Course at a Glance



Course Title: Epidemiology Methods I

Course Number: PHC 6010 Department: Epidemiology and Biostatistics Credits: 3 Credit hours

Instructor: Kevin E. Kip, Ph.D. Email: kkip@health.usf.edu

Course Description:

This course is designed to cover the important concepts in epidemiology and their application in epidemiological research. Emphasis is on measures and quantitative techniques, proper interpretation and explanation of quantitative measures and results.

Textbook and Other materials:

Required Text:

None

Recommended Text (optional):

Epidemiology: Beyond the Basics, 3rd Edition (Szklo and Nieto)

Other Required Materials:

Refer to syllabus. All reading materials will be posted as .pdf files.

Course Topics:

- 1. Introduction to Epidemiology as a Public Health Discipline
- 2. Review of Biostatistical Parameters Used in Epidemiology
- 3. Hypothesis Testing, P-values, and Confidence Intervals
- 4. Measurement of Health Outcomes and Health-Related Exposures in Epidemiology
- 5. Minimizing Bias in Epidemiologic Research
- 6. Minimizing Confounding in Epidemiologic Research
- 7. Contrasting Experimental Versus Observational Studies
- 8. Mediation and Moderation (Effect Modification) in Epidemiology
- 9. Meta-Analysis
- 10. Longitudinal Methods and Propensity Score Analyses
- 11. Survival Analysis and Critical Review of the Hemorrhagic Stroke Project
- 12. Epidemiological Methodology Used to Influence Evidence-Based Practice

Course Format:

The course will be delivered online using a weekly lecture format with lectures delivered and recorded through the Collaborate system. Student participation in the online discussion of relevant content and methodological issues is highly encouraged.

Practice exercises and 8 homework assignments will be used to augment the lecture material, coupled with four (4) examinations.

Types of Assessments:

Homework and Examinations

Required Dates to be online or on campus:

- 1. Date: 1/31/18 between Time: 1:00 AM ET and Time: 11:59 PM ET Online
- 2. Date: 2/28/18 between Time: 1:00 AM ET and Time: 11:59 PM ET Online
- 3. Date: 4/05/18 between Time: 1:00 AM ET and Time: 11:59 PM ET Online
- 4. Date: 5/02/18 between Time: 1:00 AM ET and Time: 11:59 PM ET Online

Student Expectations:

The primary expectations of students are to:

- 1. Be fully prepared for each weekly class by reviewing all recommended pre-class course content and reading assignments.
- 2 Complete all homework assignments on time, in the required format, and on an individual basis.
- 3. Complete all examinations on time, in the required format, and on an individual basis.
- 4. As available and offered, participate in discussion sessions and questions to enhance the overall learning environment.

Who to contact for more information about this course:

Instructor: Kevin E. Kip, Ph.D. Email: kkip@health.usf.edu

TA: Jill Desch

Email: jilldesch@health.usf.edu

Technical Requirements: (in addition to the <u>standard technical requirements</u> for all online courses)

- Use of Proctorio for online examinations.
- Use of <u>Blackboard Collaborate</u> and/or <u>Blackboard Collaborate Ultra</u>.

For problems accessing the course materials and other computer technical problems, click the **Tech Assistance** button in your course website and fill out a "Technical Problem Report Form". Tech Assistance button links to the Technical Assistance page of the Office of Educational Technology & Assessment website at: http://health.usf.edu/publichealth/eta/techsupport.html. Students can also receive assistance via telephone at 813-974-6666, Mon-Fri 8:30am-5pm, or via email at edu/ealth.usf.edu.

Please Note: The information on this document is subject to change. The course instructor has the right to change any information posted in this document. Students should check the official syllabus released during the first week of classes for any updates to this document. For more information on this course or academic programs, please contact the <u>COPH Department</u> directly.