American University of Beirut Faculty of Health Sciences MEDICAL LABORATORY SCIENCES PROGRAM

SeminarMLSP 211 (1 cr.)
Spring 2022-2023

Course Instructor: Dr. Nada M. Melhem

Van Dyck, Room 317

Office Hours: by appointment via email

Extension: 4699

E-mail: melhemn@aub.edu.lb

Time: Wednesday 3:30 p.m. - 4:20 p.m.

Place: Nabil Boustany Auditorium

Course Description

This course is a one-credit course offered to Medical Laboratory Sciences (MLS) Students during their senior year. This course is designed to train students to search for, read and understand published scientific papers. Moreover, students will be trained to present in class and critically analyze original manuscripts. The presenting student(s) will be guided in class and in one-to-one meetings to learn how to interpret, defend and criticize the published work as well as respond to questions and inquiries.

Course Format

The course is based on a series of introductory lectures, class exercises followed by presentations held by students. The introductory lectures aim to instruct students on searching the literature on a specific scientific topic from the MLS discipline, as well as to train and guide them on how to read and present a scientific paper. During this course, the students will be exposed to a writing component to enhance their critical thinking skills. The course requires students to work in groups to carry a critical analysis on a selected topic of the medical laboratory sciences. The students will present in an oral (presentation) on their topic of choice. A writing exercise (selected by the course instructor) will be also required.

A list of suggested topics is provided below; however, students can come up with a topic of interest/original research paper. The topic would be agreed upon following a series of meetings between the students and the course instructor. During the course of the semester and in addition to continuous feedback during class sessions, the course instructor will meet with students' groups; the former will guide the groups on the best way of reviewing and preparing their presentations and to address their questions. This course allows students to perform peer-evaluation whereby the class will be evaluating the presenting team using a standardized rubric prepared by the instructor. The same rubric will be used by the course instructor.

Specific Learning Outcomes

By the end of this course, students should be able to:

- 1. Show competence in searching the most recent literature of Medical Laboratory Sciences disciplines using medical websites (e.g. PubMed)
- 2. Select, review and interpret recently published scientific papers
- 3. Understand and critically analyze an original research manuscript
- 4. Prepare and interpret in an oral and written format the current literature

Course Material and Readings

There is no book for the course. Students are expected to prepare for the session by reading the selected paper prior to class time; the presenting group is responsible of preparing the Power Point Presentation and presenting it.

The lecture handouts and the paper reviewed and presented in class by each group will be posted on Moodle ahead of class. In the event the lecture handouts are not posted, the course instructor will be responsible for bringing hard copies to class.

| Course Schedule | Topic | | |
|-----------------|---|--|--|
| January 24 | Introduction to the course objectives and learning outcomes | | |
| January 31 | How to read, present and interpret a scientific manuscript | | |
| February 7 | Introduction to literature review and online search engines (Dr. Ola El Zein, Saab Medical Library) | | |
| February 14 | National Holiday | | |
| February 21 | Literature review and online search engines (continued) (Dr. Ola El Zein, Saab Medical Library) | | |
| February 28 | Introduction to research ethics & plagiarism Topics of presenting groups: post-class Meetings | | |
| March 6 | Class Exercise I (reading and interpreting manuscripts) Topics of presenting groups: Meetings with groups | | |
| March 13 | Critical thinking writing exercise (in-class) | | |
| March 20 | Mock Presentations Topics of presenting groups Due: post-class meetings | | |
| March 27 | No class (preparation for presentations by groups) Meetings with groups | | |
| April 3 | In class presentations by students (session will be extended based on approval of students) | | |
| April 10 | Eid Al Fitr Holiday (Tentative) | | |
| April 17 | Submission of modified PPPs (based on feedback) | | |
| April 24 | Writing Assignment: DUE | | |

Suggested Topics for Class Presentations

Students will be guided by the course instructor to search and select an article on one of the suggested topics or any other selected one by the student following the instructor's approval. Scheduled meetings outside the class will be held for further guidance on topic selection, manuscript and for answering students' queries. Students are expected to present in class during a 10-minutes presentation followed by 5 minutes of questions and discussion. Students are also expected to submit an outline of their presentation prior to the time of the presentation. Students will work in groups on the final power point presentation presented in class. The suggested topics include any discipline pertinent to the medical laboratory sciences including the major ones: bacteriology, virology, parasitology, immunology, hematology, clinical chemistry, molecular genetics and vaccines. The selected topics should be current and tackling recent advances in the pertinent field.

| Course Evaluation | | | Meets Objectives | |
|-------------------|---|------|------------------|--|
| 1. | Choice of paper/topic/journal | 5% | 1 & 2 | |
| 2. | Writing assignment | 25% | 4 | |
| 3. | Presentation and group work | 50 % | 2, 3, 4 | |
| 4. | Participation in class/drop quizzes assignments | 15% | 2 & 3 | |
| 5. | Attendance | 5% | | |

Course Requirements:

- 1. **Attendance:** Attendance will be regularly taken. In case of absence, you will be responsible of the material missed and for any announcements made. **Students who miss more than one-fifth of class sessions will be dropped from the course** (check AUB catalogue; https://www.aub.edu.lb/Registrar/catalogue/Pages/undergraduate-general-university-academic-information.aspx).
- 2. **Exams: This course does not have exams.** You are urged submit assignments on the assigned time. Make up assessment will be given <u>only</u> in case of emergencies or major illness (authorized medical report is required).
- 3. Cheating and Plagiarism: Cheating and plagiarism will not be tolerated. Review the Student Code of Conduct in your handbook and familiarize yourself with definitions and penalties. If you are 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 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.
- 4. **Students with Disabilities: Students with Disabilities:** "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; +961-1-350000, x3246; West Hall, 314".

5. Non-Discrimination – Title IX – AUB: In line with its commitment to the principle of equal opportunity in education and employment, AUB policies protect you from discrimination on the basis of protected characteristics, including discriminatory harassment and sexual harassment. The University's non-discrimination policy applies to, and protects, all students, faculty, and staff. If you think you have experienced discrimination, discriminatory harassment, or sexual harassment, we encourage you to inform the Equity/Title IX Coordinator, Mitra Tauk at 01-350000 ext. 2514, titleix@aub.edu.lb, report to a Title IX deputy at your faculty or at any other faculty (www.aub.edu.lb/titleix), or report online (www.aub.ethicspoint.com). Reports may be submitted anonymously or not.