

**UNIVERSITY OF WYOMING**

**PHCY 5160**

**Epidemiology, 3 CR hrs.**

Independent Study

**Fall 2023**

**October 23, 2023 to December 15, 2023**

**Instructor contact information:**

Nervana Elkhadragey, PharmD, PhD (Course Coordinator)  
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**Office hours:**

Nervana Elkhadragey, PharmD, PhD  
Office Hours: by appointment

**Course prerequisites, co-requisites, enrollment restrictions:** None.

**Course Description:** This course will introduce students to basic epidemiologic concepts including determinants of health and patterns of disease in populations, and population health descriptive techniques. Students will gain an understanding of the role of Epidemiology in developing prevention strategies and policy.

Since this is an on-line course we will not meet. To schedule time with me, please send me an e-mail letting me know when you would like to meet.

***COURSE CONTENT AND ACCESS:*** This course will be taught using Wyocourse Modules. I strongly recommend you follow the Modules in order as that is how the course was designed to flow. Overall, there are 4 Modules, which contain the course content, including printable slides and the video lectures. Assignments are also embedded in the Modules. **Everything you will need for this class is included in the Modules.**

- Log-in to Wyocourse, click the Modules button in the Wyocourse menu bar on the left side of the page and choose the Module of your choice from the table of contents.

**Student Learning Outcomes:**

1. Use the discourse of a discipline or interdisciplinary field to effectively communicate that field's subject matter to academic or professional audiences through written, oral and digital communication [2.4.1]
2. Find, analyze, evaluate and document information appropriately as applicable to the discipline, interdisciplinary field or professional setting as demonstrated by completing a substantial communication project that requires appropriate research skills [2.4.2]
3. Observe the accepted conventions of spelling, grammar, organizational structure, punctuation, delivery and documentation expected in disciplinary, interdisciplinary or professional context [2.4.5]
4. Evaluate the level of evidence (correlation) to support an idea or interpretation [3.2.1]
5. Conduct effective literature searches [4.1.2]
6. Analyze and evaluate a published study for appropriateness of study design including statistical analysis [4.2.3SP]
7. Develop appropriate independent conclusions when analyzing published literature [4.2.7SP]

**COURSE OBJECTIVES:** The students will be able to perform the following tasks at the completion of this course:

1. Define and discuss the basic concepts of Epidemiology.
2. Explain when it is appropriate to use various epidemiologic techniques.
3. Interpret patterns of disease or risk observed in patterns of person, place or time characteristics.
4. Identify appropriate health indicators.
5. List the limitations of various types of study designs.
6. Identify key components of research projects that attest to their validity.
7. Demonstrate the ability to present information in a professional manner.
8. Demonstrate the ability to effectively use the Internet to access needed information.

**Required Text Book:**

Brodeur Paul. *Outrageous misconduct: The asbestos industry on trial*. New York, NY: Pantheon books; 1985

**Recommended Text Book:**

Friis, Robert H. and Sellers, Thomas A. *Epidemiology for Public Health Practice*, 5th Edition, (Jones and Bartlett Publishers, Boston; ISBN 978-1-4496-5158-9

**Required examinations, assignments, activities, and projects.**

Assignment	Allowed Exam Duration	%	Due date
Exam 1 (module 1)	90 minutes	28	Nov 6
Exam 2 (modules 2, 3, 4)	150 minutes	42	Nov 20
Research paper	N/A	25	Dec 4
Exam 3	15 minutes	5	Dec 15
		<b>100</b>	

**Ungraded practice quizzes are available on Canvas to help you prepare for your exams.**

**RESEARCH PAPER:** This paper will allow students to investigate a situation of historical epidemiologic significance, i.e. asbestos, and answer to the best of their abilities, the stated question(s).

- What did the asbestos industry know regarding the adverse health effects from asbestos and when did they know it?
- What is the history of litigation, either toxic tort or product liability, in the asbestos industry? (major cases only)
- What are the current efforts/activities in Congress regarding asbestos and asbestos health effects?
- Should the asbestos industry be immune from litigation or have the amount of litigated damages limited or capped?

This paper will be graded on the quality of the literature review, incorporation of epidemiologic data, clarity of the problem statement, critical thought, correctness of interpretation of literature reviewed, correctness of writing style, and effectiveness of presentation.

Remember this is an epidemiology class so I expect to see all of the epidemiologic data, measures of association, confidence intervals, discussion regarding the study designs and biases, confounding, etc.

I would strongly advise against using review articles. Go back to the original paper, that's where you will find all of the important information that you need. If you must use a review article, cite the studies used appropriately.

**I have provided a guide on Canvas**, which includes important points and questions that should be covered in your research paper.

### Research paper Rubric

#	Criteria	0	M	E
1	History of asbestos use	0	2	2.5
2	Diseases caused by asbestos	0	2	2.5
3	Literature of the harmful effects of asbestos: 1900 – 1920	0	2	2.5
4	Literature of the harmful effects of asbestos: 1930s	0	2	2.5
5	Literature of the harmful effects of asbestos: Second half of the century	0	2	2.5
6	Synergism with smoking	0	2	2.5
7	History and implications of the asbestos litigation	0	2	2.5
8	Current position of the litigation	0	2	2.5
9	Industry's knowledge of the harmful effects	0	2	2.5
10	Citations: proper citation, use of primary literature, important papers	0	2	2.5
<b>Total</b>		<b>0</b>	<b>20</b>	<b>25</b>

0 = Does not meet expectations

M = Meets expectations

E = Exceeds expectations

### **Paper Submission:**

1. Research paper must be submitted electronically via the Research Paper tab in Assignments on Wyocourse
2. Papers must be:
  - double-spaced, with page numbers
  - at least 12-point type
  - Calibri font
  - MAXIMUM 20 pages (excluding title page, appendices, and references)
  - have at least 50 references to scientific journals in the literature review
  - Wikipedia may NOT be used as a reference
3. Use some type numbering system to cite your references. Use end notes NOT foot notes.
4. Late submissions **will not** be accepted. Papers not following the above guidelines – specifically longer than 20 pages, not double spaced, not using a 12-point font will be **penalized at least 10%**.

**(If any) Required Participation Outside of Class Meetings:** N/A

**Grading Scale and Grading Policies:** late submissions will not receive points.

**Attendance and Absence policies.** This is an online course. You will be moving at your own speed, moving as fast or as slow as you choose. Begin by reviewing the course syllabus, schedule, content, and textbook. Use this information to build a plan of study that works for your schedule. Assignments are spaced throughout the Modules. I encourage you to submit assignments once you have completed them.

**Make-Up Work:** Arrangements to make up missed work due to excused absences are to be initiated by the student. A student will be allowed to make up any missed exams only if the instructor is notified prior to the exam and the student has an approved excuse. Make-up exams will be taken at the convenience of the instructor. No students will be allowed to take an exam prior to the scheduled date and time.

**Classroom Behavior Policy:** At all times, treat your presence in the virtual classroom and your enrollment in this course as you would at a job. Act professionally, be present on time, pay attention, complete your work in a timely and professional manner, and treat all deadlines seriously. You will be respectful towards your classmates and instructor. Spirited debate and disagreement are to be expected in any classroom and all views will be heard fully, but at all times we will behave civilly and with respect towards one another. Personal attacks, offensive language, name-calling, and dismissive gestures are not warranted in a learning atmosphere. As the instructor, I have the right to dismiss you from the classroom, study sessions, electronic forums, and other areas where disruptive behavior occurs.

**Classroom Statement on Diversity:** The University of Wyoming values an educational environment that is diverse, equitable, and inclusive. The diversity that students and faculty bring to class, including age, country of origin, culture, disability, economic class, ethnicity, gender identity, immigration status, linguistic, political affiliation, race, religion, sexual orientation, veteran status, worldview, and other social and cultural diversity is valued, respected, and considered a resource for learning.

**Disability Support:** The University of Wyoming is committed to providing equitable access to learning opportunities for all students. If you have a disability, including but not limited to physical, learning, sensory or psychological disabilities, and would like to request accommodations in this course due to your disability, please register with and provide documentation of your disability as soon as possible to Disability Support Services (DSS), Room 128 Knight Hall. You may also contact DSS at (307) 766-3073 or [udss@uwyo.edu](mailto:udss@uwyo.edu). It is in the student's best interest to request accommodations within the first week of classes, understanding that accommodations are not retroactive. Visit the DSS website for more information at: [www.uwyo.edu/udss](http://www.uwyo.edu/udss)

**Academic Dishonesty Policies:** Academic dishonesty will not be tolerated in this class. Cases of academic dishonesty will be treated in accordance with UW Regulation 2-114. The penalties for academic dishonesty can include, at the discretion of the instructors, an "F" on an exam, an "F" on the class component exercise, and/or an "F" in the entire course. Academic dishonesty means anything that represents someone else's ideas as your own without attribution. It is intellectual theft – stealing - and includes (but is not limited to) unapproved assistance on examinations, plagiarism (use of any amount of another person's writings, blog posts, publications, and other materials without attributing that material to that person with citations), or fabrication of referenced information. Facilitation of another person's academic dishonesty is also considered academic dishonesty and will be treated identically.

**Duty to Report:** UW faculty are committed to supporting students and upholding the University's non-discrimination policy. Under Title IX, discrimination based upon sex and gender is prohibited. If you experience an incident of sex- or gender-based discrimination, we encourage you to report it. While you may talk to a faculty member, understand that as a "Responsible Employee" of the University, the faculty member MUST report information you share about the incident to the university's Title IX Coordinator (you may choose whether you or anyone involved is identified by name). If you would like to speak with someone who may be able to afford you privacy or confidentiality, there are people who can meet with you. Faculty can help direct you or you may find info about UW policy and resources at <http://www.uwyo.edu/reportit>

You do not have to go through the experience alone. Assistance and resources are available, and you are not required to make a formal complaint or participate in an investigation to access them.

**Substantive changes to syllabus:** All deadlines, requirements, and course structure is subject to change if deemed necessary by the instructor. Students will be notified verbally in class, on our WyoCourses page announcement, and via email of these changes. It is the student's responsibility to check the WyoCourses course page and their email for these announcements.

**Schedule of topics:**

<b>Module</b>	<b>Lecture</b>	<b>Title</b>	<b>Duration of Video</b>	<b>Questions in final exam</b>
Module 1 Exam 1	Lecture 1	Epidemiology: The science of public health	13:33	2
	Lecture 2	Case studies	6:40	1
	Lecture 3	Definitions of epidemiologic terms	8:02	2
	Lecture 4	Prevention	8:38	1
	Lecture 5	Epidemiology incidence vs. prevalence	6:37	1
	Lecture 6	How diseases are transmitted	18:00	5
	Lecture 7	Infectious vs. communicable diseases	5:07	1
	Lecture 8	Epidemiologic models	4:38	2
	Lecture 9	Outbreak investigation	43:52	7
	Lecture 10	Measures of disease severity	13:36	4
	Lecture 11	Uses of Epidemiology	9:13	2
Module 2 Exam 2	Lecture 1	Historical development of epidemiology	8:53	2
	Lecture 2	Ethical issues in public health	13:11	3
	Lecture 3	Tuskegee Study	12:25	1
	Lecture 4	Trends in disorders	23:49	6
	Lecture 5	Environmental epidemiology	29:51	6
Module 3 Exam 2	Lecture 1	Chronic diseases & observational study designs	5:44	1
	Lecture 2	Cross-sectional	5:55	1
	Lecture 3	Validity & reliability	8:37	2
	Lecture 4	Cohort Study design	26:29	6
	Lecture 5	Case control design	32:58	6
	Lecture 6	Experimental design	13:41	2
Module 4 Exam 2	Lecture 1	Confounding factors	19:13	2
	Lecture 2	Bias	14:43	2
	Lecture 3	Causation	17:53	2
Exam 3	Research	Asbestos Research Paper	Refer to your paper	5
<b>Total points [75 questions, 1 point each]</b>				<b>75</b>

Letter grades will be assigned to completed work according to the following schedule:

<u>Percent of Points Possible</u>	<u>Grade</u>
90 - 100 .....	A
80 - 89 .....	B
70 - 79 .....	C
60 - 69 .....	D
00 - 59 .....	F

**During the ongoing COVID-19 pandemic.**

- **COVID-19 Policies** – during this pandemic, you must abide by all UW policies and public health rules put forward by the City of Laramie (or by Natrona County if at UW-Casper), the University of Wyoming and the State of Wyoming to promote the health and well-being of fellow students and your own personal self-care.
- As with other disruptive behaviors, we have the right to dismiss you from the classroom (Zoom and physical), or other class activities if you fail to abide by these COVID-19 policies. These behaviors will be referred to the Dean of Students Office using the [UWYO Cares Reporting Form](#) for Student Code of Conduct processes.

**Syllabus Changes:** I will alert you to any possible course format changes in response to UW decisions about community safety during the semester.

**HyFlex, Zoom, and WyoCourses expectations:**

As with all UW coursework, this course will be educational and useful to you. I will respond to questions, concerns, and feedback in a timely manner.

**Your responsibilities:**

- Give and receive feedback from me and your classmates respectfully and constructively in all interactions. This includes in Zoom chats, on WyoCourses boards, and within physical classroom spaces.
- Actively engage in civil discourse in a respectful manner. Use professional language in all course related forums.
- Communicate professionally. Whenever you send class-related email or messages, please include a clear, specific subject line and use the body of the email or message to explain the purpose for the email and any attached materials. Conduct yourself professionally.
- Meet assignment deadlines. We expect that you're interacting with course material multiple times during the week.
- Ask for help when you need it. For academic assistance for this course please contact me for available resources. Please visit our Dean of Students page for assistance.
- Please let us know if you notice another student who needs help in our (anonymous) WyoCares referral option.

**Information Technology (IT):** If you have any IT related challenges, please contact the UWIT Service Center.

**Student Attendance Policy**

UW will adhere to UW Regulation 2-108 Student attendance Policy. However, during the COVID-19 pandemic, instructors are encouraged to add additional information on the attendance policy specific for their course and modality of delivery.

**Coronavirus Pandemic Addendum to Attendance Policy:** During the fall of 2020 and for the duration of the coronavirus pandemic, the attendance policy applies as noted below:

- **Self-Quarantine and Isolation:** Any student notified that they have tested positive for covid-19 or that they have been exposed to someone who has tested positive for covid-19 may need to isolate for up to two weeks at a time.



- Students will not be penalized for having to self-quarantine for exposure to a known positive. Students who test positive will be told to isolate and should continue to complete course work online for the duration of their isolation as they are able.

- **Illness:** Under no circumstances are students to attend in-person classes if they are experiencing any symptoms of covid-19. Illnesses are covered under the Authorized Absence program managed within the Dean of Students Office.

**Note: All campus community members are requested to use the COVID Pass as tool to track their personal health symptoms.** If a student enters their daily temperature and symptoms and receives a “fail”, they should notify their faculty they will need to participate virtually for that day.

### **Hyflex Absences**

An official student **absence** for the hyflex version of this course is when a student meets the following criteria:

- The student misses a scheduled in-class session.
- The student or a dedicated representative of the student fails to communicate the reason for their absence within the week of the absence.
- The student does not engage with the week’s course material and/or does not turn in the week’s assignment on time.

### **Online Absences**

In the event that the course moves online at any point in the semester, an official student **absence** for the online version of this course is when a student meets the following criteria:

- The student does not engage with the week’s course material and/or does not turn in the week’s assignment on time.
- The student or a dedicated representative of the student fails to communicate the reason for not engaging with the course material and/or not turning in the week’s assignment on time within the week of the absence.
- The dedicated student representative is the person tasked by the student for reaching out on their behalf when they are not able - e.g. parents, other family member, significant other, etc. A faculty member can receive information from the student’s dedicated representative, but would need a FERPA release in place to discuss anything further. The Dean of Students will assist in these situations.

### **Student Resources:**

DISABILITY SUPPORT SERVICES: [udss@uwyo.edu](mailto:udss@uwyo.edu), 766-3073, 128 Knight Hall, [www.uwyo.edu/udss](http://www.uwyo.edu/udss)

COUNSELING CENTER: [uccstaff@uwyo.edu](mailto:uccstaff@uwyo.edu), 766-2187, 766-8989 (After hours), 341 Knight Hall, [www.uwyo.edu/ucc](http://www.uwyo.edu/ucc)

ACADEMIC AFFAIRS: 766-4286, 312 Old Main, [www.uwyo.edu/acadaffairs](http://www.uwyo.edu/acadaffairs)

DEAN OF STUDENTS OFFICE: [dos@uwyo.edu](mailto:dos@uwyo.edu), 766-3296, 128 Knight Hall, [www.uwyo.edu/dos](http://www.uwyo.edu/dos)

UW POLICE DEPARTMENT: [uwpd@uwyo.edu](mailto:uwpd@uwyo.edu), 766-5179, 1426 E Flint St, [www.uwyo.edu/uwpd](http://www.uwyo.edu/uwpd)

STUDENT CODE OF CONDUCT WEBSITE: [www.uwyo.edu/dos/conduct](http://www.uwyo.edu/dos/conduct)

### **New Studying Resource: CircleIn**

UW has made **CircleIn**, a virtual studying app/website, available to you and your classmates. You can easily hop on a video call with classmates, create study groups, and share helpful content. Earn points

and rewards, just for helping and collaborating with your classmates.

**To get started** on your computer, phone, or other device, [Download the App](#) or visit the [App's Desktop Version](#). Search University of Wyoming, enter your school log-in credentials, and select "Authorize" to get started.

Want to learn more? Visit the [Student Informational Website](#).