



EPIDEMIOLOGY AND GREAT EPIDEMICS BIOS 203

Course Description

This course will introduce the concepts of epidemiology and focus on the great epidemics of the world. The timelines of epidemics will be explored along with the causative factors influencing the progression of the disease and factors leading to decline of disease.

Credit: 2 credits

Repeatable: No

Course Structure

The course will be presented in different formats: Lectures with PowerPoints, self-led presentations and student assignments etc.

Competencies

This course emphasizes competencies to enhance skills essential for a future health care professional.

- Knowledge
 - **Demonstrate content knowledge and skills in foundational courses required by biomedical professionals**
 - **Demonstrate information literacy**
 - Demonstrate quantitative reasoning
 - **Demonstrate longitudinal learning through coursework**
- Critical Thinking
 - **Develop the skills of self-reflection and peer assessment to improve personal performance.**
 - **Demonstrate the ability to analyze literature and written material**
 - Demonstrate the ability to distinguish between well-reasoned and poorly reasoned arguments
- Communication Skills
 - **Demonstrate effective presentation skills to faculty and peers.**
 - **Demonstrate effective listening skills**
 - **Demonstrate effective written communication**

Objectives:

Upon completion of BIOS 203 course, the student should be able to describe:

- Understand the basic terminology of epidemiology
- Evaluate the historical importance of the great epidemics
- Demonstrate good listening skills and the ability to summarize material presented
- Demonstrate team-work in the development of a team presentation
- Reinforce computer skills in PowerPoint development
- Demonstrate good communication skills within classes through presentations and discussion of presentations

Schedule: Dates and times to be posted at the beginning of the term on the online calendar.

Course Topics / Outline

Activity	Lecture Topics
Week 1	Introduction of Epidemiology I
Week 2	Introduction of Epidemiology II
Week 3	Water-borne diseases
Week 4	Water-borne diseases
Week 5	Airborne diseases
Week 6	Airborne diseases
Week 7	Mid-Term Examination
Week 8	Airborne diseases
Week 9	Vector-borne diseases
Week 10	Vector-borne diseases
Week 11	Modern Epidemics
Week 12	Modern Epidemics
Week 13	Self-study
Week 14	Final Examination

Assignments:

Students required to do a Power-point presentation individually or as a group on an assigned topic. The Presentation time is 20 minutes and the students required to submit the power-point 24 hours before the presentation schedule. In addition, a written summary of two case presentations using the reflective writing practice model is to be submitted.

Textbooks and Reference Materials:

Sandra Hempel. The Atlas of Disease: Mapping deadly epidemics and contagion from the plague to the Zika virus. 1st edition. Publisher: White Lion Publishing.

Leon Gordis. Epidemiology. 5th edition. Publisher: Saunders.

Evaluation: Students are evaluated by faculty and by their peers immediately following their presentation three quizzes, a midterm exam, a final exam, assignments and their attendance.

Points:

Submission case summaries on time	5 per case
Class presentation – Course Director & faculty evaluations <ul style="list-style-type: none"> • Organization: 20 • Depth and accuracy of content: 20 • Research effort: 17 • Use of PowerPoint: 12 • Use of language: 7 • Eye contact: 5 • Personal appearance: 5 • Interaction with audience (Q&A): 10 • Length of presentation: 4 	100
Class presentation – student evaluations (mean score of class evaluations after dropping the high and low score)	40
Final exam	50
Total Points	200 approx.

Grade:

Percent of Points	Letter Grade
95-100%	A(h)
90-94%	A
85-89%	B+
80-84%	B
75-79%	C+
70-74%	C
<70%	F

Attendance:

Students must attend a case presentation in order to submit a summary for that presentation. Students must attend all case presentations. Please note that absences due to illness or misadventure will be considered on a case by case basis. All reasonable effort should be made to inform the course director or the Dean of Students.

Policies:Professional Demeanor

The student should be thoughtful and professional when interacting with faculty and other students. Inappropriate behavior includes the use of offensive language, gestures, or remarks with sexual overtones. Students should maintain a neat and clean appearance, and dress in attire that is generally accepted as professional.

Honesty

Students are expected to demonstrate honesty and integrity in all aspects of their education and in their interactions with faculty, administration, physicians, patients, and fellow students. They will not cheat, plagiarize, or assist others in the commission of these acts.

Faculty and Office Hours:

Dr. Amrie Morris-Patterson, Assistant Professor

Students can schedule an appointment by email to the course director.