**American University of Beirut**  
Faculty of Health Sciences   
Department of Epidemiology and Population Health

**EPHD 213 - SURVEY METHODS**

2 credit course  
Spring AY 2023/2024

**Pre-requisite**

EPHD203 or equivalent course to be approved by course instructor.

**Course timing and venue**

Lecture Session – Room 101:

Wednesday 8:00am - 8:50am

Application/Lab Sessions – Room 332 or computer lab on specific weeks:

Thursday (B1) 8:00am – 10:00am

Friday (B2) 8:00am – 10:00am

**Course Instructors:**

**Dr. Ghada Saad**, PhD

Instructor of Public Health Practice

Van Dyck, Room 334a

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Office hours: Wed 9:00am-11:00am, or by appointment

**Ms. Fadia Shebbo**, MSc

PhD Candidate

Van Dyck, Room 218

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Office hours: To be scheduled via e-mail

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Office hours: To be scheduled via e-mail

**Course Objectives**

This course provides students with an introduction to the overall process of survey research and enables them to plan and execute a survey research study by applying basic principles of epidemiology, biostatistics and survey methodology to examining and understanding public health issues.

**Course description**

EPHD213 is a two-credit undergraduate course that provides students with a general overview of quantitative research methods, with an emphasis on survey research. In this course, students will select one of several research topics/questions with guidance and suggestions from their instructor, conduct a literature review, analyze secondary data, synthesize the main findings in tables/graphs, and summarize and present the results in an oral (student final presentation) and written format (student final paper). The course will also cover research ethics, and the main ethical considerations to address during a research project.

**Course learning objectives (LOs)**

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

**LO1.** Carry out literature reviews.

**LO2**. Link research questions to theories and published literature.

**LO3.** Operationalize variables.

**LO4.** Develop good questions.

**LO5.** Describe ethical considerations in survey research.

**LO6.** Perform elementary data analysis and data synthesis using STATA.

**LO7.** Synthesize data in tables and graphs.

**LO8.** Present research meaningfully in a written paper format

**LO9.** Prepare meaningful PowerPoint presentations.

**Course structure**

The course consists of a one-hour lecture (every Wednesday) and a weekly two-hour application/lab session (every Thursday or Friday). During the application/lab session, the students will be working, in a group of 3 or 4 students, on a particular topic of their choice (guided by the instructor) to apply what they learnt during the lectures about writing relevant research questions, aims and objectives as well as devising a literature search strategy and conducting a literature review of their topic. Subsequently, students will learn how to design a survey relevant to their topic to appropriately collect data for their research. Students will not be required to collect data using the survey. To train on analyzing collected data and writing up results, students will be given a publicly available dataset, and will be asked to choose a topic (a main exposure and outcome of interest). Next, students will work in the same groups to formulate their research question, aim and objective(s), carry out a literature review and perform basic descriptive and inferential data analysis using STATA statistical software. Students will write up a research paper that includes a literature review, methods, results, discussion, and conclusion that will also be presented by the group as an oral presentation.

The assignments, detailed below, will be communicated to students two weeks before the submission date and there will be a detailed grading rubric stating how grading will be done. There will be time to work on the assignments during the lab sessions under the guidance of the lab instructors. Nevertheless, independent group work will be expected at times. Students are expected to submit their group assignments on Moodle by the specified deadline. There will be no extension of the deadline. If the group is late to submit, then they will lose points on their overall assignment grade.

**Course Assessments**

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| --- | --- | --- |
| **Assessment Method** | **Date of submission** | **Grade percentage** |
| **Assignment 1: Group Assignment** | **February 18th, 2024** | **20%** |
| Group assignment on Introduction and Literature Review:  Students will work in groups (assigned by the lab instructor) on a health-related topic of their choice. You will develop the introduction and literature review, which includes a) a statement of the problem and rationale for study; b) a critical summary of the most relevant literature pertaining to the research question, highlighting the gaps in the literature; c) clearly stated research question, aim, objective, and hypotheses.  Each student will need to write a statement on their individual contribution to group work. Grading rubric will be posted on Moodle in due time. | | |
| **Assignment 2: Group Assignment** | **March 10th, 2024** | **20%** |
| Group assignment on Designing a Questionnaire:  You will continue working in the same group and on the same topic to develop a questionnaire relevant to your topic. You are also expected to prepare the relevant consent form(s) for your tool. Each student will need to write a statement on their individual contribution to group work. Grading rubric will be posted on Moodle in due time. | | |
| **Quiz 1: Individual Assessment** | **April 3rd, 2024** | **20%** |
| This quiz will test you individually on your knowledge about the following topics: development of questionnaires, obtaining consent, sampling, descriptive and inferential statistics. | | |
| **Final Report: Group Assessment** | **April 21st 2024** | **20%** |
| Group assignment on writing a complete research report:  You will write up, with your group, a complete research report with all the components based on the topic you chose using the GSHS dataset.  Each student will need to write a statement on their individual contribution to group work. Grading rubric will be posted on Moodle in due time. | | |
| **Final Oral Presentation: Group/Individual Assessment** | **April 24-26 2024** | **15%** |
| Group assignment on Presenting Research:  You will work with your group to prepare a meaningful PowerPoint presentation and communicate the research effectively in an oral presentation. The oral presentation of group research reports will take place over a week, where the groups will either present during the lecture time or their respective lab timings. Each student will be graded individually on the way they present their part of the presentation, in addition to being given an overall group presentation grade. Grading rubric will be posted on Moodle in due time. | | |
| **Participation & attendance: Individual Assessment** |  | **5%** |
| Students are expected to attend all lectures and lab sessions. Participation is important, especially given the group work nature of the course. Furthermore, to make sure students have comprehended the material, there may be pop quizzes administered at the beginning of labs. | | |

**Mapping of Course Assessments to Learning Objectives**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Learning Objectives** | | | | | | | | | |
|  | **LO1** | **LO2** | **LO3** | **LO4** | **LO5** | **LO6** | **LO7** | **LO8** | **LO9** | |
| **Assignment 1** | X | X |  |  |  |  |  |  |  |
| **Assignment 2** |  |  | X | X | X |  |  |  |  |
| **Quiz** |  |  | X | X | X | X |  |  |  |
| **Final research report** | X | X |  |  |  | X | X | X |  |
| **Final oral presentation** |  |  |  |  |  |  |  |  | X |

**Readings & Course Materials**

Course material (lectures and assignments) will be placed on Moodle. VLab access or installation of needed software on your own PC is required to use stata and endnote on your personal laptops. It is your responsibility to secure vlab access, install needed software, and to check the course website frequently during the week, particularly before the lecture/lab sessions.

**Absenteeism**

Students who miss more than one-fifth of the sessions of any course in the first ten weeks of the semester will be dropped from the course.

**Academic Integrity**

Education is demanding and you need to properly manage your time. Do not hesitate to see the resources around you but do not cut corners. Cheating and plagiarism will not be tolerated. Please review the Student Code of Conduct in the student handbook and familiarize yourself with definitions and penalties. Cheating might earn you a failing mark on the assignment, at the very least. You might fail the course in which you cheated, be required to repeat your work, suspended or expelled from university, and a permanent mention of the disciplinary action might be made in your student records. **If you are in doubt about what constitutes plagiarism, ask your instructor because it is *your* responsibility to know.** Remember that the American University of Beirut has a strict anti-cheating and anti-plagiarism policy. Do not become a lesson to others.

**Use of artificial intelligence/ChatGPT**

Many students and individuals are using ChatGPT or other artificial intelligence. Responsible use of

these media is acceptable, yet, similar to any other source used in academic writing, you must

acknowledge use of any AI source. A reference that you have generated through these channels but have not read yourself should not be included in your bibliography, as otherwise that would be plagiarism. We will be asking in all assignments that individuals and groups report if they use such media, and if so, how. In this course, the use of words, images, ideas or content that is created/generated by other people or digital tools such as AI as content created by you is considered academic misconduct. The use of content generated by AI is considered automated plagiarism. Please note that materials generated by digital tools such as AI may be inaccurate or problematic with unknown primary sources as these tools may provide inaccurate information and cite non-existing sources. Beware that the inappropriate use of these digital tools may impact your ability to think independently and creatively. Please look for alternative tools (word, grammarly, endnote, etc...) for spell checking, referencing and language checking.

**Students with Special Needs**

“If you have documented special needs and anticipate difficulties with the content or format of the course due to a physical or learning disability, please contact me and/or your academic advisor, as well as the Counseling Center in the Office of Student Affairs (Ext. 3196), as soon as possible to discuss options for accommodations. Those seeking accommodations must submit the Special Needs Support Request Form along with the required documentation.”

**Non-Discrimination – Title IX – AUB**

The University's non-discrimination policy is applicable to, and protects, all students, professors, and staff. AUB is committed to fostering a campus free of all types of discrimination, including sex/gender-based harassment, which is prohibited under Title IX. We urge you to come forward as soon as possible if you believe that you have been the victim of sexual misconduct or other forms of harassment or discrimination. The information will be kept as private as possible if you speak with a professor or staff member about a problem like harassment, sexual assault, or discrimination, but faculty and designated staff are required to bring it to the university's Title IX Coordinator's attention. You can discover information and contacts at [www.aub.edu.lb/titleix](http://www.aub.edu.lb/titleix), and faculty can direct you to completely confidential resources. To file a report, get in touch with the University's Title IX Coordinator Mitra Tauk at 01-350000 ext. 2514, or [titleix@aub.edu.lb](mailto:titleix@aub.edu.lb). An anonymous report may be submitted online via EthicsPoint at [www.aub.ethicspoint.com](http://www.aub.ethicspoint.com).

**DETAILED SCHEDULE PER WEEK**

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| --- | --- | --- | --- | --- |
| **Week** | **Lecture topic** | **Wed** | **Application session topic** | **Thurs/Fri** |
| **1** | Introduction to scientific research | Jan 24 | Choosing a research topic.  Group work - Develop the research question, aims and objectives.  (ASSIGNMENT 1 introduction) | Jan 25/26 |
| **2** | Writing the literature review  Stating objectives/ hypotheses + | Jan 31 | How to conduct a literature review?  Given by Ms. Nour El Ayoubi (SML)  **Computer lab** | Feb 1/2 |
| **3** | Questionnaire development I | Feb 7 | **NO SESSIONS** (holiday on Feb 9)  Student work independently on assignment 1 | Feb 8/9 |
| **4** | **NO LECTURE** | Feb 14 | In class group work on Assignment 1 | Feb 15/16 |
|  | **ASSIGNMENT 1 – Topic Introduction and Literature Review – Submission deadline Feb 18 2024** | | | |
| **5** | Questionnaire development II  How to administer a survey  Ethical issues | Feb 21 | Designing a questionnaire – overview and introduction of ASSIGNMENT 2  Group work on questionnaire design | Feb 22/23 |
| **6** | Sampling | Feb 28 | Refresher on descriptive statistics  **Computer lab** – work on STATA | Feb29/Mar1 |
| **7** | Refresher on Inferential Statistics and Confidence Intervals | Mar 6 | In class group work on Assignment 2 | Mar 7/8 |
|  | **ASSIGNMENT 2 – Topic Questionnaire and consent forms – Submission deadline Mar 10th 2024** | | | |
| **8** | Hypothesis Testing | Mar 13 | Intro to GHSH study and dataset.  Group work - choosing a topic and research question | Mar 14/15 |
| **9** | Hypothesis Testing | Mar 20 | Inferential data analysis using Stata  **Computer lab** | Mar 21/22 |
| **10** | Overview of Methods, Plan of analysis & ethical considerations | Mar 27 | **NO SESSIONS** (holiday on Mar 29) | Mar 28/29 |
| **11** | **QUIZ 1** | **Apr 3** | In class group work on data analysis related to topics for final report  **Computer lab** | Apr 4/5 |
| **12** | **NO LECTURE (Eid El Fitr holiday\*)** | Apr 10 | **NO SESSIONS** (**Eid El Fitr holiday\***) | Apr 11/12 |
| **13** | Data synthesis, discussion and conclusions | Apr 17 | In class group work on Final report and PowerPoint presentation | Apr 18/19 |
|  | **FINAL Assignments – Final research report – Submission deadline April 21st 2024**  **Power Point presentation - submission before prior to class presentation** | | | |
| **14** | **FINAL** - Student oral presentations – session 1) | Apr 24 | **FINAL** - Student oral presentations – sessions 2 and 3) | Apr 25/26 |