Syllabus: Epidemiology of Infectious Diseases MCB 4276-001()
Spring 2019, 3 credits

Department of Biological Sciences, Charles E. Schmidt College of Science Florida Atlantic University

Time & location TBD

**Instructor:** Erik G. Noonburg, DW332, Phone 954-236-1303, Email enoonbur@fau.edu. **Office hours.** Tues. 1:00-3:00, Wed. 10:00-12:00, Fri. 10:00-12:00. Additional times are available by appointment.

**Textbook (required):** *Introduction to Epidemiology*, 7<sup>th</sup> ed., by Ray M. Merrill. (ISBN-13: 9781284094350)

**Course description:** The class will examine the basic principles of epidemiology in the context of infectious diseases. Topics will include the distribution and determinants of disease. Case studies from the current literature will supplement textbook material. The course will place a strong emphasis on quantitative aspects of the field, including experimental design and basic statistics.

**Course Objectives:** Students will learn the techniques required to understand and predict the dynamics of infectious diseases. Students will be introduced to the primary research literature via case studies, and students will gain hands-on experience with analysis of biological data in weekly assignments.

**Course approach.** The course will consist of lecture/discussion, with written and computer-based examples. In-class examples will be an important source of instruction, particularly for the weekly assignments.

Prerequisites: None.

**Course website:** Assignments and supplementary material will be posted on Canvas (canvas.fau.edu). *Homework assignments will be administered via Canvas*.

**Assessment procedures.** Weekly assignments (readings and questions) must be completed on Canvas by the end of every week. In addition to the weekly assignments, there will be two midterm exams and a final exam.

**Grading:** 30% homework, 20% first midterm, 20% second midterm, 30% final exam. There will be no extra credit assignments. Homework assignments will consist of problems to be completed online in Canvas, and they must be completed prior to the posted due date. If a student cannot attend an exam or complete a homework assignment on time due to circumstances beyond their control then the instructor may assign appropriate make-up work. Students will not be penalized for absences due to

participation in University-approved activities, including athletic or scholastics teams, musical and theatrical performances, and debate activities. These students will be allowed to make up missed work without any reduction in the student's final course grade. Reasonable accommodation will also be made for students participating in a religious observance. Also, note that grades of Incomplete ("I") are reserved for students who are passing a course but have not completed all the required work because of exceptional circumstances. A grade of "I" will only be given under certain conditions and in accordance with the academic policies and regulations put forward in FAU's University Catalog. The student must show exceptional circumstances why requirements cannot be met. A request for an incomplete grade has to be made in writing with supporting documentation, where appropriate.

FAU Attendance Policy Statement: Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Classroom etiquette policy: University policy on the use of electronic devices states: "In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular telephones and pagers, are to be disabled in class sessions."

**Disability policy**: In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Counseling and Psychological Services (CAPS) Center: Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau.edu/counseling/.

Honor Code policy: Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty, including cheating and plagiarism, is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001 at http://www.fau.edu/ctl/4.001\_Code\_of\_Academic\_Integrity.pdf

## Spring 2019 lecture schedule (subject to change by instructor, depending on needs of the class). Readings and homework will be assigned weekly on Canvas.

[Exam dates subject to change with FAU calendar.]

Week 1. Chap. 1, Foundations.

Week 2. Chap. 2, Historic developments.

Week 3. Chap. 3, Practical disease concepts.

Week 4. Case study.

Week 5. In-class exercises, midterm 1 (Fri., Feb. 8).

Week 6. Chap. 4, Design strategies and statistical methods.

Week 7. Chap. 5, Methods in descriptive epidemiology.

Week 8. Chap. 6, General health and population indicators.

Week 9. Case study.

Week 10. In-class exercises, midterm 2 (Fri., March 18).

Week 11. Chap. 7, Analytic epidemiology.

Week 12. Chap. 8, Experimental studies.

Week 13. Chap. 9, Causality.

Week 14. Case study.

Week 15. In-class exercises.

Final Exam: May 1, 1:15.