# PH 380 INTRODUCTION TO EPIDEMIOLOGY, Sp 2021

Credit hours: 3

Course format: Online

## **INSTRUCTOR INFORMATION**

**Instructor:** Jennifer Lowell, PhD

**Office:** Berndt Hall 467

**Office Hours**: Visit me on Zoom M, W: 1:00 – 2:00 or T, Th: 12:00 – 1:00 (or by appointment)

**Zoom Room:** <https://fortlewis.zoom.us/j/5871686897>

**Email:** jllowell@fortlewis.edu

**Phone:** 970-247-6185

## Course Materials

*We will use two online texts:*

[Principles of Epidemiology in Public Health Practice, Third Edition: An Introduction to Applied Epidemiology and Biostatistics](https://www.cdc.gov/csels/dsepd/ss1978/)

[WHO: Basic Epidemiology. Second edition. Bonita, R., Beaglehole, R., and Kjellström, T.](https://apps.who.int/iris/bitstream/handle/10665/43541/9241547073_eng.pdf?sequence=1&isAllowed=y)

Additional supplementary material will be provided during the course.

## Course overview

Human diseases are the result of complex interactions between, environmental, socio-economic, behavioral, and genetic factors, and have challenged mankind throughout time. Epidemiology is an interdisciplinary practice that provides the scientific evidence to support disease prevention and control strategies. This course will provide the foundation needed to evaluate how external factors may influence population health and to identify, describe, and solve basic epidemiologic problems.

## Land acknowledgement

Please join me in acknowledging that the land on which we gather here, at Fort Lewis College, is the ancestral lands and territories of Nuchu (Ute), Apache, the Pueblos, Hopi, Zuni, and the Diné Nation. We think it is important to provide this acknowledgment because the narratives of this land and region have long been told from one dominant perspective, without full acknowledgment of the tribes who lived on this land before it was Fort Lewis College. Thank you for your attention and respect in acknowledging this important history.

## Inclusiveness and respect

* Please contribute to and maintain an atmosphere of respect for all class members
* Respect all perspectives and experiences
* Keep online discussions and individual comments respectful and do not degrade, stereotype, or promote deficit thinking about any group or individual
* Ensure that each person has an opportunity to articulate their perspective and ideas without being demeaned.

Course learning outcomes

* Define epidemiology and describe at least 5 contributions of epidemiology to public health.
* Explain health determinants and how they are intertwined with population health outcomes.
* Discuss the One Health relationship between the environment, animals, and humans.
* Define and explain the 4 steps of public health surveillance.
* Descriptive epidemiology: Explain, calculate, and interpret disease frequency measures and distribution.
* Analytic Epidemiology: Use hypothesis testing to demonstrate epidemiologic cause and effect.
* Explain and identify epidemiologic study bias
* Define and apply disease prevention strategies to epidemiology

## Canvas

Course materials will be available at [Canvas](http://courses.fortlewis.edu). If you are not familiar with Canvas, please work through the [Student Canvas Orientation](https://courses.fortlewis.edu/courses/6805). For technical help contact the 24/7 support hotline at 855-971-1611 or submit a HELP ticket in Canvas. Also check out my [Learner Support](https://courses.fortlewis.edu/courses/21202/pages/learner-support-technical-accessibility-and-academic?module_item_id=586845) page!

## Credit hour statement

**This course is entirely online, it will be up to you to engage regularly and to keep up on material.** Online does not mean self-paced. Plan to spend around 9 hours per week concentrating on course-related work, including reading, reviewing, organizing notes, preparing for upcoming quizzes/exams, problem solving, and project work.

## Assessments and grading scale

Table 1. Course grading

|  |  |
| --- | --- |
| **Category** | **Percent** |
| Quizams 1-5 | 25 |
| Reading questions and other assignments | 30 |
| Project 1 | 15 |
| Project 2 | 15 |
| Final Exam | 15 |

Table 2. Course grading ranges

|  |
| --- |
| Grade: range |
| A: 93 – 100% |
| A-: 90 – 92% |
| B+: 88 – 89% |
| B: 83 – 87%  |
| B-: 80 – 82% |
| C+: 78 – 79% |
| C: 73 – 77%  |
| C-: 70 – 72% |
| D+: 68 – 69% |
| D: 63 – 67%  |
| D-: 60 – 62% |
| F: < 60% |

## Semester schedule

Table 3. Course module dates. Please refer to Canvas for weekly topics, assignments and due dates!

|  |  |
| --- | --- |
| **Dates** | **Module** |
| Jan 28 – Feb 7 | Module 1: What is epidemiology? Historical and current practices |
| Feb 8 – 14 | Module 2: One Health: links between environmental, animal, and human health |
| Feb 15 – Feb 28  | Module 3: Public health surveillance and data collection |
| Mar 1 – Mar 7 | Module 4: Describing and displaying public health data |
| Mar 8 – Mar 28 | Module 5: Descriptive epidemiology and disease distribution |
| Mar 29 – April 18 | Module 6: Analytic epidemiology and disease causation |
| April 19 – April 30 | Module 7: Disease prevention and diagnostic tests |

Table 4. Quizam and Project Due Dates. Please refer to Canvas for weekly module assignments and due dates.

|  |  |
| --- | --- |
| **Important due dates** | **Activity** |
| Feb 21 | Quizam 1 |
| March 7 | Quizam 2 |
| March 21  | Quizam 3 |
| March 28 | Project 1 |
| April 4 | Quizam 4 |
| April 18 | Quizam 5 |
| April 30 | Project 2 |
| May 3 – 6  | Final Exam |

# Course policies

## Course format: online

This course is entirely online and will consist of reading, listening to podcasts, watching videos, answering questions in Canvas, and participating in discussions, projects, and exams. Assignments will always be due on Wednesdays and Sundays by 10:00 pm.

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## Make-up work

Make-ups will only be given at my discretion and only with compelling evidence of an illness or other personal event preventing you from taking quizams or completing work on the scheduled date. The final exam cannot be made-up after the assigned date.

## Late assignments:

Late materials will be graded down by ½ grade per day they are late. Late materials cannot be turned in more than a week after they are due.

## Online Learning Technology Requirements:

If you are attending this course remotely, in order to be successful, you will need access to a computer. We recommend that you rent a laptop through Technology Bundle program detailed above. You must have a reliable computer and Internet Service Provider that has the following capabilities:

* Consistent access to WiFi (high-speed access is recommended)
* Speakers, a microphone, or a headset to connect to Zoom and participate remotely
* Access to a printer to print out readings, etc., if applicable
* Canvas mobile app, if applicable
* Microsoft Office software, if applicable. Student can download the suite of Microsoft Apps from Fort Lewis’ Office 365 portal. Sign in to <https://fortlewis.edu/office> and look for the Install Office button on the upper right area of the window.

You will also need the following set of computer skills and digital information literacy skills:

* Using Canvas
* Using email with attachments
* Creating and submitting files in commonly used word processing formats such as Word

## Additional course and campus wide policies

Click [HERE](https://courses.fortlewis.edu/courses/21202/pages/course-and-campus-policies?module_item_id=586844) for additional important information regarding Introduction to Epidemiology and the FLC campus!

Click [HERE](https://courses.fortlewis.edu/courses/21202/pages/covid-19-precautions?module_item_id=594078) for COVID-19 precaution guidance!