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

Updated: August of 2015

AGRI 5000 – Advanced Issues in Agriculture

1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
5. **CN-APE 5** - Compare and contrast animal and plant agriculture production systems in the United States and analyze the related public health concerns.
6. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
7. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
8. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
9. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.
10. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.

AGRI 5460 – Principles of Cooperative Extension

1. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
2. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
3. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
4. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.

AGRI 5470 – Delivery of Cooperative Extension Programs

1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.

5. **CN-APE 5** - Compare and contrast animal and plant agriculture production systems in the United States and analyze the related public health concerns.
6. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
7. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
8. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
9. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.
10. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.

AGRI 6340 – Animal Production Systems
1. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
2. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
3. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.

AGRI 6370 – Understanding Policy and Emerging Issues
1. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
2. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
3. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.

AGRI 6950 – Agriculture Independent Study
1. Varies based on individual student

ANEQ 5670 – HAACP Meat Safety
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.

4. **CN-APE 5** - Compare and contrast animal and plant agriculture production systems in the United States and analyze the related public health concerns.
5. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
6. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.

ANEQ 6600 – Topics in Meat Safety
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 5** - Compare and contrast animal and plant agriculture production systems in the United States and analyze the related public health concerns.
4. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
5. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.

ANEQ 6760 – Molecular Approaches to Food Safety
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
3. **CN-APE 9** - Apply biostatistical and epidemiological methods to public health issues that affect human and animal populations, and the surrounding environment.

ANTP 5200 – Women, Health and Culture
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

ANTP 5320 – The Culture of Disaster
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships

2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

ANTP 5400 – Medical Anthropology
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

ANTP 5450 – Culture and Mental Health (Global Mental Health: Theory and Method)
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

ANTP 5470 – Mind, Medicine and Culture
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships

2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

ANTP 5710 – Anthropology and Global Health
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations

ANTH 5810 – Anthropology Seminar
Varies by topic

ANTH 6950 – Anthropology Independent Study
Varies based on individual student

CBHS 6613 – Program Planning and Implementation (CU-Anshutz)
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
7. **CN-PAHL 1** - Identify and use public health data as a tool to develop and prioritize community-based interventions to promote physical activity (ACSM)

8. **CN-PAHL 3** - Apply social, behavioral and environmental models in physical activity intervention planning (ACSM)
9. **CN-PAHL 4** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
10. **CN-PAHL 6** - Utilize assessment tools to determine physical, social, cultural and environmental supports and barriers to physical activity (ACSM)
11. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors
12. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies

CBHS 6619 – Public Health in the Global Community (CU-Anschutz)
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
4. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
5. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

CBHS 6628 – Tech-Based Health Promotion (CU-Anschutz)
1. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
2. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
3. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
4. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
5. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
6. **CN-GHHD 4**- Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
7. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
8. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
9. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users

10. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
11. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
12. **CN-HCOM 6 -** Apply the broad literature of communication theory and the subset of that literature specifically about health communication to public health communication practice
13. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.
14. **CN-PAHL 1** - Identify and use public health data as a tool to develop and prioritize community-based interventions to promote physical activity (ACSM)
15. **CN-PAHL 2** - Utilize epidemiological methods to develop and test hypotheses pertaining to physical activity and health and disease outcomes at the population level
16. **CN-PAHL 3** - Apply social, behavioral and environmental models in physical activity intervention planning (ACSM)
17. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies

CBHS 6629 – Health and Human Rights (CU-Anschutz)
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
5. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

CBHS 6630 – Mental Health (CU-Anschutz)
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

CHBH 5050 – Health Communications and the Media (UNC)
1. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
2. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
3. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-HCOM 4 -** Identify the 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
5. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention
6. **CN-HCOM 6 -** Apply the broad literature of communication theory and the subset of that literature specifically about health communication to public health communication practice
7. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.

CHBH 5330 – Physical Activity Interventions in the Community (UNC)
1. **CN-PAHL 1** - Identify and use public health data as a tool to develop and prioritize community-based interventions to promote physical activity (ACSM)
2. **CN-PAHL 2** - Utilize epidemiological methods to develop and test hypotheses pertaining to physical activity and health and disease outcomes at the population level
3. **CN-PAHL 3** - Apply social, behavioral and environmental models in physical activity intervention planning (ACSM)
4. **CN-PAHL 4** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
5. **CN-PAHL 5** - Assess the effects of physical activity on reducing chronic disease risk factors (ACSM)
6. **CN-PAHL 6** - Utilize assessment tools to determine physical, social, cultural and environmental supports and barriers to physical activity (ACSM)
7. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors
8. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies

EDRM 6060 - Principles: Quantitative Data Analysis
1. **CR-BIOS 1:** Describe the role that biostatistics serves in the disciplines of public research.
2. **CR-BIOS 2:** Distinguish among the different measurement scales and the implications for selection of statistical methods to be used based on these distinctions.
3. **CR-BIOS 3:** Describe basic concepts of probability, commonly used probability distributions, statistical accuracy, systematic and random variation, and statistical correlation.
4. **CR-BIOS 4:** Apply descriptive statistics and related technique for expressing levels of confidence in estimators that are commonly used to summarize public health data.
5. **CR-BIOS 5:** Apply basic statistical estimation and inference methods, along with necessary assumptions, that apply to the commonly used statistical methods in public health.

6. **CR-BIOS 6:** Apply alternative statistical methods (e.g. nonparametric methods) when assumptions are not met completely or when working with small research data sources.
7. **CR-BIOS 7:** Apply basic database management principles (e.g. strategies for building relational data models) to public health records, clinical observations or observational data to facilitate data analysis, data quality management and administrative and scientific reporting using a statistical software package.
8. **CR-BIOS 8:** Create and interpret results in summary tables (e.g. Table 1) of public health and other scientific publications.
9. **CR-BIOS 9:** Describe and interpret statistical analyses commonly done in public health studies in language and terms appropriate for both public health professionals and educated lay audiences.
10. **CR-CC 2:** Determine uses and limitations of quantitative and qualitative methods in research and public health practice.
11. **CR-CC 4:** Identify and address ethical issues that arise in public health practice and research.
12. **CR-CC 10:** Describe and apply the concepts of the 3 core functions and 10 essential public health services to inform public health practice.

EDRM 7010 – Applied Linear Models – Educational Research
1. **CN-EPID 1** - Appropriately use descriptive epidemiologic methods to describe a given condition including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.
2. **CN-EPID 2** - Select and apply appropriate quantitative and qualitative measurement and analysis methods to support research and evaluations in the core areas of public health research and practice, including: epidemiology, environmental and occupational health, community and behavioral health, and public health systems management, policy and outcomes research.
3. **CN-EPID 3** - Critically review and interpret public health and other scientific literature to identify strengths and weaknesses of individual studies, to synthesize evidence in a research area, to identify gaps in evidence and to demonstrate relevance of current knowledge to the practice of public health.
4. **CN-EPID 4** - Translate investigator ideas into answerable research questions.
5. **CN-EPID 5** - Describe and select study designs, taking into account the advantages and limitations of each for addressing specific problems, as well as the practical aspects of their uses.
6. **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.
7. **CN-EPID 7** - Use computer software for data entry, database management, and summarizing, analyzing and displaying data.
8. **CN-EPID 8** - Apply and interpret the concepts of effect modification and interaction.
9. **CN-EPID 9** - Interpret statistical results in order to make appropriate inferences.
10. **CN-EPID 10** - Evaluate threats to internal validity when critically evaluating strength of evidence.

EDRM 7030 – Applied Longitudinal Data Analysis

1. **CN-EPID 1** - Appropriately use descriptive epidemiologic methods to describe a given condition including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.
2. **CN-EPID 2** - Select and apply appropriate quantitative and qualitative measurement and analysis methods to support research and evaluations in the core areas of public health research and practice, including: epidemiology, environmental and occupational health, community and behavioral health, and public health systems management, policy and outcomes research.
3. **CN-EPID 3** - Critically review and interpret public health and other scientific literature to identify strengths and weaknesses of individual studies, to synthesize evidence in a research area, to identify gaps in evidence and to demonstrate relevance of current knowledge to the practice of public health.
4. **CN-EPID 4** - Translate investigator ideas into answerable research questions.
5. **CN-EPID 5** - Describe and select study designs, taking into account the advantages and limitations of each for addressing specific problems, as well as the practical aspects of their uses.
6. **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.
7. **CN-EPID 7** - Use computer software for data entry, database management, and summarizing, analyzing and displaying data.
8. **CN-EPID 8** - Apply and interpret the concepts of effect modification and interaction.
9. **CN-EPID 9** - Interpret statistical results in order to make appropriate inferences.
10. **CN-EPID 10** - Evaluate threats to internal validity when critically evaluating strength of evidence.

EHOH 6622 – Public Health Emergency Prep – Community Resilience (CU-Anschutz)
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally

EHOH 6623 – Geographic Perspective on Global Health (CU-Anschutz)
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations

5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

EHOH 6710 – Disasters, Climate Change and Health (CU-Anschutz)
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
5. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
6. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
7. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
8. **CN-APE 9** - Apply biostatistical and epidemiological methods to public health issues that affect human and animal populations, and the surrounding environment.
9. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.
10. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
11. **CN- GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
12. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
13. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
14. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
15. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

EPID 6635 – Infectious Disease Epidemiology (CU-Anschutz)
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships

2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

EPID 6644 – Maternal Child Health Epidemiology (CU-Anschutz)
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

ERHS 5200 – Environmental and Occupational Health
1. **CR-EHOH 1:** Describe the direct and indirect human ecological and safety effects of major environmental and occupational agents of regional, national, and global importance.
2. **CR-EHOH 2:** Explain the general mechanisms of toxicity in eliciting a toxic response to various environmental exposures.
3. **CR-EHOH 3:** Specify approaches for assessing, preventing, and controlling environmental and occupational hazards that pose risks to human health and safety.
4. **CR-EHOH 4:** Specify current environmental exposure and risk assessment methods.
5. **CR-EHOH 5:** Discuss various risk assessment, management and risk communication approaches in relation to issues of environmental justice and equity.
6. **CR-EHOH 6:** Develop a testable model of environmental insult.
7. **CR-EHOH 7:** Describe federal and state regulatory programs, guideline and authorities that control environmental and occupational health issues.
8. **CR-EHOH 8:** Describe genetic, physiologic, and psychological factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards.
9. **CR-CC 1:** Define, assess, and report on the health status of populations, determinants of health and illness, and factors contributing to health promotion and disease prevention.

10. **CR-CC 2:** Determine uses and limitations of quantitative and qualitative methods in research and public health practice.
11. **CR-CC 3:** Communicate effectively both in writing and orally with policy makes, professionals, and the public.
12. **CR-CC 5:** Identify, retrieve, appraise, and apply scientific evidence relevant in the practice of public health.
13. **CR-CC 9:** Discuss sentinel events in the history and development of the public health profession and their relevance for practice in the field.
14. **CR-CC 10:** Describe and apply the concepts of the 3 core functions and 10 essential public health services to inform public health practice.

ERHS 5320 – Epidemiologic Methods
1. **CR-EPID 1:** Compare strengths and limitations of various study designs and reports to answer public health questions.
2. **CR-EPID 2:** Explain the importance of epidemiology for informing scientific, ethical, economic, and political discussion of health issues.
3. **CR-EPID 3:** Describe a public health problem in terms of magnitude, person, place, and time.
4. **CR-EPID 4:** Apply basic terminology and definitions of epidemiology.
5. **CR-EPID 5:** Identify key sources of data for epidemiologic purposes.
6. **CR-EPID 6:** Calculate basic epidemiology measures.
7. **CR-EPID 7:** Draw appropriate inferences from epidemiologic data.
8. **CR-EPID 8:** Comprehend basic ethical legal principles pertaining to the collection, maintenance, uses and dissemination of epidemiologic data.
9. **CR-EPID 9:** Identify the principles and limitations of public health screening and surveillance systems.
10. **CR-CC 1:** Define, assess, and report on the health status of populations, determinants of health and illness, and factors contributing to health promotion and disease prevention.
11. **CR-CC 2:** Determine uses and limitations of quantitative and qualitative methods in research and public health practice.
12. **CR-CC 4:** Identify and address ethical issues that arise in public health practice and research.
13. **CR-CC 5:** Identify, retrieve, appraise, and apply scientific evidence relevant in the practice of public health.
14. **CR-CC 8:** Define a public health problem and specify an analytical approach.
15. **CR-CC 9:** Discuss sentinel events in the history and development of the public health profession and their relevance for practice in the field.
16. **CR-CC 10:** Describe and apply the concepts of the 3 core functions and 10 essential public health services to inform public health practice.
17. **CR-CC 13:** Integrate professional ethics, principles of cultural competence and accountability in all professional conduct.

ERHS 5810 – Geographic Information Systems and Health

1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
3. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
4. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
5. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
6. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
7. **CN-APE 9** - Apply biostatistical and epidemiological methods to public health issues that affect human and animal populations, and the surrounding environment.

ERHS 6400 – Advanced Epidemiology
1. **CN-EPID 1** - Appropriately use descriptive epidemiologic methods to describe a given condition including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.
2. **CN-EPID 2** - Select and apply appropriate quantitative and qualitative measurement and analysis methods to support research and evaluations in the core areas of public health research and practice, including: epidemiology, environmental and occupational health, community and behavioral health, and public health systems management, policy and outcomes research.
3. **CN-EPID 3** - Critically review and interpret public health and other scientific literature to identify strengths and weaknesses of individual studies, to synthesize evidence in a research area, to identify gaps in evidence and to demonstrate relevance of current knowledge to the practice of public health.
4. **CN-EPID 4** - Translate investigator ideas into answerable research questions.
5. **CN-EPID 5** - Describe and select study designs, taking into account the advantages and limitations of each for addressing specific problems, as well as the practical aspects of their uses.
6. **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.
7. **CN-EPID 8** - Apply and interpret the concepts of effect modification and interaction.
8. **CN-EPID 9** - Interpret statistical results in order to make appropriate inferences.
9. **CN-EPID 10** - Evaluate threats to internal validity when critically evaluating strength of evidence.

ERHS 6420 – Applied Logistic Regression
1. **CN-EPID 1** - Appropriately use descriptive epidemiologic methods to describe a given condition including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.
2. **CN-EPID 2** - Select and apply appropriate quantitative and qualitative measurement and analysis methods to support research and evaluations in the core areas of public health research and

practice, including: epidemiology, environmental and occupational health, community and behavioral health, and public health systems management, policy and outcomes research.

3. **CN-EPID 3** - Critically review and interpret public health and other scientific literature to identify strengths and weaknesses of individual studies, to synthesize evidence in a research area, to identify gaps in evidence and to demonstrate relevance of current knowledge to the practice of public health.
4. **CN-EPID 4** - Translate investigator ideas into answerable research questions.
5. **CN-EPID 5** - Describe and select study designs, taking into account the advantages and limitations of each for addressing specific problems, as well as the practical aspects of their uses.
6. **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.
7. **CN-EPID 7** - Use computer software for data entry, database management, and summarizing, analyzing and displaying data.
8. **CN-EPID 8** - Apply and interpret the concepts of effect modification and interaction.
9. **CN-EPID 9** - Interpret statistical results in order to make appropriate inferences.
10. **CN-EPID 10** - Evaluate threats to internal validity when critically evaluating strength of evidence.

ERHS 6580 – Environmental/Occupational Epidemiology
1. **CN-EPID 1** - Appropriately use descriptive epidemiologic methods to describe a given condition including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.
2. **CN-EPID 3** - Critically review and interpret public health and other scientific literature to identify strengths and weaknesses of individual studies, to synthesize evidence in a research area, to identify gaps in evidence and to demonstrate relevance of current knowledge to the practice of public health.
3. **CN-EPID 4** - Translate investigator ideas into answerable research questions.
4. **CN-EPID 5** - Describe and select study designs, taking into account the advantages and limitations of each for addressing specific problems, as well as the practical aspects of their uses.
5. **CN-EPID 8** - Apply and interpret the concepts of effect modification and interaction.
6. **CN-EPID 9** - Interpret statistical results in order to make appropriate inferences.
7. **CN-EPID 10** - Evaluate threats to internal validity when critically evaluating strength of evidence.

ERHS 6930 – Research Seminar-Epidemiology
1. **CN-EPID 1** - Appropriately use descriptive epidemiologic methods to describe a given condition including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.
2. **CN-EPID 3** - Critically review and interpret public health and other scientific literature to identify strengths and weaknesses of individual studies, to synthesize evidence in a research area, to identify gaps in evidence and to demonstrate relevance of current knowledge to the practice of public health.
3. **CN-EPID 5** - Describe and select study designs, taking into account the advantages and limitations of each for addressing specific problems, as well as the practical aspects of their uses.

4. **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.
5. **CN-EPID 8** - Apply and interpret the concepts of effect modification and interaction.
6. **CN-EPID 9** - Interpret statistical results in order to make appropriate inferences.
7. **CN-EPID 10** - Evaluate threats to internal validity when critically evaluating strength of evidence.

ERHS 6932 – Research Seminar - Toxicology
> Varies by topic

ERHS 6950 – Epidemiology Independent Study
> Varies based on individual student

ERHS 6951 – Occupational and Environmental Health Independent Study
> Varies based on individual student

ETHS 5100 – Ethnicity, Race, and Health Disparities
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
7. **CN-PAHL 1** - Identify and use public health data as a tool to develop and prioritize community-based interventions to promote physical activity (ACSM)
8. **CN-PAHL 3** - Apply social, behavioral and environmental models in physical activity intervention planning (ACSM)
9. **CN-PAHL 4** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
10. **CN-PAHL 6** - Utilize assessment tools to determine physical, social, cultural and environmental supports and barriers to physical activity (ACSM)
11. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors
12. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies

ETHS 6950 – Ethnic Studies Independent Study
> Varies based on individual student

FSHN 5000 – Food Systems, Nutrition and Food Security
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
4. **CN-APE 5** - Compare and contrast animal and plant agriculture production systems in the United States and analyze the related public health concerns.
5. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
6. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
7. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
8. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
9. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
10. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
11. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.

FSHN 5200 – Advanced Medical Nutrition Therapy
1. **CN-PHN 1** - Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.
2. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.
3. **CN-PHN 3** - Incorporate principles of successful human behavior change in the development of effective nutrition interventions.
4. **CN-PHN 6** - Monitor and evaluate the effectiveness of nutrition interventions, and modify interventional approaches as needed to improve nutritional outcomes.

FSHN 5250 – Nutrition Education Theories and Practice
1. **CN-PAHL 3** - Apply social, behavioral and environmental models in physical activity intervention planning (ACSM)

2. **CN-PAHL 4** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
3. **CN-PAHL 5** - Assess the effects of physical activity on reducing chronic disease risk factors (ACSM)
4. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors
5. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies
6. **CN-PHN 1** - Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.
7. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.
8. **CN-PHN 3** - Incorporate principles of successful human behavior change in the development of effective nutrition interventions.
9. **CN-PHN 4** - Apply principles of community engagement to develop effective interventions to improve nutritional status of specific populations.
10. **CN-PHN 5** - Assess the role of policy interventions in improving dietary quality within communities.
11. **CN-PHN 6** - Monitor and evaluate the effectiveness of nutrition interventions, and modify interventional approaches as needed to improve nutritional outcomes.

FSHN 5500 – Advanced Nutritional Science I
1. **CN-PHN 1** - Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.
2. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.
3. **CN-PHN 6** - Monitor and evaluate the effectiveness of nutrition interventions, and modify interventional approaches as needed to improve nutritional outcomes.

FSHN 5510 – Advanced Nutritional Science II
1. **CN-PHN 1** - Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.
2. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.
3. **CN-PHN 5** - Assess the role of policy interventions in improving dietary quality within communities.
4. **CN-PHN 6** - Monitor and evaluate the effectiveness of nutrition interventions, and modify interventional approaches as needed to improve nutritional outcomes.

FSHN 6200 – Community Nutrition Planning and Evaluation
1. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes

2. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
3. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
4. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
5. **CN-PAHL 1** - Identify and use public health data as a tool to develop and prioritize community-based interventions to promote physical activity (ACSM)
6. **CN-PAHL 3** - Apply social, behavioral and environmental models in physical activity intervention planning (ACSM)
7. **CN-PAHL 5** - Assess the effects of physical activity on reducing chronic disease risk factors (ACSM)
8. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors
9. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies
10. **CN-PHN 1** - Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.
11. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.
12. **CN-PHN 3** - Incorporate principles of successful human behavior change in the development of effective nutrition interventions.
13. **CN-PHN 4** - Apply principles of community engagement to develop effective interventions to improve nutritional status of specific populations.
14. **CN-PHN 5** - Assess the role of policy interventions in improving dietary quality within communities.
15. **CN-PHN 6** - Monitor and evaluate the effectiveness of nutrition interventions, and modify interventional approaches as needed to improve nutritional outcomes.

FSHN 6400 – Selected Topics in Nutritional Epidemiology
1. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
2. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
3. **CN-PAHL 2** - Utilize epidemiological methods to develop and test hypotheses pertaining to physical activity and health and disease outcomes at the population level
4. **CN-PAHL 5** - Assess the effects of physical activity on reducing chronic disease risk factors (ACSM)
5. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies
6. **CN-PHN 1** - Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.

7. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.
8. **CN-PHN 3** - Incorporate principles of successful human behavior change in the development of effective nutrition interventions.
9. **CN-PHN 5** - Assess the role of policy interventions in improving dietary quality within communities.
10. **CN-PHN 6** - Monitor and evaluate the effectiveness of nutrition interventions, and modify interventional approaches as needed to improve nutritional outcomes.

FSHN 6500 – Nutrition – Proteins
1. **CN-PHN 1** - Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.
2. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.
3. **CN-PHN 5** - Assess the role of policy interventions in improving dietary quality within communities.
4. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies

FSHN 6501 – Recent Developments in Human Nutrition – Carbohydrates, Lipids, and Energy
5. **CN-PAHL 2** - Utilize epidemiological methods to develop and test hypotheses pertaining to physical activity and health and disease outcomes at the population level
6. **CN-PAHL 5** - Assess the effects of physical activity on reducing chronic disease risk factors (ACSM)
7. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors
8. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies
9. **CN-PHN 1** - Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.
10. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.
11. **CN-PHN 3** - Incorporate principles of successful human behavior change in the development of effective nutrition interventions.
12. **CN-PHN 5** - Assess the role of policy interventions in improving dietary quality within communities.
13. **CN-PHN 6** - Monitor and evaluate the effectiveness of nutrition interventions, and modify interventional approaches as needed to improve nutritional outcomes.

FSHN 6502 - Recent Developments in Human Nutrition – Genomics, Proteomics, and Metabolomics
1. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies

2. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.

FSHN 6600 - Women's Issues in Lifecycle Nutrition
1. **CN-PHN 1** - Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.
2. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.
3. **CN-PHN 3** - Incorporate principles of successful human behavior change in the development of effective nutrition interventions.
4. **CN-PHN 6** - Monitor and evaluate the effectiveness of nutrition interventions, and modify interventional approaches as needed to improve nutritional outcomes.

FSHN 6610 - International Nutrition
1. **CN-GHHD 2**- Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
2. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.
3. **CN-PHN 3** - Incorporate principles of successful human behavior change in the development of effective nutrition interventions.
4. **CN-PHN 4** - Apply principles of community engagement to develop effective interventions to improve nutritional status of specific populations.
5. **CN-PHN 5** - Assess the role of policy interventions in improving dietary quality within communities.
6. **CN-PHN 6** - Monitor and evaluate the effectiveness of nutrition interventions, and modify interventional approaches as needed to improve nutritional outcomes.

FSHN 6750 - Regulation of Energy Intake
1. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies
2. **CN-PHN 1** - Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.
3. **CN-PHN 2** - Assess and integrate information based on nutritional needs, the study of the scientific literature, and epidemiologic data to develop short and long range nutritional priorities and programs that will have the greatest impact.

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

1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
4. **CN-APE 5** - Compare and contrast animal and plant agriculture production systems in the United States and analyze the related public health concerns.
5. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
6. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
7. **CN-APE 9** - Apply biostatistical and epidemiological methods to public health issues that affect human and animal populations, and the surrounding environment.
8. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.
9. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.

FTEC 5740 - Current Issues in Food Safety

1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
4. **CN-APE 5** - Compare and contrast animal and plant agriculture production systems in the United States and analyze the related public health concerns.
5. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
6. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
7. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.
8. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.
9. **CN-PHN 1** - Apply biological principles for the development and implementation of public health nutrition programs targeted at disease prevention, control, or management.

10. **CN-PHN 5** - Assess the role of policy interventions in improving dietary quality within communities.

FWLD 5440 – Ecotoxicology
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
3. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
4. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
5. **CN-APE 9** - Apply biostatistical and epidemiological methods to public health issues that affect human and animal populations, and the surrounding environment.

FWLD 5650 – Managing Human-Wildlife Conflicts
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.

GERO 6250 - Psychosocial Aspects of Aging (UNC)
1. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
2. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

GERO 6350 –Social Policies of Aging (UNC)
1. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
2. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
3. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally

HDFS 5920 – Grant Writing – Human Services and Research
1. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
2. **CN-PAHL 4** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
3. **CN-PAHL 6** - Utilize assessment tools to determine physical, social, cultural and environmental supports and barriers to physical activity (ACSM)

4. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors

HDFS 6070 – Prevention Science Across the Lifespan
1. **CR-CC 1** - Define, assess and report on the health status of populations, determinants of health and illness, and factors contributing to health promotion and disease prevention.
2. **CR-CC 3** - Communicate effectively both in writing and orally with policy makers, professionals, and the public.
3. **CR-CC 5** - Identify, retrieve, appraise, and apply scientific evidence relevant in the practice of public health.
4. **CR-CBHS 6** - Describe steps and methods for the planning, implementing and evaluating of evidence-based public health programs and policies.
5. **CN-CBHS 4** - Use systematic approaches to conceive, design and implement and evaluate health promotion and disease prevention programs. Systematic approaches include the use of logic models, principles of Community Based Participatory Research, epidemiologic evidence, and evidence-based intervention strategies.
6. **CN-CBHS 5** - Identify and describe appropriate research designs for assessing program effectiveness.
7. **CN-GHHD 4** - Construct health behavior change intervention plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations.
8. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors

HDFS 6080 – Program Planning and Implementation
1. **CR-CC 3** - Communicate effectively both in writing and orally with policy makers, professionals, and the public.
2. **CR-CC 5** - Identify, retrieve, appraise, and apply scientific evidence relevant in the practice of public health.
3. **CN-CBHS 2** - Describe and apply systematic approaches and methods to assess the health-related needs of communities and populations, taking into account individual, interpersonal, community and societal factors.
4. **CR-CBHS 6** - Describe steps and methods for the planning, implementing and evaluating of evidence-based public health programs and policies.
5. **CN-CBHS 4** - Use systematic approaches to conceive, design and implement and evaluate health promotion and disease prevention programs. Systematic approaches include the use of logic models, principles of Community Based Participatory Research, epidemiologic evidence, and evidence-based intervention strategies.
6. **CN-GHHD 4** - Construct health behavior change intervention plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations.
7. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors

HDFS 6090 – Prevention Program Evaluation
1. **CR-CC 1** - Define, assess and report on the health status of populations, determinants of health and illness, and factors contributing to health promotion and disease prevention.

2. **CR-CC 3** - Communicate effectively both in writing and orally with policy makers, professionals, and the public.
3. **CR-CC 5** - Identify, retrieve, appraise, and apply scientific evidence relevant in the practice of public health.
4. **CR-CBHS 6** - Describe steps and methods for the planning, implementing and evaluating of evidence-based public health programs and policies.
5. **CN-CBHS 4** - Use systematic approaches to conceive, design and implement and evaluate health promotion and disease prevention programs. Systematic approaches include the use of logic models, principles of Community Based Participatory Research, epidemiologic evidence, and evidence-based intervention strategies.
6. **CN-CBHS 5** - Identify and describe appropriate research designs for assessing program effectiveness.
7. **CN-GHHD 4** - Construct health behavior change intervention plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations.
8. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors

HDFS 6100 – Risk and Resilience
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

HDFS 6120 – Adolescent Development
See Maternal and Child Health Competencies

HDFS 6950 – Independent Study - Human Development
Varies based on individual student

HDFS 6970 – Group Study – Human Development
Varies based on individual student

HDFS 7400 – Family Policy and Programming
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes

3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

HESC 5200 – Advanced Exercise Testing and Prescription
1. **CN-PAHL 3** - Apply social, behavioral and environmental models in physical activity intervention planning (ACSM)
2. **CN-PAHL 4** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
3. **CN-PAHL 5** - Assess the effects of physical activity on reducing chronic disease risk factors (ACSM)
4. **CN-PAHL 6** - Utilize assessment tools to determine physical, social, cultural and environmental supports and barriers to physical activity (ACSM)
5. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors
6. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies

HESC 5560 – Wellness and Health Promotion
1. **CR-CBHE 1:** Identify theories, concepts and models from a range of social and behavioral disciplines used in public health research and practice.
2. **CR-CBHE 2:** Identify the social and behavioral factors that affect the health of individuals and populations.
3. **CR-CBHE 3:** Use a socio-ecological framework when identifying appropriate interventions to improve population health.
4. **CR-CBHE 4:** Identify community health needs and assets, including those at the individual, organizational, and community levels for the purpose of designing social and behavioral interventions to improve health.
5. **CR-CBHE 5:** Describe the merits and limitations of social and behavioral science programs and policies for improving population health.
6. **CR-CBHE 6:** Describe steps and methods for the planning, implementing and evaluating of evidence-based public health programs and policies.
7. **CR-CBHE 7:** Identify strategies for engaging stakeholders in planning, implementing, and evaluating public health programs and policies.
8. **CR-CC 1:** Define, assess, and report on the health status of populations, determinants of health and illness, and factors contributing to health promotion and disease prevention.
9. **CR-CC 3:** Communicate effectively both in writing and orally with policy makes, professionals, and the public.

10. **CR-CC 5:** Identify, retrieve, appraise, and apply scientific evidence relevant in the practice of public health.
11. **CR-CC 6:** Understand and utilize leadership, team building, negotiation, and conflict resolution skills to collaborate and build partnerships for the purpose of improving the public's health.
12. **CR-CC 7:** Identify organizational decision-making structures, stakeholders, style, and processes.
13. **CR-CC 8:** Define a public health problem and specify an analytical approach.
14. **CR-CC 9:** Discuss sentinel events in the history and development of the public health profession and their relevance for practice in the field.
15. **CR-CC 10:** Describe and apply the concepts of the 3 core functions and 10 essential public health services to inform public health practice.
16. **CR-CC 11:** Describe steps and strategies to consider when working collaboratively in a culturally-sensitive manner with diverse groups to promote the health of communities.
17. **CR-CC 12:** Describe the roles of history, power, privilege, and structural inequality in producing health disparities.
18. **CR-CC 13:** Integrate professional ethics, principles of cultural competence and accountability in all professional conduct.

HESC 6450 – Epidemiology of Health and Physical Activity
1. **CN-PAHL 1** - Identify and use public health data as a tool to develop and prioritize community-based interventions to promote physical activity (ACSM)
2. **CN-PAHL 2** - Utilize epidemiological methods to develop and test hypotheses pertaining to physical activity and health and disease outcomes at the population level
3. **CN-PAHL 3** - Apply social, behavioral and environmental models in physical activity intervention planning (ACSM)
4. **CN-PAHL 5** - Assess the effects of physical activity on reducing chronic disease risk factors (ACSM)
5. **CN-PAHL 6** - Utilize assessment tools to determine physical, social, cultural and environmental supports and barriers to physical activity (ACSM)
6. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies

HESC 6500 – Health Promotion Programming
1. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
2. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
3. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
4. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
5. **CN-PAHL 1** - Identify and use public health data as a tool to develop and prioritize community-based interventions to promote physical activity (ACSM)

6. **CN-PAHL 3** - Apply social, behavioral and environmental models in physical activity intervention planning (ACSM)
7. **CN-PAHL 4** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
8. **CN-PAHL 5** - Assess the effects of physical activity on reducing chronic disease risk factors (ACSM)
9. **CN-PAHL 6** - Utilize assessment tools to determine physical, social, cultural and environmental supports and barriers to physical activity (ACSM)
10. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors
11. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies

HESC 6920 – Seminar – Health and Exercise Science
Varies by topic

HESC 6950 – Independent Study-Health
Varies based on individual student

HESC 6951 – Independent Study – Exercise Science
Varies based on individual student

HESC 6960 Group Study - Exercise and Nutrition
Varies based on individual student

HSMP 6601 – Introduction to HSMP (CU-Anschutz)
1. **CR-CC 7** - Identify organizational decision-making structures, stakeholders, style, and processes.
2. **CR-CC 8** - Define a public health problem and specify an analytical approach.
3. **CR-CC 9** - Discuss sentinel events in the history and development of the public health profession and their relevance for practice in the field.

HSMP 6615 – Current Global Health Policy Issues (CU-Anschutz)
1. **CN-GHHD 1 -** Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally

6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

IEOO 6790 – Advanced International Development
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

IEOO 6920 – International Development Seminar
> Varies by topic

JTCM 5000 – Communication Research and Evaluation Methods
1. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
2. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
3. **CN-HCOM 4 -** Identify the 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
4. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention
5. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.

JTCM 5010 – Process and Effects of Communication
1. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
2. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
3. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-HCOM 4 -** Identify the 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
5. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention

6. **CN-HCOM 6 -** Apply the broad literature of communication theory and the subset of that literature specifically about health communication to public health communication practice
7. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.

JTCM 5440 – Corporate and Institutional Media Production
1. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
2. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
3. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

JTCM 6140 – Public Communication Campaigns
1. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
2. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
3. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
4. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
5. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.
6. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
7. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
8. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
9. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
10. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
11. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
12. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
13. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings

14. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
15. **CN-HCOM 4 -** Identify the 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
16. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention
17. **CN-HCOM 6 -** Apply the broad literature of communication theory and the subset of that literature specifically about health communication to public health communication practice
18. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.
19. **CN-PAHL 1** - Identify and use public health data as a tool to develop and prioritize community-based interventions to promote physical activity (ACSM)
20. **CN-PAHL 3** - Apply social, behavioral and environmental models in physical activity intervention planning (ACSM)
21. **CN-PAHL 4** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
22. **CN-PAHL 6** - Utilize assessment tools to determine physical, social, cultural and environmental supports and barriers to physical activity (ACSM)
23. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors
24. **CN-PAHL 8** - Translate appropriate scientific information and data of evidence-based strategies to recommend healthy eating and active living promotion strategies

JTCM 6300 - Health Communication
1. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
2. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
3. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
4. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
5. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
6. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
7. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
8. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
9. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

10. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
11. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
12. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
13. **CN-HCOM 4 -** Identify the 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
14. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention
15. **CN-HCOM 6 -** Apply the broad literature of communication theory and the subset of that literature specifically about health communication to public health communication practice
16. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.
17. **CN-PAHL 3** - Apply social, behavioral and environmental models in physical activity intervention planning (ACSM)
18. **CN-PAHL 4** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

JTCM 6500 – Strategic Communications
1. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
2. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
3. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-HCOM 4 -** Identify the 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
5. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention
6. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.

JTCM 6600 – Communication and Innovation
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations

5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
7. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
8. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
9. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
10. **CN-HCOM 4 -** Identify the 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
11. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention
12. **CN-HCOM 6 -** Apply the broad literature of communication theory and the subset of that literature specifically about health communication to public health communication practice
13. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.

JTCM 6610 – Information Design
1. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
2. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
3. **CN-HCOM 4 -** Identify the 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
4. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention
5. **CN-HCOM 6 -** Apply the broad literature of communication theory and the subset of that literature specifically about health communication to public health communication practice
6. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.

JTCM 6700 – Communication in the Social Processes of Risk
1. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
2. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
3. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.

4. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
5. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
6. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
7. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
8. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
9. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
10. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
11. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
12. **CN-HCOM 4 -** Identify the 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
13. **CN-HCOM 6 -** Apply the broad literature of communication theory and the subset of that literature specifically about health communication to public health communication practice
14. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.
15. **CN-PAHL 4** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
16. **CN-PAHL 7** - Apply program design, implementation and evaluation strategies to promote, and address barriers to, adoption of healthy lifestyle behaviors

JTCM 6950 – Independent Study - Communication
Varies based on individual student

MIPO 5550 – Principles and Mechanisms of Disease
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
3. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.

NRES 5120 – Spatial Statistical Modeling – Natural Resources
1. Apply basic skills in geographic information systems technology in the evaluation of environmental health problems.

NROO 5920 – Seminar

Varies by topic

PBHC 5160 – Public Health Foundations

1. **CR-CC 1:** Define, assess, and report on the health status of populations, determinants of health and illness, and factors contributing to health promotion and disease prevention.
2. **CR-CC 3:** Communicate effectively both in writing and orally with policy makes, professionals, and the public.
3. **CR-CC 4:** Identify and address ethical issues that arise in public health practice and research.
4. **CR-CC 5:** Identify, retrieve, appraise, and apply scientific evidence relevant in the practice of public health.
5. **CR-CC 6:** Understand and utilize leadership, team building, negotiation, and conflict resolution skills to collaborate and build partnerships for the purpose of improving the public's health.
6. **CR-CC 9:** Discuss sentinel events in the history and development of the public health profession and their relevance for practice in the field.
7. **CR-CC 10:** Describe and apply the concepts of the 3 core functions and 10 essential public health services to inform public health practice.
8. **CR-CC 11:** Describe steps and strategies to consider when working collaboratively in a culturally-sensitive manner with diverse groups to promote the health of communities.
9. **CR-CC 12:** Describe the roles of history, power, privilege, and structural inequality in producing health disparities.
10. **CR-CC 13:** Integrate professional ethics, principles of cultural competence and accountability in all professional conduct.
11. **CR-CC 14:** Explain the importance of a diverse public health workforce.

PBHC 5400 – One Health in Public Health

6. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
7. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
8. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
9. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
10. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
11. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
12. **CN-APE 9** - Apply biostatistical and epidemiological methods to public health issues that affect human and animal populations, and the surrounding environment.
13. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.

PBHC 5500 – Community Health Strategies

1. **CR-CBHE 1:** Identify theories, concepts and models from a range of social and behavioral disciplines used in public health research and practice.
2. **CR-CBHE 2:** Identify the social and behavioral factors that affect the health of individuals and populations.
3. **CR-CBHE 3:** Use a socio-ecological framework when identifying appropriate interventions to improve population health.
4. **CR-CBHE 4:** Identify community health needs and assets, including those at the individual, organizational, and community levels for the purpose of designing social and behavioral interventions to improve health.
5. **CR-CBHE 5:** Describe the merits and limitations of social and behavioral science programs and policies for improving population health.
6. **CR-CBHE 6:** Describe steps and methods for the planning, implementing and evaluating of evidence-based public health programs and policies.
7. **CR-CBHE 7:** Identify strategies for engaging stakeholders in planning, implementing, and evaluating public health programs and policies.
8. **CR-CC 1:** Define, assess, and report on the health status of populations, determinants of health and illness, and factors contributing to health promotion and disease prevention.
9. **CR-CC 3:** Communicate effectively both in writing and orally with policy makes, professionals, and the public.
10. **CR-CC 5:** Identify, retrieve, appraise, and apply scientific evidence relevant in the practice of public health.
11. **CR-CC 6:** Understand and utilize leadership, team building, negotiation, and conflict resolution skills to collaborate and build partnerships for the purpose of improving the public's health.
12. **CR-CC 7:** Identify organizational decision-making structures, stakeholders, style, and processes.
13. **CR-CC 8:** Define a public health problem and specify an analytical approach.
14. **CR-CC 9:** Discuss sentinel events in the history and development of the public health profession and their relevance for practice in the field.
15. **CR-CC 10:** Describe and apply the concepts of the 3 core functions and 10 essential public health services to inform public health practice.
16. **CR-CC 11:** Describe steps and strategies to consider when working collaboratively in a culturally-sensitive manner with diverse groups to promote the health of communities.
17. **CR-CC 12:** Describe the roles of history, power, privilege, and structural inequality in producing health disparities.
18. **CR-CC 13:** Integrate professional ethics, principles of cultural competence and accountability in all professional conduct.
19. **CR-CC 14:** Explain the importance of a diverse public health workforce.

PBHC 5600 – Public Health Data Analysis

1. **CR-BIOS 1:** Describe the role that biostatistics serves in the disciplines of public research.
2. **CR-BIOS 2:** Distinguish among the different measurement scales and the implications for selection of statistical methods to be used based on these distinctions.

3. **CR-BIOS 3:** Describe basic concepts of probability, commonly used probability distributions, statistical accuracy, systematic and random variation, and statistical correlation.
4. **CR-BIOS 4:** Apply descriptive statistics and related technique for expressing levels of confidence in estimators that are commonly used to summarize public health data.
5. **CR-BIOS 5:** Apply basic statistical estimation and inference methods, along with necessary assumptions, that apply to the commonly used statistical methods in public health.
6. **CR-BIOS 6:** Apply alternative statistical methods (e.g. nonparametric methods) when assumptions are not met completely or when working with small research data sources.
7. **CR-BIOS 7:** Apply basic database management principles (e.g. strategies for building relational data models) to public health records, clinical observations or observational data to facilitate data analysis, data quality management and administrative and scientific reporting using a statistical software package.
8. **CR-BIOS 8:** Create and interpret results in summary tables (e.g. Table 1) of public health and other scientific publications.
9. **CR-BIOS 9:** Describe and interpret statistical analyses commonly done in public health studies in language and terms appropriate for both public health professionals and educated lay audiences.
10. **CR-CC 1:** Define, assess, and report on the health status of populations, determinants of health and illness, and factors contributing to health promotion and disease prevention.
11. **CR-CC 2:** Determine uses and limitations of quantitative and qualitative methods in research and public health practice.
12. **CR-CC 4:** Identify and address ethical issues that arise in public health practice and research.
13. **CR-CC 10:** Describe and apply the concepts of the 3 core functions and 10 essential public health services to inform public health practice.

PBHC 6300 – Field Methods of Disease Investigation
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
5. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
6. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
7. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.

8. **CN-APE 9** - Apply biostatistical and epidemiological methods to public health issues that affect human and animal populations, and the surrounding environment.
9. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.
10. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.
11. **CN-EPID 1** - Appropriately use descriptive epidemiologic methods to describe a given condition including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.
12. **CN-EPID 2** - Select and apply appropriate quantitative and qualitative measurement and analysis methods to support research and evaluations in the core areas of public health research and practice, including: epidemiology, environmental and occupational health, community and behavioral health, and public health systems management, policy and outcomes research.
13. **CN-EPID 3** - Critically review and interpret public health and other scientific literature to identify strengths and weaknesses of individual studies, to synthesize evidence in a research area, to identify gaps in evidence and to demonstrate relevance of current knowledge to the practice of public health.
14. **CN-EPID 4** - Translate investigator ideas into answerable research questions.
15. **CN-EPID 5** - Describe and select study designs, taking into account the advantages and limitations of each for addressing specific problems, as well as the practical aspects of their uses.
16. **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.
17. **CN-EPID 7** - Use computer software for data entry, database management, and summarizing, analyzing and displaying data.
18. **CN-EPID 8** - Apply and interpret the concepts of effect modification and interaction.
19. **CN-EPID 9** - Interpret statistical results in order to make appropriate inferences.

PBHC 6860 – Public Health Practicum
> Varies by student

PBHC 6920 – Public Health Seminar
> Varies by topic

PBHC 6950 – Public Health Independent Study
> Varies by student

PBHC 6960 – Public Health Group Study
> Topics will vary

PBHC 6980- Public Health Capstone – Animals, People, and the Environment
> Varies by student

PBHC 6980- Public Health Capstone – Epidemiology

Varies by student

PBHC 6980- Public Health Capstone – Global Health and Health Disparities
Varies by student

PBHC 6980- Public Health Capstone – Health Communication
Varies by student

PBHC 6980- Public Health Capstone – Physical Activity and Healthy Lifestyle
Varies by student

PBHC 6980- Public Health Capstone – Public Health Nutrition
Varies by student

PHLY 5640 – Seminar in Animal Rights
1. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
2. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
3. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.

POLS 6650 – Public Policy Analysis
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
5. **CN-APE 5** - Compare and contrast animal and plant agriculture production systems in the United States and analyze the related public health concerns.
6. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
7. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
8. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
9. **CN-APE 9** - Apply biostatistical and epidemiological methods to public health issues that affect human and animal populations, and the surrounding environment.

10. **CN-GHHD 1**- Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
11. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
12. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
13. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
14. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
15. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

POLS 6700 – Politics of Environment and Sustainability
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
3. **CN-APE 7** - 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
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
6. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

PSCY 5170 – Perspectives in Global Health
1. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

2. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
3. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
4. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
5. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
6. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
7. **CN-GHHD 4**- Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
8. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
9. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

PSCY 7920 – Applied Social Psychology
Varies by topic

PSCY 7920 - Occupational Health Psychology
1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
5. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally

SOCO 5620 – Sociology of Food Systems and Agriculture
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.

5. **CN-APE 5** - Compare and contrast animal and plant agriculture production systems in the United States and analyze the related public health concerns.
6. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
7. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
8. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
9. **CN-APE 9** - Apply biostatistical and epidemiological methods to public health issues that affect human and animal populations, and the surrounding environment.
10. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.

SOCO 6620 – Sociological Policy Analysis
1. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
2. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities

SPCM 5320 – Theories of Interpersonal Communication
1. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
2. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
3. **CN-HCOM 4 -** Identify the 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
4. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention
5. **CN-HCOM 6 -** Apply the broad literature of communication theory and the subset of that literature specifically about health communication to public health communication practice
6. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.

SPCM 5340 – Communication and Global Diversity
1. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
2. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
3. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-HCOM 4 -** Identify the 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

5. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention
6. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.

SPCM 5380 – Communicating in the Health Clinic
1. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
2. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
3. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-HCOM 4 -** Identify the 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
5. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention
6. **CN-HCOM 6 -** Apply the broad literature of communication theory and the subset of that literature specifically about health communication to public health communication practice
7. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.

SPCM 5390 – Communication Theory
1. **CN-HCOM 1 -** Analyze the influences of social, organizational and individual factors on the use of information technology by end users
2. **CN-HCOM 2 -** Apply theory and strategy-based communication principles across different settings
3. **CN-HCOM 3-** Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-HCOM 4 -** Identify the 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
5. **CN-HCOM 5 -** Assess the critical relationship between formative and evaluative research in the ongoing delivery of a communication based intervention
6. **CN-HCOM 6 -** Apply the broad literature of communication theory and the subset of that literature specifically about health communication to public health communication practice
7. **CN-HCOM 7 -** Apply quantitative and qualitative social science research methods to interpret published communication research; apply findings to public health communication practice.

VM 637/DVM Transfer – Bacteriology and Mycology
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

4. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
5. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
6. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
7. **CN-APE 9** - Apply biostatistical and epidemiological methods to public health issues that affect human and animal populations, and the surrounding environment.
8. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.

VM 638/DVM Transfer – Veterinary Parasitology
1. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
2. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
3. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
4. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
5. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.
6. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.
7. **CN-EPID 1** - Appropriately use descriptive epidemiologic methods to describe a given condition
8. **CN-EPID 9** - Interpret statistical results in order to make appropriate inferences.
9. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
10. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
11. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

VM 707/DVM Transfer – Emerging Issues in Infectious Diseases
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

4. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
5. **CN-APE 5** - Compare and contrast animal and plant agriculture production systems in the United States and analyze the related public health concerns.
6. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
7. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.
8. **CN-EPID 1** - Appropriately use descriptive epidemiologic methods to describe a given condition including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.
9. **CN-EPID 3** - Critically review and interpret public health and other scientific literature to identify strengths and weaknesses of individual studies, to synthesize evidence in a research area, to identify gaps in evidence and to demonstrate relevance of current knowledge to the practice of public health.
10. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
11. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
12. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
13. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
14. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

VM 714/DVM Transfer – Veterinary Preventative Medicine
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
5. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
6. **CN-APE 7** - Identify ways in which agricultural and human incursion positively and adversely impact environmental and ecological health, and develop methods of minimizing negative impacts.
7. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.

8. **CN-APE 9** - Apply biostatistical and epidemiological methods to public health issues that affect human and animal populations, and the surrounding environment.
9. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.
10. **CN-APE 11** - Differentiate and properly use various types of infectious disease preventive measures.
11. **CN-EPID 1** - Appropriately use descriptive epidemiologic methods to describe a given condition including measures of prevalence, incidence, morbidity, mortality, demographic characteristics and risk factors.
12. **CN-EPID 2** - Select and apply appropriate quantitative and qualitative measurement and analysis methods to support research and evaluations in the core areas of public health research and practice, including: epidemiology, environmental and occupational health, community and behavioral health, and public health systems management, policy and outcomes research.
13. **CN-EPID 3** - Critically review and interpret public health and other scientific literature to identify strengths and weaknesses of individual studies, to synthesize evidence in a research area, to identify gaps in evidence and to demonstrate relevance of current knowledge to the practice of public health.
14. **CN-EPID 4** - Translate investigator ideas into answerable research questions.
15. **CN-EPID 5** - Describe and select study designs, taking into account the advantages and limitations of each for addressing specific problems, as well as the practical aspects of their uses.
16. **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.
17. **CN-EPID 7** - Use computer software for data entry, database management, and summarizing, analyzing and displaying data.
18. **CN-EPID 8** - Apply and interpret the concepts of effect modification and interaction.
19. **CN-EPID 9** - Interpret statistical results in order to make appropriate inferences.
20. **CN-EPID 10** - Evaluate threats to internal validity when critically evaluating strength of evidence.
21. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
22. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
23. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
24. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
25. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
26. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention

VSCS 5330 – Epidemiology of Infectious Diseases and Zoonoses

1. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
2. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
3. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities
4. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations

VSCS 5800 – Global Veterinary Public Health
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
3. **CN-APE 5** - Compare and contrast animal and plant agriculture production systems in the United States and analyze the related public health concerns.
4. environmental and ecological health, and develop methods of minimizing negative impacts.
5. **CN-APE 8** - Analyze issues regarding awareness and communication that impact optimal collaboration between human, animal, and environmental health professionals.
6. **CN-APE 10** - Evaluate how public health skills and knowledge benefit agriculture industries and individual producers, and how knowledge of agriculture and environmental health benefit public health professionals.

VSCS 5810 – Experimental Couse
    Varies by topic

VSCS 6480/VM 648 DVM Transfer – Food Animal Production and Food Safety
1. **CN-APE 1** - Assess the public health threat of emerging issues to animal and human populations and identify intervention strategies.
2. **CN-APE 2** - Incorporate the principles of safe and secure food systems into public health problem solving.
3. **CN-APE 3** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention
4. **CN-APE 4** - Analyze how social, political and cultural differences can impact public perceptions about how human, environment and animal interactions affect public health, social wellbeing and environmental health.
5. **CN-APE 6** - Analyze public health concerns that have been related to various food production systems and how animal and plant agriculture impact public health and wellbeing.
6. **CN-GHHD 1** - Apply social, behavioral and cultural theory to analyze determinants and correlates of global health problems and their interrelationships
7. **CN-GHHD 2** - Assess how social, behavioral, environmental, cultural and biological factors contribute to global health outcomes
8. **CN-GHHD 3** - Incorporate the impacts of gender, race, poverty, history, migration and culture in the design and assessment of interventions addressing health disparities

9. **CN-GHHD 4** - Construct health behavior change interventions plans and evaluations tailored appropriately for ethnically, culturally and socioeconomically diverse populations
10. **CN-GHHD 5** - Identify the role of cultural, social, economic, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services locally, nationally, and internationally
11. **CN-GHHD 6** - Apply basic skills of message production and delivery for a target audience, which can be employed in a communication-based public health intervention.

VSCS 6620 – Applied Data Analysis
1. **CR-BIOS 1:** Describe the role that biostatistics serves in the disciplines of public research.
2. **CR-BIOS 2:** Distinguish among the different measurement scales and the implications for selection of statistical methods to be used based on these distinctions.
3. **CR-BIOS 3:** Describe basic concepts of probability, commonly used probability distributions, statistical accuracy, systematic and random variation, and statistical correlation.
4. **CR-BIOS 4:** Apply descriptive statistics and related technique for expressing levels of confidence in estimators that are commonly used to summarize public health data.
5. **CR-BIOS 5:** Apply basic statistical estimation and inference methods, along with necessary assumptions, that apply to the commonly used statistical methods in public health.
6. **CR-BIOS 6:** Apply alternative statistical methods (e.g. nonparametric methods) when assumptions are not met completely or when working with small research data sources.
7. **CR-BIOS 7:** Apply basic database management principles (e.g. strategies for building relational data models) to public health records, clinical observations or observational data to facilitate data analysis, data quality management and administrative and scientific reporting using a statistical software package.
8. **CR-BIOS 8:** Create and interpret results in summary tables (e.g. Table 1) of public health and other scientific publications.
9. **CR-BIOS 9:** Describe and interpret statistical analyses commonly done in public health studies in language and terms appropriate for both public health professionals and educated lay audiences.
10. **CR-CC 2:** Determine uses and limitations of quantitative and qualitative methods in research and public health practice.
11. **CR-CC 10:** Describe and apply the concepts of the 3 core functions and 10 essential public health services to inform public health practice.

VSCS 7950 – Independent Study-Epidemiology
        Varies based on individual student