measure physical activity and healthy lifestyle behaviors as well as their supports and barriers.

CN-PHN 3: Analyze the effects of different dietary patterns on the primary, secondary, and tertiary prevention of various chronic diseases such as obesity, diabetes, coronary heart disease, cancer and others.

CN-PHN 5: Assess dietary intake using nutrition assessment tools and apply evidence-based approaches to best measure dietary exposures and chronic disease outcomes in populations.

### **FSHN 5250 – Nutrition Education Theories and Practice**

CN-PAHL 1: Use public health data to assess the healthy lifestyle needs of a population and prioritize community-based interventions aimed at promoting physical activity or other healthy lifestyle behaviors.

CN-PHN 6: Apply evidence-based public health planning strategies to design nutrition programs.

### **FSHN 5300 – Principles of Nutrition Science and Metabolism**

\* CN-PHN 1: Appraise essential dietary macronutrients (carbohydrates, lipids, proteins) for their optimal sources and contribution to cellular and organ function that sustain human health and well-being.

\* CN-PHN 2: Appraise essential dietary micronutrients (vitamins and minerals) for their optimal sources and contribution to cellular and organ function that sustain human health and well-being.

\* CN-PHN 3: Analyze the effects of different dietary patterns on the primary, secondary, and tertiary prevention of various chronic diseases such as obesity, diabetes, coronary heart disease, cancer and others.

### **FSHN 5500 – Advanced Nutritional Science I**

\*CN-PHN 1: Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.

\*CN-PHN 4: Identify interactions between vitamins and minerals and other nutrients and their impact on health.

### **FSHN 5510 – Advanced Nutritional Science II**

CN-PHN 2: Appraise essential dietary micronutrients (vitamins and minerals) for their optimal sources and contribution to cellular and organ function that sustain human health and well-being.

### **FSHN 6200 – Community Nutrition Planning and Evaluation**

CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

CN-PAHL 3: Apply nationally-recognized, evidence-based physical activity promotion approaches to the implementation and evaluation of community health promotion programs.

CN-PAHL 5: Develop strategies to engage with external partners from a variety of disciplines, including transportation and city planning, to promote physical activity or healthy lifestyles.

\* CN-PHN 6: Apply evidence-based public health planning strategies to design nutrition programs.

\* CN-PHN 7: Apply evidence-based public health evaluation strategies to assess effectiveness of nutrition programs.

### **FSHN 6280 – Advanced Nutrition Counseling Techniques**

CN-PHN 3: Analyze the effects of different dietary patterns on the primary, secondary, and tertiary prevention of various chronic diseases such as obesity, diabetes, coronary heart disease, cancer and others.

### **FSHN 6400 – Selected Topics in Nutritional Epidemiology**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

CN-APE 5: Incorporate the principles of safe and secure food systems into public health problem solving.

CN-PAHL 2: Utilize field-specific assessment tools to measure physical activity and healthy lifestyle behaviors as well as their supports and barriers.

\* CN- PHN 4: Analyze and interpret nutritional data using epidemiological principles to assess chronic disease outcomes.



\* CN-PHN 5: Assess dietary intake using nutrition assessment tools and apply evidence-based approaches to best measure dietary exposures and chronic disease outcomes in populations.

#### **FSHN 6500 – Nutrition – Proteins**

CN-PAHL 1: Use public health data to assess the healthy lifestyle needs of a population and prioritize community-based interventions aimed at promoting physical activity or other healthy lifestyle behaviors.

CN-PHN 1: Appraise essential dietary macronutrients (carbohydrates, lipids, proteins) for their optimal sources and contribution to cellular and organ function that sustain human health and well-being.

#### **FSHN 6501 – Recent Developments in Human Nutrition – Carbohydrates, Lipids, and Energy**

CN-PAHL 1: Use public health data to assess the healthy lifestyle needs of a population and prioritize community-based interventions aimed at promoting physical activity or other healthy lifestyle behaviors.

CN-PHN 1: Appraise essential dietary macronutrients (carbohydrates, lipids, proteins) for their optimal sources and contribution to cellular and organ function that sustain human health and well-being.

#### **FSHN 6502 - Recent Developments in Human Nutrition – Genomics, Proteomics, and Metabolomics**

CN-PAHL 1: Use public health data to assess the healthy lifestyle needs of a population and prioritize community-based interventions aimed at promoting physical activity or other healthy lifestyle behaviors.

CN-PHN 3: Analyze the effects of different dietary patterns on the primary, secondary, and tertiary prevention of various chronic diseases such as obesity, diabetes, coronary heart disease, cancer and others.

#### **FSHN 6600 - Women’s Issues in Lifecycle Nutrition**

CN-PAHL 7: Incorporate a variety of approaches for physical activity or healthy lifestyle promotion programs that anticipate and respect diverse values, beliefs, and cultures in the community

CN-PHN 2: Appraise essential dietary micronutrients (vitamins and minerals) for their optimal sources and contribution to cellular and organ function that sustain human health and well-being.

CN-PHN 6: Apply evidence-based public health planning strategies to design nutrition programs.

#### **FSHN 6610 - International Nutrition**

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

CN-PHN 3: Analyze the effects of different dietary patterns on the primary, secondary, and tertiary prevention of various chronic diseases such as obesity, diabetes, coronary heart disease, cancer and others.

CN-PHN 6: Apply evidence-based public health planning strategies to design nutrition programs.

#### **FSHN 6950 – Independent Study-Food Science**

Varies based on individual student

#### **FSHN 6951 – Independent Study-Nutrition**

Varies based on individual student

**FTEC 5720 – Food Biotechnology**

CN-APE 2: Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social well-being and environmental health.

**FTEC 5740 - Current Issues in Food Safety**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

CN-APE 5: Incorporate the principles of safe and secure food systems into public health problem solving.

CN-PHN 6: Apply evidence-based public health planning strategies to design nutrition programs.

**FWLD 5440 – Ecotoxicology**

CN-APE 2: Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social well-being and environmental health.

**HDFS 5920 – Grant Writing – Human Services and Research**

CN-PAHL 4: Identify and analyze historic and current trends, guidelines, recommendations, and research in the field of physical activity.

**HDFS 6070 – Prevention Science Across the Lifespan**

FN-MPH 4: Interpret results of data analysis for public health research, policy or practice

FN-MPH 11: Select methods to evaluate public health programs

**HDFS 6080 – Program Planning and Implementation**

CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

CN-PAHL 3: Apply nationally-recognized, evidence-based physical activity promotion approaches to the implementation and evaluation of community health promotion programs.

**HDFS 6090 – Prevention Program Evaluation**

CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

CN-PAHL 3: Apply nationally-recognized, evidence-based physical activity promotion approaches to the implementation and evaluation of community health promotion programs.

**HDFS 6100 – Risk and Resilience**

CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

**HDFS 6120 – Adolescent Development**

See Competencies for the Maternal and Child Health concentration at the Anschutz campus

**HDFS 6500 – Research Methods II**

FN-MPH 2: Select quantitative and qualitative data collection methods appropriate for a given public health context

FN-MPH 3: Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.

**HDFS 6950 – Independent Study - Human Development**

Varies based on individual student

**HESC 6000 – Research Design**

FN-MPH 2: Select quantitative and qualitative data collection methods appropriate for a given public health context

FN-MPH 4: Interpret results of data analysis for public health research, policy or practice.

**HESC 6450 – Epidemiology of Health and Physical Activity**

CN-PAHL 6: Describe the effects of physical activity on primary, secondary and tertiary prevention of various chronic diseases such as heart disease, stroke, diabetes mellitus, cancer, arthritis, asthma, osteoporosis or obesity.

**HESC 6950 – Independent Study-Health**

Varies based on individual student

**IEOO 6790 - Advanced International Development**

FN-MPH 6: Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels.

FN-MPH 8: Apply awareness of cultural values and practices to the design or implementation of public health policies or programs

FN-MPH 14: Advocate for political, social or economic policies and programs that will improve health in diverse populations

**JTCM 5010 – Process and Effects of Communication**

CN-HCOM 1: Apply theory and strategy-based communication principles across different settings for public health practice.

**JTCM 6140 – Public Communication Campaigns**

CN-APE 4: Develop strategies for optimal communication and collaboration between human, animal, and environmental health professionals.

CN-HCOM 1: Apply theory and strategy-based communication principles across different settings for public health practice.

\*CN-HCOM 2: Design a communication-based public health intervention applying best practices of message production and delivery for a target audience.

\*CN-HCOM 3: Identify and analyze fundamental properties of the intended audience for a communication based intervention, including demographic, psychological, sociological and cultural elements at all levels from interpersonal to mass.

\*CN-HCOM 4: Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention.

\*CN- HCOM 5: Develop a communication plan to reach relevant professional groups, the public, or policy-makers.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

CN-PAHL 7: Incorporate a variety of approaches for physical activity or healthy lifestyle promotion programs that anticipate and respect diverse values, beliefs, and cultures in the community

\*CN-PAHL 8 - Develop a communication plan to reach relevant professional groups, the public, or policy-makers.

### **JTCM 6300 - Health Communication**

CN-APE 2: Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social well-being and environmental health.

CN-HCOM 1: Apply theory and strategy-based communication principles across different settings for public health practice.

CN-HCOM 2: Design a communication-based public health intervention applying best practices of message production and delivery for a target audience.

CN-HCOM 3: Identify and analyze fundamental properties of the intended audience for a communication based intervention, including demographic, psychological, sociological and cultural elements at all levels from interpersonal to mass.

CN-HCOM 4: Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention.

CN- HCOM 5: Develop a communication plan to reach relevant professional groups, the public, or policy-makers.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

CN-PAHL 7: Incorporate a variety of approaches for physical activity or healthy lifestyle promotion programs that anticipate and respect diverse values, beliefs, and cultures in the community

### **JTCM 6500 – Strategic Communications**

CN-HCOM 5: Develop a communication plan to reach relevant professional groups, the public, or policy-makers.

### **JTCM 6600 – Communication and Innovation**

CN-HCOM 1: Apply theory and strategy-based communication principles across different settings for public health practice.

### **JTCM 6610 – Information Design**

CN-HCOM 3: Identify and analyze fundamental properties of the intended audience for a communication-based intervention, including demographic, psychological, sociological and cultural elements at all levels from interpersonal to mass.

### **JTCM 6700 – Communication in the Social Processes of Risk**

CN-APE 2: Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social well-being and environmental health.

CN-HCOM 1: Apply theory and strategy-based communication principles across different settings for public health practice.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

CN-PAHL 1: Use public health data to assess the healthy lifestyle needs of a population and prioritize community-based interventions aimed at promoting physical activity or other healthy lifestyle behaviors.

### **JTCM 6950 – Independent Study - Communication**

Varies based on individual student

### **MIPO 5510 - Infectious Diseases and Social Equity**

FN-MPH 6: Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and systemic levels

FN-MPH 14: Advocate for political, social or economic policies and programs that will improve health in diverse populations

### **MIPO 5550 – Principles and Mechanisms of Disease**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

### **NRRT 6650 – Survey Research and Analysis**

FN-MPH 2: Select quantitative and qualitative data collection methods appropriate for a given public health context

### **PBHC 5160 – Public Health Foundations**

\*FN-MPH 17: Apply negotiation and mediation skills to address organizational or community challenges

\*FN-MPH 20: Describe the importance of cultural humility in communicating public health content

\*FN-MPH 21: Perform effectively on interprofessional teams

### **PBHC 5200 – Healthcare Systems, Policy and Management**

\*FN-MPH 5: Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings

\*FN-MPH 10: Explain basic principles and tools of budget and resource management

\*FN-MPH 12: Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence

\*FN-MPH 14: Advocate for political, social or economic policies and programs that will improve health in diverse populations

\*FN-MPH 15: Evaluate policies for their impact on public health and health equity

\*FN-MPH 16: Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making

### **PBHC 5300 – Environmental Public Health and Policy**

\*FN-MPH 19: Communicate audience-appropriate public health content, both in writing and through oral presentation to a non-academic, non-peer audience with attention to factors such as literacy and health literacy

\*FN-MPH 22: Apply systems thinking tools to a public health issue

### **PBHC 5340 – Public Health Data Management Using SAS**

CN-BIOS 6: Use the principles of hypothesis testing and estimation of population parameters to draw inferences from quantitative data and communicate orally and in writing those inferences and their statistical and scientific interpretation to non-statistical scientists.

CN-EPID 7: Use computer software for data entry, database management, and summarizing, analyzing, and displaying data.

### **PBHC 5400 – One Health in Public Health**

\*CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

\*CN-APE 2: Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social well-being and environmental health.

\*CN-APE 3: Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.

\*CN-APE 4: Develop strategies for optimal communication and collaboration between human, animal, and environmental health professionals.

\*CN-APE 5: Incorporate the principles of safe and secure food systems into public health problem solving.

### **PBHC 5500 – Applied Social & Community Factors in Health**

\*FN-MPH 2: Select quantitative and qualitative data collection methods appropriate for a given public health context

\*FN-MPH 3: Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate

\*FN-MPH 6: Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels

\*FN-MPH 7: Assess population needs, assets and capacities that affect communities' health

\*FN-MPH 8: Apply awareness of cultural values and practices to the design or implementation of public health policies or programs

\*FN-MPH 9: Design a population-based policy, program, project or intervention

\*FN-MPH 11: Select methods to evaluate public health programs

\*FN-MPH 13: Propose strategies to identify relevant communities and individuals and build coalitions and partnerships for influencing public health outcomes

\*FN-MPH 18: Select communication strategies for different audiences and sectors

### **PBHC 5530 - Global Health Foundations**

\*CN-GHHD-1: Analyze major causes of morbidity and mortality around the world, and how the risk of disease varies with region.

\*CN-GHHD-2: Examine the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health equity.

\*CN-GHHD-4: Assess major public health efforts to reduce health disparities in locally or globally.

### **PBHC 5540 - Decolonizing Global Health**

\*CN-GHHD-3: Analyze strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

\*CN-GHHD-5: Describe social justice and human rights principles in addressing public health problems globally

\*CN-GHHD-6: Critique a current health intervention in global health applying concepts of decolonization and propose recommendations for future global health interventions.

### **PBHC 5600 – Public Health Data Analysis**

\*FN-MPH 3: Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate

\*FN-MPH 4: Interpret results of data analysis for public health research, policy or practice

### **PBHC 5700 – Epidemiology for Public Health**

\*FN-MPH 1: Apply epidemiological methods to the breadth of settings and situations in public health practice

\*FN-MPH 2: Select quantitative and qualitative data collection methods appropriate for a given public health context

\*FN-MPH 4: Interpret results of data analysis for public health research, policy or practice

### **PBHC 5750 – Epidemiological Research for Public Health**

CN-EPID 2: Critically review and evaluate public health and other scientific literature to identify threats to internal validity, strengths and weaknesses of individual studies, and assess for overall strength of evidence.

CN-EPID 3: Synthesize evidence in a research area to identify gaps in evidence and to demonstrate relevance of current knowledge to the practice of public health.

CN-EPID 4: Translate investigator ideas into answerable research questions.

CN-EPID 5: Design studies to address public health topics, taking into account the strengths, limitations, and feasibility of study designs for addressing specific topics, as well as the practical aspects of their uses.

CN-EPID 7: Use computer software for data entry, database management, and summarizing, analyzing and displaying data.

CN-EPID 8: Apply and interpret the concepts of effect modification, confounding, and bias in research design and analysis approaches.

### **PBHC 6300 – Field Methods of Disease Investigation**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

CN-APE 4: Develop strategies for optimal communication and collaboration between human, animal, and environmental health professionals.

CN-EPID 1: Compare and prioritize public health issues within and across populations, using epidemiologic methods including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.

CN-EPID 7: Use computer software for data entry, database management, and summarizing, analyzing and displaying data.

### **PBHC 6440 – Physical Activity and Public Health**

\*CN-PAHL 1: Use public health data to assess the healthy lifestyle needs of a population and prioritize community-based interventions aimed at promoting physical activity or other healthy lifestyle behaviors.

\*CN-PAHL 2: Utilize field-specific assessment tools to measure physical activity and healthy lifestyle behaviors as well as their supports and barriers.

\*CN-PAHL 3: Apply nationally-recognized, evidence-based physical activity promotion approaches to the implementation and evaluation of community health promotion programs.

\*CN-PAHL 4: Identify and analyze historic and current trends, guidelines, recommendations, and research in the field of physical activity.

\*CN-PAHL 5: Develop strategies to engage with external partners from a variety of disciplines, including transportation and city planning, to promote physical activity or healthy lifestyles.

\*CN-PAHL 6: Describe the effects of physical activity on primary, secondary and tertiary prevention of various chronic diseases such as heart disease, stroke, diabetes mellitus, cancer, arthritis, asthma, osteoporosis or obesity.

\*Notes when a course is responsible for assessing that specific competency

\*CN-PAHL 7: Incorporate a variety of approaches for physical activity or healthy lifestyle promotion programs that anticipate and respect diverse values, beliefs, and cultures in the community

**PBHC 6450 – Team Science**

\*CN-APE 6: Develop a resource that communicates a Team Science method or concept to be used by a cross-disciplinary team working in the context of One Health or Public Health.

**PBHC 6500 – Health Promotion Programming**

CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

CN-PAHL 3: Apply nationally-recognized, evidence-based physical activity promotion approaches to the implementation and evaluation of community health promotion programs.

**PBHC 6600 – Quantitative Methods in Public Health II**

MPH 2 - Select quantitative and qualitative data collection methods appropriate for a given public health context

MPH 3 - Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.

MPH-EPID 5 - Design studies to address public health topics, taking into account the strengths, limitations, and feasibility of study designs for addressing specific topics, as well as the practical aspects of their uses.

MPH-EPID 6 - Describe best practices for design of data collection forms and protocols, instrument reliability and validity, data monitoring and quality assurance, and data archiving for analysis and use of data by other investigators

**PBHC 6860 – Public Health Practicum**

Varies by student

FN-MPH 21: Perform effectively on interprofessional teams

**PBHC 6920 – Public Health Seminar - APE**

Varies by topic

**PBHC 6921 – Public Health Seminar - EPI**

Varies by topic

**PBHC 6922 – Public Health Seminar - GHHD**

**PBHC 6923 – Public Health Seminar - HCOM**

Varies by topic

**PBHC 6924 – Public Health Seminar - PAHL**

Varies by topic

**PBHC 6925 – Public Health Seminar - PHN**

Varies by topic

**PBHC 6926 – Public Health Seminar – Public Health**

Varies by topic



**PBHC 6950 – Public Health Independent Study**

Varies by student

**PBHC 6960 – Public Health Group Study**

Topics will vary

**PBHC 6980- CSU Public Health Capstone**

Varies by student

**PHLY 5640 – Seminar in Animal Rights**

CN-APE 2: Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social well-being and environmental health.

**PHLY 6660 – Science and Ethics**

FN-MPH 14: Advocate for political, social or economic policies and programs that will improve health in diverse populations

**POLS 6650 – Public Policy Analysis**

CN-APE 2: Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social well-being and environmental health.

CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

**POLS 6700 – Politics of Environment and Sustainability**

CN-APE 3: Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts

**PSCY 5150 - Women’s Health**

CN-APE 2: Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social well-being and environmental health.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

**PSCY 5170 – Perspectives in Global Health**

CN-APE 2: Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social well-being and environmental health.

\*CN-GHHD 1: Use a population pyramid to assess the role of demographic characteristics in shaping patterns of morbidity, mortality, and health service needs of a specified community, country, or region.

\*CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

\*CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

\*CN-GHHD 4: Conduct a situation analysis across a range of cultural, economic, and health contexts.

\*CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

**PSCY 6000 – Health Psychology**

CN-PAHL 6: Describe the effects of physical activity on primary, secondary and tertiary prevention of various chronic diseases such as heart disease, stroke, diabetes mellitus, cancer, arthritis, asthma, osteoporosis or obesity.

**PSCY 6530 – Methods of Research in Psychology II**

FN-MPH 3: Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.

**SOCO 5620 – Sociology of Food Systems and Agriculture**

CN-APE 3: Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts

**SOCO 6620 – Sociological Policy Analysis**

FN-MPH 15: Evaluate policies for their impact on public health and health equity

**SOCO 6950 – Independent Study – Sociology**

Varies by student

**SOWK 5300 – Anti-Oppressive Social Work Practice**

CN-GHHD 2: Describe the roles and relationships of the entities (such as NGOs, national governmental agencies, and international organizations) influencing global health and health disparities.

CN-GHHD 3: Propose strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

**SPCM 5380 – Communicating in the Health Clinic**

\*CN-HCOM 1: Apply theory and strategy-based communication principles across different settings for public health practice.

CN-HCOM 2: Design a communication-based public health intervention applying best practices of message production and delivery for a target audience.

CN-HCOM 3: Identify and analyze fundamental properties of the intended audience for a communication based intervention, including demographic, psychological, sociological and cultural elements at all levels from interpersonal to mass.

CN-HCOM 4: Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention.

CN-HCOM 5: Develop a communication plan to reach relevant professional groups, the public, or policy-makers.

**SPCM 6320 – Theories of Interpersonal Communication**

CN-HCOM 1: Apply theory and strategy-based communication principles across different settings for public health practice.

**SPCM 6390 – Communication Theory**

\*CN-HCOM 1: Apply theory and strategy-based communication principles across different settings for public health practice. (Assesses competency in years that SPCM 5380 is not available)

**STAS 5110 – Design and Data Analysis for Researchers**

\*Notes when a course is responsible for assessing that specific competency

FN-MPH 3: Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.

**VM 637/DVM Transfer – Bacteriology and Mycology**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

**VM 638/DVM Transfer – Veterinary Parasitology**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

CN-APE 5: Incorporate the principles of safe and secure food systems into public health problem solving.

**VM 707/DVM Transfer – Emerging Issues in Infectious Diseases**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

CN-EPID 2: Critically review and evaluate public health and other scientific literature to identify threats to internal validity, strengths and weaknesses of individual studies, and assess for overall strength of evidence.

CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

**VM 714/DVM Transfer – Veterinary Preventative Medicine**

APE 1 - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

CN-EPID 1: Compare and prioritize public health issues within and across populations, using epidemiologic methods including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.

CN-EPID 5: Design studies to address public health topics, taking into account the strengths, limitations, and feasibility of study designs for addressing specific topics, as well as the practical aspects of their uses.

CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

**VSCS 5330 – Epidemiology of Infectious Diseases and Zoonoses**

CN-EPID 5: Design studies to address public health topics, taking into account the strengths, limitations, and feasibility of study designs for addressing specific topics, as well as the practical aspects of their uses.

CN-EPID 8: Apply and interpret the concepts of effect modification, confounding, and bias in research design and analysis approaches.

CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

**VSCS 6480/VM 648 DVM Transfer – Food Animal Production and Food Safety**

CN-APE 1: Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.

CN-APE 5: Incorporate the principles of safe and secure food systems into public health problem solving.

CN-GHHD 5: Design context-specific health interventions based upon a situation analysis.

**VSCS 7950 – Independent Study-Epidemiology**

Varies based on individual student