Examples of well done exemption requests:

### D. Core Competencies

Refer to list of core competencies for the required UNC-CH core course- available at [http://www.sph.unc.edu/student_affairs/taking_classes.html](http://www.sph.unc.edu/student_affairs/taking_classes.html). Describe how you have met each core competency for the course being exempted. For each topic covered in the UNC-CH core course, describe how you fulfilled that competency, such as the chapter covered in a previous course or specific work experience. If you have not completed a core course topic through previous course work or work experience, please indicate that as well.

**-Identify key sources of data for epidemiologic purposes:** The PUBH 203 course that I took in Spring 2006 gave specific detail about sources of data (lecture 3) and used examples of these sources throughout class and case studies. Sources included CDC data (including MMWR), surveillance data, study data from journal articles, etc.

-R&G, Part II: Study Design and Conduct
-Chapter 5: Types of Epidemiologic Studies
-Chapter 6: Cohort Studies
-Chapter 7: Case-Control Studies
-Work experience: participation in developing data collection processes for randomized trials.

**-Identify the principles of limitation of public health screening programs:** In PUBH203, I learned how to calculate sensitivity, specificity, predictive value positive and negative for screening tests—as well as learning about which diseases are appropriate for public health screening tests (those that have serious consequences, have effective treatment if caught early, can be detected early which is prevalent in the target population).

-R&G, Chapter 25: Screening
-Morgenstern’s notes on stages of disease, calculations of positive predictive value

**-Describe a public health problem in terms of magnitude, person, time and place:** Again, in PUBH203, descriptive epidemiology was one of the first topics that we learned, reinforced during testing and case studies. This was also necessary during several of my jobs—as an intern at NASTAD and as an infectious disease policy analyst at ASTHO. Framing a public health problem correctly is critical to build support from policy makers and the public.

-R&G, Part I: Basic Concepts
-Chapter 1: The Emergence of Modern Epidemiology
-Chapter 2: Causation and Causal Inference
-Chapter 3: Measures of Disease Frequency
-Chapter 4: Measures of effect and measures of association
-Case studies of peer reviewed journal articles
-Explain the importance of epidemiology for informing scientific, ethical, economic, and political discussion of health issues: This topic came up throughout PUBH 203, using real life examples for issues such as the PSA screening test, HIV and STD policy, etc. As well, my work at NASTAD, ASTHO, and at the Virginia Beach Department of Public Health, all use epidemiology to describe a public health problem—whether the goal is awareness of a health issue, to gain political support for an issue, to justify new programs or policies, to build partnerships in the community, or to secure funding for programs that address the public health issue at hand.

-R&G, Chapter 1: The Emergence of Modern Epidemiology

-Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data: During PUBH 203, study design and data collection were discussed (Lectures 3, 4, 5 and 9). Also, GW required HIPAA training and courses in public health law (Health Services and the Law and Life, Death, and Human Subjects) explored ethical and legal considerations at length. As well, during my work experience at ASTHO, I used CDC’s EpiX database, and I currently work with epidemiologic data at the Health Department, specifically infant mortality data, TB data, and information regarding sentinel events. Care is taken to ensure patient privacy.

-Work experience: data management for multiple randomized studies, completion of IRB forms and reports for randomized and other clinical studies, completion of required IRB training at multiple institutions

-Apply the basic terminology and definitions of epidemiology: Achieving high marks in the PUBH203 course and subsequent public health courses and working in public health requires a working knowledge of epidemiologic terms (prevalence, incidence, cohort, case-control, bias, clusters, outbreaks, etc).

-R&G, Part I: Basic Concepts
-Chapter 1: The Emergence of Modern Epidemiology
-Chapter 2: Causation and Causal Inference
-Chapter 3: Measures of Disease Frequency
-Chapter 4: Measures of effect and measures of association

-Calculate basic epidemiologic measures: The PUBH 203 course required conducting, prevalence rates, incidence rates, risk ratios, odds ratios, standardizing rates, sensitivity, specificity, and predictive value.

-R&G, Chapter 3: Measures of Disease Frequency
-R&G, Chapter 4: Measures of Effect and Measures of Association
-R&G, Part III: Data Analysis
Communicate epidemiologic information to lay and professional audiences: PUBH 203 included small group discussions where communicating finding from case studies was very important. In my work at NASTAD, ASTHO and the Virginia Beach Department of Public Health, discussions about epidemiologic data and information were constantly discussed internally. As well, I presented information to both public health professionals and policy makers that included epidemiologic information, which had to be geared toward a specific audience. At the health department, I presented to an MPH class about the basic epidemiologic TB information and local/state rates.

Academic experience: preparation of presentations and reports for class
Work experience: preparation of manuscripts for publication, presentation of study results at epidemiologic conferences, participation in informed consent process with study subjects.

Draw appropriate inferences from epidemiologic data: Class discussions and tests in PUBH 203 required the ability to interpret data from case studies and journal articles. Professionally, I have had to look at state/local/national data to assess trends and summarize these trends.

R&G, Chapter 2: Causation and Causal Inference
R&G, Chapter 8: Precision and Validity in Epidemiologic Studies
R&G, Chapter 9: Accuracy Considerations in Study Design
Work experience: preparation of manuscripts for publication

Evaluate the strengths and limitations of epidemiologic reports: PUBH 203 spent a fair amount of time during lectures and small group discussions looking at both good and bad examples of reports, and focused on evaluating the type of study (case-control, cohort), the pros and cons of the types of studies, how the data was collected, the confidence intervals, P values, samples sizes and where the report was published.

R&G, Part II. Study Design and Conduct
Chapter 5: Types of Epidemiologic Studies
Chapter 6: Cohort Studies
Chapter 7: Case-Control Studies
Chapter 8: Precision and Validity in Epidemiologic Studies
Chapter 9: Accuracy Considerations in Study Design