



EAST TEXAS A&M UNIVERSITY
HHPH 522: OUTBREAK INVESTIGATION AND RESPONSE
COURSE SYLLABUS: SUMMER I 2026

June 1, 2026 - July 2, 2026

INSTRUCTOR INFORMATION

Instructor: Dr. Rahmatu Kassimu, Adjunct Professor

Office Location: NHS 146

Office Hours: By Appointment

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Preferred Form of Communication: Email; Scheduled appointments

Communication Response Time: 48 business hours

COURSE INFORMATION

Item	Information
Course Value	Three (3) Credit Hours
Course Location/Time	Online through myLeo Online (D2L). This draft assumes an asynchronous Summer I delivery unless the department assigns a meeting time.
Course Dates	June 1, 2026 - July 2, 2026
Prerequisites	HHPH 587 and HHPH 517, or department approval.
Required Textbook	No required textbook. Students will use open-access readings, public health reports, outbreak case materials, and instructor-provided resources posted in D2L.
Required Technology	D2L, Microsoft Word or Google Docs, PowerPoint or Google Slides, Excel or Google Sheets, internet access, and ability to view streaming media. No R, Python, or SPSS is required for this course.

This course intentionally uses no required textbook. Readings and media will be drawn from open-access public health sources, including the CDC Field Epidemiology Manual, CDC Morbidity and Mortality Weekly Report (MMWR), CDC National Notifiable Diseases Surveillance System case definitions, CDC National Outbreak Reporting System resources, FEMA Independent Study materials, and selected public health case studies or media clips posted in D2L.

All written assignments should follow APA 7 style where formal citation is required, unless the assignment instructions specify a field memo, briefing, script, or public-facing communication format.

Course Description

This course covers infectious disease outbreaks, epidemiology, outbreaks, and public health. Students will learn about modern outbreaks, historic outbreaks of significance, and will explore the tools that outbreak investigators

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use to stop the spread of outbreaks in populations and to prevent future outbreaks. Case studies and popular media are used to apply knowledge in real-life scenarios.

The course is application-focused. Students will practice the major steps of outbreak investigation and response, including recognizing a potential outbreak, creating a case definition, building a line list, interpreting an epidemic curve, developing hypotheses about source and spread, designing culturally responsive interview and contact tracing tools, communicating risk, recommending control measures, and reflecting on response coordination and after-action learning.

Student Learning Outcomes

Upon successful completion of this course, students should be able to:

1. Explain the major steps of an infectious disease outbreak investigation and the role of public health agencies in outbreak response.
2. Differentiate outbreak types, transmission pathways, chains of infection, and population-level risk factors using modern and historic outbreak examples.
3. Apply surveillance concepts and case definitions to classify, count, and monitor suspected, probable, and confirmed outbreak cases.
4. Create and interpret basic outbreak investigation tools, including a line list, epidemic curve, exposure timeline, and preliminary source hypothesis using spreadsheet-based tools such as Excel or Google Sheets.
5. Develop culturally responsive and stigma-aware case interview, contact tracing, and exposure assessment materials.
6. Evaluate outbreak control measures, including isolation, quarantine, vaccination, prophylaxis, environmental controls, communication, and policy or systems interventions.
7. Communicate outbreak findings and recommendations clearly to both public audiences and professional/public health audiences.
8. Describe the role of emergency preparedness, the Incident Command System (ICS), the National Incident Management System (NIMS), and interagency coordination during outbreak response.
9. Analyze ethical, legal, equity, and communication challenges that arise during outbreak investigations and emergency public health response.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students should have basic computer and internet skills to be successful in this course, including the ability to:

- Access and navigate D2L, including announcements, modules, discussions, quizzes, and assignment submissions.
- Use Microsoft Word or Google Docs to write and format short reports, memos, and reflections.
- Use PowerPoint, Google Slides, or Canva to create a simple public-facing communication product.
- Use Excel or Google Sheets for basic spreadsheet tasks such as sorting a line list, counting cases, and creating a simple epidemic curve. Programming is not required.
- Download, name, save, upload, and back up files in common formats such as .docx, .pdf, .xlsx, and .pptx.
- Access open-access readings, CDC/WHO/FEMA resources, and assigned videos or media clips.

Instructional Methods

This course is organized by weekly modules in D2L. Because the course is offered in a compressed summer format, each module includes a focused set of readings, short lecture materials, applied case work, and a deliverable that builds practical outbreak response skills.

- Short recorded lectures and/or narrated slides for core concepts.
- Open-access readings and outbreak reports from CDC, MMWR, NNDSS, NORIS, FEMA, and other credible public health sources.
- Historic and modern outbreak case studies.
- Popular media clips used as discussion starters for public perception, risk communication, stigma, and response ethics.

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- Weekly readiness checks to support accountability and comprehension.
- Applied outbreak labs that require students to practice field-oriented products rather than memorize definitions only.
- A final tabletop-style outbreak response package that integrates the course skills.

Weekly Rhythm for the Short Summer Course

Day	Expectation
Monday	Module opens. Review Start Here page, lecture/narrated slides, readings, and assignment instructions.
Wednesday	Application workspace day. Students should begin the lab, case study, or response product early enough to ask questions.
Friday	Readiness check or discussion initial post due unless otherwise stated.
Sunday	Weekly application labs and discussion replies due by 11:59 PM CST, except during the final week.
Final Week	All final materials are due Thursday, July 2, 2026 by 11:59 PM CST.

Student Responsibilities or Tips for Success in the Course

- Treat this as a fast-paced graduate course. Five weeks moves quickly, so waiting until the weekend will make the work feel heavier than it needs to be.
- Read assigned outbreak reports carefully. In this course, the details matter because your job is to decide what public health action should follow from the evidence.
- Use the application tasks as practice for the final response package. Each lab builds a piece of the outbreak investigator toolkit.
- Ask questions early when an assignment is unclear. Field epidemiology requires decision-making under uncertainty, but the course expectations should be clear before you submit work.
- Communicate professionally and respectfully. Outbreak response often involves fear, stigma, grief, uncertainty, and public distrust. Course discussions should reflect the same care expected in public health practice.

GRADING

Final grades in this course will be based on the following scale:

Letter Grade	Percentage	Point Range
A	90%-100%	900-1000 points
B	80%-89%	800-899 points
C	70%-79%	700-799 points
D	60%-69%	600-699 points
F	59% or below	0-599 points

Total points possible: 1000

Weights of the Assessments in the Calculation of the Final Letter Grade

Assignment Type	Quantity	Points Each	Total Points
Course Orientation and Syllabus Quiz	1	50	50
Weekly Readiness Checks	5	30	150
Applied Outbreak Investigation Labs	4	100	400
Case Study Discussion Boards	2	75	150
Final Outbreak Response Tabletop Package	1	200	200
Professionalism and Peer Debrief Reflection	1	50	50
Total			1000

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Assessment Descriptions

Course Orientation and Syllabus Quiz (50 points)

Students will complete an orientation activity and syllabus quiz during Week 1. This ensures students understand the course structure, deadlines, communication expectations, technology requirements, and assignment categories.

Weekly Readiness Checks (5 x 30 = 150 points)

Readiness checks are short, low-stakes assessments based on weekly readings, lecture materials, and key outbreak investigation vocabulary. Items may include multiple choice, matching, short answer, or brief scenario responses. Readiness checks are designed to prepare students for application tasks and are completed in D2L.

Applied Outbreak Investigation Labs (4 x 100 = 400 points)

Applied labs are the heart of this course. Each lab asks students to produce a practical public health product connected to an outbreak scenario. These assignments are not programming assignments. Students may use Excel or Google Sheets for basic sorting, counting, and graphing when needed.

Lab	Purpose
Lab 1: Outbreak Profile and Case Definition	Students summarize a suspected outbreak, identify the population at risk, draft a working case definition, and classify example cases as suspected, probable, confirmed, or not a case.
Lab 2: Line List, Epi Curve, and Preliminary Hypothesis	Students organize a small line list, identify patterns by person/place/time, build a simple epidemic curve, and propose a preliminary source or transmission hypothesis.
Lab 3: Case Interview and Contact Tracing Toolkit	Students create an interview guide, exposure history questions, contact notification script, and stigma-aware communication notes for an assigned outbreak scenario.
Lab 4: Control Measures and Public Communication	Students recommend control measures and create an audience-specific message such as a public advisory, stakeholder brief, FAQ, or social media carousel outline.

Case Study Discussion Boards (2 x 75 = 150 points)

Discussion boards ask students to evaluate outbreak case studies and popular media examples. Students will connect course concepts to real-world outbreak response issues such as public trust, misinformation, stigma, ethical tensions, resource constraints, and communication across audiences. Each discussion will require an initial post and peer replies.

Final Outbreak Response Tabletop Package (200 points)

The final assignment is a tabletop-style response package. Students will receive an outbreak scenario and produce a concise response portfolio that demonstrates the ability to move from detection to action. The final package may include:

- Situation brief: What is known, unknown, and urgent?
- Working case definition and surveillance plan.
- Initial line list or data summary template.
- Epi curve or timeline interpretation using provided data.
- Interview/contact tracing priorities.
- Recommended control measures and rationale.
- Risk communication product for a public or stakeholder audience.
- After-action reflection identifying lessons learned and prevention strategies.

Professionalism and Peer Debrief Reflection (50 points)

Students will complete a final reflection and peer debrief connected to the tabletop exercise. The purpose is to reflect on role clarity, ethical decision-making, public health communication, teamwork, uncertainty, and how outbreak response can protect communities without increasing stigma or inequity.

Late Work Policy

Because this is a short summer course, deadlines matter. Late work is accepted for select assignments with a 10% deduction per day late unless prior arrangements are made and approved. Work submitted more than 72 hours late may not be accepted. Readiness checks, discussion boards, and the final tabletop package may have stricter deadlines because they are time-sensitive and connected to peer interaction or course completion. No emailed work will be accepted unless the instructor gives written permission due to a documented technical issue.

Students are responsible for ensuring that the correct file is submitted in D2L and that the file can be opened by the instructor. Corrupted, blank, incorrect, or inaccessible files may be treated as missing work if they are not corrected promptly.

Use of Artificial Intelligence Tools

Artificial intelligence tools may be used for brainstorming, outlining, revising for clarity, or checking grammar when assignment directions allow it. However, students remain fully responsible for the accuracy, ethics, originality, and professional quality of submitted work. AI-generated content should not replace student analysis, case interpretation, citation, or public health judgment. Students may be asked to explain their reasoning, sources, or revision process. Any use of AI that fabricates sources, misrepresents evidence, violates privacy, or produces work the student cannot defend may be treated as academic misconduct.

Confidentiality and Responsible Use of Outbreak Scenarios

Students may work with simulated outbreak data, publicly available outbreak reports, or de-identified case materials. Students should not attempt to identify individuals, speculate about private health information, or share course scenarios outside of the course in a way that could cause harm. Public health practice requires respect for privacy, confidentiality, and community trust.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements:

- LMS Requirements: <https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>
- LMS Browser Support: https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm
- Zoom Video Conferencing Tool: https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

Access and Navigation

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs a backup method to address inevitable technology problems. Backup options may include another computer at home or work, a library computer, a campus open computer lab, or another reliable internet access point.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

- Students are welcome to email questions or concerns to the instructor using their university email account.
- A reasonable response time for emailed questions is 48 business hours.
- Questions emailed on weekends or university holidays may not receive a response until the next business day.
- Questions about assignments may be answered in a general class announcement when the response would benefit the whole class.

- Students should use professional communication in all emails, discussions, peer replies, and group interactions.

Technical Support

If you have technical difficulty with any part of Brightspace/D2L, contact Brightspace Technical Support at 1-877-325-7778. Additional support options are available through the Brightspace help and support resources linked in D2L.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

- The course is organized by weekly modules in D2L.
- All assignments must be submitted through D2L unless the instructor provides alternate written instructions.
- Students are responsible for reading announcements and checking D2L regularly.
- Students should maintain copies of all submitted assignments until final grades are posted.
- The instructor reserves the right to modify the course schedule, readings, assignments, or due dates as needed. Changes will be communicated through D2L.

Academic Integrity

Students are expected to maintain high standards of academic integrity. All submitted work should be original, properly cited where appropriate, and completed according to assignment instructions. Plagiarism, unauthorized collaboration, falsification of sources or data, misuse of AI tools, or submitting work completed by someone else may result in disciplinary action in accordance with university policy.

Attendance and Participation

For an online asynchronous course, attendance is demonstrated through consistent participation in D2L, timely completion of readings and readiness checks, and submission of weekly application work. Online courses are not independent study courses; students are expected to show up weekly, engage with assigned materials, and meet course deadlines.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, public health events, or university calendar changes, may make it necessary for the instructor to modify the syllabus during the semester. Any changes will be announced in D2L.

Nondiscrimination Statement

East Texas A&M University is committed to providing an educational and work environment free from discrimination and harassment. Students should refer to current university policies and resources posted in D2L or on the university website for reporting procedures and support services.

Students with Disabilities/ADA Statement

Students with disabilities who need accommodations should contact the appropriate university office for disability resources and follow university procedures for requesting accommodations. Students are encouraged to begin this process as early as possible so that approved accommodations can be implemented in a timely manner.

Mental Health and Student Well-Being

Graduate coursework can be demanding, and compressed summer courses can intensify that pressure. Students are encouraged to seek support early if they are experiencing stress, illness, caregiving challenges, or other barriers that may affect course participation. Contact the instructor as soon as possible when course-related concerns arise, and use university support resources as needed.

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Tentative Course Calendar

All assignments are due by 11:59 PM CST on the listed due date unless otherwise noted in D2L. The instructor may adjust readings or assignments to reflect current outbreak events or university requirements.

Week/Date	Module Focus	Guiding Questions	Open-Access Readings and Media	Assignments
Week 1 June 1-7	Outbreak Investigation Foundations	What counts as an outbreak? How do investigators begin?	CDC FEM Ch. 1 and Ch. 3; CDC EIS overview; NNDSS case definitions; selected historic outbreak media.	Orientation + syllabus quiz; Readiness Check 1; Lab 1.
Week 2 June 8-14	Person, Place, Time and the Investigation File	What do line lists, timelines, and epi curves reveal?	CDC FEM Ch. 4, Ch. 6, and Ch. 9; selected MMWR outbreak report.	Readiness Check 2; Lab 2; Discussion Board 1.
Week 3 June 15-21	Transmission, Interviewing, and Contact Tracing	How do investigators identify exposures and contacts while protecting trust and dignity?	CDC FEM Ch. 10; selected contact investigation/interviewing resources; media clip on stigma or misinformation.	Readiness Check 3; Lab 3.
Week 4 June 22-28	Control Measures, Coordination, and Risk Communication	How do investigators move from findings to action and communicate uncertainty?	CDC FEM Ch. 11, Ch. 12, Ch. 13, and Ch. 14; CDC NORS overview.	Readiness Check 4; Lab 4; Discussion Board 2.
Week 5 June 29- July 2	Tabletop Response and After-Action Learning	How do response teams decide, document, communicate, and learn?	CDC FEM Ch. 16; FEMA IS-700.B selected materials; modern outbreak report.	Readiness Check 5; Final Tabletop Package; Peer Debrief Reflection. Due July 2 by 11:59 PM CST.

Open-Access Source Bank for the Course

The following source bank may be used across weekly modules. Specific chapters, reports, videos, and case materials will be linked in D2L.

- CDC Field Epidemiology Manual: <https://www.cdc.gov/field-epi-manual/php/chapters/index.html>
- CDC Morbidity and Mortality Weekly Report (MMWR): <https://www.cdc.gov/mmwr/index.html>
- CDC National Notifiable Diseases Surveillance System Case Definitions: <https://ndc.services.cdc.gov/>
- CDC National Outbreak Reporting System (NORS): <https://www.cdc.gov/nors/index.html>
- CDC Solve the Outbreak: <https://www.cdc.gov/digital-social-media-tools/mobile/applications/sto/web-app.html>
- CDC Epidemic Intelligence Service overview and publications: <https://www.cdc.gov/eis/index.html>
- FEMA IS-700.B: An Introduction to the National Incident Management System: <https://training.fema.gov/is/courseoverview.aspx?code=IS-700.b&lang=en>

End-of-Course Deliverables at a Glance

Checkpoint	Competency Demonstrated
By the end of Week 1	Students can explain the outbreak investigation process and create a working case definition.
By the end of Week 2	Students can organize outbreak information into a line list and interpret basic person/place/time patterns.
By the end of Week 3	Students can design stigma-aware interview and contact tracing tools.
By the end of Week 4	Students can recommend control measures and communicate outbreak guidance to a defined audience.
By the end of Week 5	Students can integrate surveillance, investigation, control, communication, coordination, and after-action reflection into a response package.

Mental Health and Well-Being

The syllabus/schedule are subject to change.

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The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.

