



Department of Epidemiology and Population Health  
Faculty of Health Sciences

### **Epidemiology beyond the basic**

#### **EPDH 336 A (1 credit)**

Course Syllabus

Spring AY 2019/20

#### **COURSE INSTRUCTOR – UNDER THE SUPERVISION OF DR. MONIQUE CHAAYA:**

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#### **CONTACT DETAILS:**

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Office hours: by appointment

Course schedule: Monday 15:40 -17:10

#### **COURSE DESCRIPTION**

This is a tutorial course that complements materials and activities of EPHD 320 (Epidemiology beyond the Basic). It aims at reinforcing students skills in evaluating epidemiological studies of various designs. It consists of discussing in class, selected articles addressing epidemiologic studies using observational and experimental designs, and presentations of selected epidemiological design and analysis issues selected by the course instructor.

Prerequisites: EPHD 300 and EPHD 310

Co requisite: EPHD 320

#### **SPECIFIC LEARNING OBJECTIVES**

By the end of the course, students will be able to:

- LO1. Interpret published epidemiological findings
- LO2. Evaluate published epidemiological studies of difference study designs

#### **POLICIES AND OTHER GENERAL NOTES:**

- 'AUB strives to make learning experiences as accessible as possible. If you anticipate or experience academic barriers due to a disability (including mental health, chronic or temporary medical conditions), please inform me immediately so that we can privately discuss options. In order to help establish reasonable accommodations and facilitate a smooth accommodations process, you are encouraged to contact the Accessible Education Office: [accessibility@aub.edu.lb](mailto:accessibility@aub.edu.lb); [+961-1-350000](tel:+961-1-350000), [x3246](tel:+961-1-3246); West Hall, 314'.
- On proper referencing and plagiarism: "Education is demanding and time management is essential. Do not hesitate to use the resources around you but do not cut corners. Cheating and plagiarism will not be tolerated. Please review the Student Code of Conduct in your handbook and

familiarize yourself with definitions and penalties (p. 34-35). If you're in doubt about what constitutes plagiarism, ask your instructor because it is your responsibility to know. The American University of Beirut has a strict anti-cheating and anti-plagiarism policy. Penalties include failing marks on the assignment in question, suspension or expulsion from University and a permanent mention of the disciplinary action in the student's records."

## DETAILED SCHEDULE

Date	Session Content	Session Type
<b>Monday, February 3</b>	<ul style="list-style-type: none"> <li>Introductory session</li> </ul>	Face to Face
<b>Monday, February 10</b>	<ul style="list-style-type: none"> <li>Refresher: Applications on measures of morbidity/mortality and measures of association</li> </ul>	Online
<b>Monday, February 17</b>	<ul style="list-style-type: none"> <li>Article discussion on biases and causal association + examples/applications</li> </ul>	Face to Face
<b>Monday, February 24</b>	<ul style="list-style-type: none"> <li>Article discussion on confounding</li> </ul>	Face to Face
<b>Monday, March 2</b>	<ul style="list-style-type: none"> <li>Article discussion on interaction / effect modification</li> </ul>	Face to Face
<b>Monday, March 9</b>	<ul style="list-style-type: none"> <li>Case-control study</li> </ul>	Online <a href="#">Assignment</a> uploaded on Moodle
<b>Monday, March 16</b>	<ul style="list-style-type: none"> <li>Presentation on nested case control/case cohort studies</li> </ul>	Face to Face
<b>Monday, March 23</b>	<ul style="list-style-type: none"> <li>Design a cross-sectional study</li> </ul>	Online <a href="#">Assignment</a> uploaded on Moodle
<b>Monday, March 30</b>	<ul style="list-style-type: none"> <li>Articles discussion on P-value and CI</li> </ul>	Face to Face
<b>Monday, April 6</b>	<ul style="list-style-type: none"> <li>Quasi experimental studies: issues of design</li> </ul>	<a href="#">Assignment</a> presentation
<b>Tuesday, April 14</b>	<ul style="list-style-type: none"> <li>Recap of the materials</li> </ul>	Face to Face
<b>May 3-6</b>	Reading period	

- Chaaya, M., Sibai, A. M., Tabbal, N., Chemaitelly, H., El Roueiheb, Z., & Slim, Z. N. (2009). Work and mental health: the case of older men living in underprivileged communities in Lebanon. *Ageing and Society*, 30(1), 25-40. doi:10.1017/s0144686x09990171
- Grimes, D. A., & Schulz, K. F. (2002). Bias and causal associations in observational research. *The Lancet*, 359(9302), 248-252. doi:10.1016/s0140-6736(02)07451-2
- Ioannidis, J. P. (2005). Why most published research findings are false. *PLoS Med*, 2(8), e124. doi:10.1371/journal.pmed.0020124
- Kraemer, H. C. (2019). Is It Time to Ban the P Value? *JAMA Psychiatry*. doi:10.1001/jamapsychiatry.2019.1965
- Luo, X., Wang, Y., Wang, Z., Zhou, X.-h., Zhao, J., Suo, J., . . . Liu, M. (2014). Effect modification by gender and smoking status on the association between obesity and atopic sensitization in Chinese adults: a hospital-based case-control study. *BMC public health*, 14(1), 1105.
- McCormack, J., Vandermeer, B., & Allan, G. M. (2013). How confidence intervals become confusion intervals. *BMC Medical Research Methodology*, 13(1), 134.
- Mehio-Sibai, A., Feinleib, M., Sibai, T. A., & Armenian, H. K. (2005). A positive or a negative confounding variable? A simple teaching aid for clinicians and students. *Annals of epidemiology*, 15(6), 421-423.
- Parker, A. S., Cerhan, J. R., Lynch, C. F., Leibovich, B. C., & Cantor, K. P. (2004). History of urinary tract infection and risk of renal cell carcinoma. *Am J Epidemiol*, 159(1), 42-48. doi:10.1093/aje/kwh014
- Salazar-Martínez, E., Lazcano-Ponce, E. C., Lira-Lira, G. G., Escudero-De los Ríos, P., Salmerón-Castro, J., Larrea, F., & Hernández-Avila, M. (2000). Case-control study of diabetes, obesity, physical activity and risk of endometrial cancer among Mexican women. *Cancer Causes & Control*, 11(8), 707-711.
- Vart, P., Nigatu, Y. T., Jaglan, A., van Zon, S. K., & Shafique, K. (2015). Joint Effect of Hypertension and Elevated Serum Phosphorus on the Risk of Mortality in National Health and Nutrition Examination Survey-III. *J Am Heart Assoc*, 4(5). doi:10.1161/JAHA.114.001706