

Guidance for Incoming COPHP Students

Epidemiology and biostatistics are the bread and butter of public health research; these disciplines shape our understanding of population health and are vital for innovation in our field. Even those looking for a practice-based career must understand how to interpret and analyze scientific evidence to develop programs and policies to improve the public's health, and how to conduct and interpret program evaluations.

In the Community-Oriented Public Health Practice Program, we value candidates with relevant real life and work experience, because they bring depth to classroom discussions and have a mature worldview. We recognize that even excellent candidates need more assistance brushing up on quantitative skills lost in the years since undergraduate or high school studies. We are committed to helping students who struggle with quantitative methods succeed in this program, but we need students to take the initiative to refresh their quantitative skills. We believe that with extra focus and determination, students who are weaker in math and statistics can still succeed in our program.

Who could use some extra preparation before taking the quantitative methods block?

- Students with low quantitative GRE scores
- Students who have not taken a class in a long time
- Students who are anxious about their math skills and about succeeding in a quantitative class

To prepare for the rigor of the program, we highly recommend students take the following steps.

Over the Summer (prior to entering the program):

- Take a community college-level statistics and/or algebra course
- Read scientific articles based on epidemiologic evidence and see if you can apply what you are learning about statistics to their methods and results. We do not expect incoming students to have this down completely – after all, that's what the class is for – but reducing anxiety

and getting a head start can help.

- Sign up to have the Center for Disease Control and Prevention's [Morbidity and Mortality Weekly Report](#) (MMWR) delivered to your email (it's free!) and read it regularly, paying attention to how data are used and how statistics are presented
- Figure out and practice effective strategies to reduce your anxiety about doing math
- Connect with your faculty advisor ASAP to chat about strengths and areas for growth

During the School Year:

- Be proactive in asking your quantitative block faculty for help.
- Attend out-of-class opportunities offered by faculty to refresh your math skills, learn how to use STATA and get your general questions answered.
- Do not turn down an opportunity to speak with faculty if you are struggling to understand something.
- Form study groups, and ask faculty members to join a study session or to clarify any confusion over email or during class.

Recommended Readings:

- The Cartoon Guide to Statistics, by Larry Gonick and Woollcott Smith
- Epidemiology, by Leon Gordis, early editions (1st–4th) are fine and less expensive
- Math GED workbooks, to refresh basic math skills. Key topics to focus on: multiplying and dividing fractions, exponents and square roots, tables with row and column percents, and solving for X in equations that look like:
 - $175/2240=X/14789$