



INSTITUTE FOR  
INTERNATIONAL  
MEDICINE

## INMED Communicable Disease Control Course Syllabus

### Course Faculty:

Joseph LeMaster, MD, MPH, DLSHTM, FAAFP  
[jlemaster@inmed.us](mailto:jlemaster@inmed.us), 573-999-3366

### Learning Support:

Leda Rivera: [leda@inmed.us](mailto:leda@inmed.us), 816-444-6400

### Library Services:

Kitty Serling: [library@inmed.us](mailto:library@inmed.us), 816-444-6400

### Overview

Rapidly increasing international trade and travel predictably increases the likelihood of rapid transmission of diseases that are both infectious and communicable. The devastation caused by the 1918 Spanish influenza epidemic and the worldwide alarm prompted by the 2004 SARS epidemic provide important insights into today's concerns surrounding COVID-19. This course emphasizes objective investigation to identify evidence-based answers to critical questions, including identifying the infectious agent, the mode of transmission, incubation period, and effective modalities for prevention, diagnosis, and treatment. This course also highlights how communicable disease control often requires deliberate intervention to address special ethical challenges: disease-associated racism, resistance to local and international cooperation, and extreme stress placed upon low-resource health systems.

### Competency Objectives:

At the completion of the INMED Communicable Disease Control Course learners will be able to demonstrate using case-studies and simulation:

- Long-range mitigation of risk factors associated with communicable diseases

- Effective measures to investigate the causes of communicable diseases
- Reliable communicable disease control interventions

### **Timeframes:**

This course includes 8 weeks of structured learning, and assignments due each Sunday night. Each week includes a *required* virtual class with the faculty for discussions, simulations, case studies and final exams. This weekly *required* virtual class may last up to 120 minutes.

### **Academic Credit:**

Completion of this course requirements earns three credit hours of academic credit.

### **Enrollment Qualifications:**

This course is open to all healthcare professionals and healthcare profession students, as well as non-healthcare professionals. This Communicable Disease Control is especially appropriate for public health personnel, public leaders and policymakers, laboratory scientists, infectious disease specialists, and those providing primary health care.

### **Computing Requirements:**

The following are the minimum computing requirements for participating this course. Students must have ready access to and be functionally proficient with:

- A personal computer with an up-to-date operating system and ample memory for downloads. A rectangular monitor (desktop or tablet) is highly preferable for course navigation.
- A web browser, preferably the most up-to-date version of Chrome, Internet Explorer, Firefox, or Safari
- Applications capable of opening and editing Microsoft Word documents and of viewing PDFs
- An Internet connection, preferably high speed
- Capability of viewing YouTube and Vimeo videos

### **Education Methods:**

Learners will achieve the course competency objectives through the following educational methods:

- Assigned book and article readings
- Critical analysis
- Group discussions
- Essay composition
- Applied skills simulation

### **Mentored Discussion**

Course faculty will schedule once-weekly discussion up to 120 minutes with course learners to discuss assigned chapters, articles, forum discussions and questions. The link for this discussion is provided below. Please note that lack of internet connectivity will not be accepted as a reason for non-participation, since there is a phone-in option for almost every country in the world.

### **Textbook Required:**

*The End of Epidemics*, by Jonathan D. Quick  
Scribe Publications, 2018  
Available on Amazon.com

### **Weekly Assignments:**

*Required weekly virtual class with course faculty for up to 120 minutes to discuss assigned lessons, chapters, articles, forum discussions and questions.*

*Communicable Diseases Control Week 1: The Power of Seven, and Lessons from the Bush*

- Lessons learned from Spanish flu, HIV/AIDS, Ebola, SARS, and Zika
- Dangers posed by fear, denial, complacency, and self-interest

Assignments to be completed by 11:55 pm, on Sunday:

- Watch the video *What Was the 1918 Influenza Pandemic?*  
<https://www.youtube.com/watch?v=L6jTMacxzkl>
- Watch the video *Lessons Learned from AIDS Epidemic*  
<https://www.youtube.com/watch?v=REaP2MHXZB8>
- Read *The End of Epidemics*, Chapters 1 and 2
- Complete the Book Discussion Board assignments
- Read the assigned article(s)
- Complete the Article Discussion Board assignments

**Please note that these assignments must be completed prior to the FIRST on-line class session.**

*Communicable Diseases Control Week 2: Lessons from the Barn, and The Triple Threat*

- Threats posed by the global animal food industry
- Perennial influenza and mad cow: the first man-made epidemic
- Bioterrorism, bio-error, and unethical science

Assignments to be completed by 11:55 pm, on Sunday:

- Watch the video *COVID-19 is a zoonotic disease. What are zoonotic diseases?* <https://www.youtube.com/watch?v=5qh7ynC9F7Y>
- Watch the video *What is Bioterrorism?* <https://www.youtube.com/watch?v=eT1qaq7L8EQ>
- Read *The End of Epidemics*, Chapters 3 and 4
- Complete the Book Discussion Board assignments
- Read the assigned article(s)
- Complete the Article Discussion Board assignments

*Communicable Diseases Control Week 3: The Costs of Complacency, and Lead Like the House Is on Fire*

- Ricochet effect: scattered risks and amplified costs
- Aversion behavior and epidemic cascade
- The hit to education
- DA Henderson and the end of smallpox
- Pivotal leadership against AIDS, SARS, and Ebola

Assignments to be completed by 11:55 pm, on Sunday:

- Watch the video *Lessons Learned from Ebola* <https://www.youtube.com/watch?v=yJ6gwtuwlxw>
- Watch the video *What lessons can we take from COVID-19, to deal with monkeypox?* <https://www.youtube.com/watch?v=J1pA6bdB3Rc>
- Read *The End of Epidemics*, Chapter 5 and 6
- Complete the Book Discussion Board assignments
- Read the assigned article(s)
- Complete the Article Discussion Board assignments

*Communicable Diseases Control Week 4: Resilient Systems and Global Security, and Active Prevention and Constant Readiness*

- Nigeria's response to Ebola
- Ethiopia's fight against AIDS

- Governmental, NGO, and faith-based health leadership
- Preventing mosquito-borne diseases
- Vaccines: our most powerful protection
- Early detection, rapid response, and protecting primary healthcare

Assignments to be completed by 11:55 pm, on Sunday:

- Watch the video *DR Congo: How to Beat Ebola*  
<https://www.youtube.com/watch?v=eQVVplaw-CA>
- Watch the video *Stepping up momentum in Africa's fight against AIDS*  
<https://www.youtube.com/watch?v=iDkcjk4THh8>
- Read *The End of Epidemics*, Chapters 7 and 8
- Complete the Book Discussion Board assignments
- Read the assigned article(s)
- Complete the Article Discussion Board assignments
- Complete the Emergency Pandemic Control Mid-Term Exam

*Communicable Diseases Control Week 5: Fatal Fictions and Timely Truth, and Disruptive Innovation and Collaborative Transformation*

- The psychology of fear and distrust
- The leadership-during-crisis tight rope
- How mainstream media can help
- Analysis and response to vaccine skepticism
- The proud history of innovation
- Vaccines, mosquito control, rapid tests, early warning systems
- Collaboration for critical innovations

Assignments to be completed by 11:55 pm, on Sunday:

- Watch the public service video Prevention and Control of Mosquito-Borne Disease <https://www.youtube.com/watch?v=ecGoD2EUTOo>
- Watch the video 200 Years of Vaccine Skepticism  
<https://www.youtube.com/watch?v=Stv3SZ7toPI>
- Read *The End of Epidemics*, Chapters 9 and 10
- Complete the Book Discussion Board assignments
- Read the assigned article(s)
- Complete the Article Discussion Board assignments
- Begin developing a draft for the Communicable Disease Control Essay

*Communicable Diseases Control Week 6: Invest Wisely and Save Lives, and Ring the Alarm and Rouse the Leaders*

- How "recency bias" trips us up

- The political case for action
- The business case for investments
- Fighting ignorance at the top
- AIDS denialism and the battle for HIV treatment
- From local campaigns to a global movement to end epidemics

Assignments to be completed by 11:55 pm, Sunday:

- Watch the video *An Early Warning System for the Next Pandemic*  
<https://www.youtube.com/watch?v=vpByzTCvj-E>
- Watch the video *Why did Canada's early pandemic warning system fail?*  
<https://www.youtube.com/watch?v=ZOxqB9odFMM>
- Read *The End of Epidemics*, Chapter 11 and 12
- Complete the Book Discussion Board assignments
- Read the assigned article(s)
- Complete the Article Discussion Board assignments
- Submit your draft for Communicable Diseases Control Essay to receive instructor feedback

*Communicable Diseases Control Week 7:*

- Class Presentations

Assignments to be completed by 11:55 pm, Sunday:

- Watch the video *Recency Bias*  
<https://www.youtube.com/watch?v=fAetPKCkQyM>
- Watch the video *China Struggles to Contain Frustration from Shanghai Covid Lockdown* <https://www.youtube.com/watch?v=HQxJBhR5ZzU>
- Submit your FINAL Communicable Disease Control Essay for grading.
- For this week's class, give a presentation about your Communicable Disease Control Essay. Use no more than 8 slides and speak for no more than 10 minutes. Classmates will provide feedback on your presentation for no more than five additional minutes.

*Communicable Diseases Control Week 8:*

- Final Exam

## Essay Composition

Learners will compose an essay on the subject *How shall my nation (or other smaller group) better prepare against communicable disease threats?* Due

dates for the draft submission (followed by feedback from the instructor) and final submission are posted above. An optional outline for that essay can be:

#### Introduction

- Define your nation's potential pandemic threats.
- Describe your nation's current preparedness.

#### Main body

- Recommend interventions to increase your nation's resilience to pandemic threats.
- Discuss the resources required, potential obstacles, and potential benefits of these interventions.

#### Conclusion(s)

- Present a plan necessary to implement your recommended interventions.
- Include a strategy for building support for this plan among relevant authorities.

The completed the essay conforming to the following specifications.

- Approximately 2500 words
- At least 10 references
- References may be in any recognized style (AMA, APA, etc.), and the same style should be used throughout
- Footnotes are preferred over endnotes

#### Essay Grading Rubric

- Content – (weight: 60%)
  - Excellent
    - Background of the issue is comprehensively reviewed
    - Rationales are logically organized
    - Alternate views are extensively included
  - Good
    - Background of the issue is adequately reviewed
    - Rationales are organized
    - Alternate views are sufficiently included
  - Fair
    - Background of the issue is reviewed
    - Rationales are somewhat organized
    - Alternate views are somewhat included
  - Poor
    - Background of the issue is not reviewed
    - Rationales are poorly organized

- Alternate views are not included
- Structure/organization – (weight: 20%)
  - Excellent
    - Strong introductory paragraph
    - Clear concluding statement
  - Good
    - Good introductory paragraph
    - Good concluding statement
  - Fair
    - Modest introductory paragraph
    - Modest concluding statement
  - Poor
    - Poor introductory paragraph
    - Poor concluding statement
- References – (weight: 20%)
  - Satisfactory
    - Required minimum number are included
    - Organized in a recognized reference style
  - Not Satisfactory
    - Does not have required minimum number
    - Not organized in a recognized reference style

## Essay Presentation

Prepare a five-minute presentation for your peers about your Communicable Disease Control Essay. You will give this presentation to your classmates during the Week 7 class session. Use no more than 8 slides and speak for no more than 10 minutes. Classmates will then provide feedback on your presentation for no more than five minutes.

## Presentation Grading Rubric

- Content – (weight: 40%)
  - Excellent
    - Rationales are logically organized
    - Recommendations and calls to action are extensively included
    - References are comprehensive
  - Good
    - Rationales are organized
    - Recommendations and calls to action are sufficiently included
    - References are adequate



- Fair
  - Rationales are somewhat organized
  - Recommendations and calls to action are somewhat included
  - References are insufficient
- Poor
  - Rationales are not poorly organized
  - Recommendations and calls to action are not included
  - References are missing
- Presentation – (weight: 20%)
  - Excellent
    - Presenter is well organized
    - Knowledge of content is excellent
    - Delivery is excellent
  - Good
    - Presenter is organized
    - Knowledge of content is good
    - Delivery is good
  - Fair
    - Presenter is modestly organized
    - Knowledge of content is fair
    - Delivery is fair
  - Poor
    - Presenter is not organized
    - Knowledge of content is poor
    - Delivery is poor
- Visual – (weight: 20%)
  - Satisfactory
    - PPT is visually appealing
    - Graphs are viewable
    - Images are appropriate
  - Not Satisfactory
    - PPT is not visually appealing
    - Graphs are not viewable
    - Images are not appropriate
- Participation (weight: 20%)
  - Satisfactory
    - Learner asks thoughtful questions of the other presenters
    - Learner makes recommendations to the other presenters
  - Not Satisfactory

- Learner does not ask thoughtful questions of the other presenters
- Learner does not make recommendations to the other presenters

## Final Exam Simulation

The Communicable Disease Control Final Exam Simulation will take place in an online meeting. Over a period of 120 minutes, learners will take part in a pandemic control simulation based upon the [CDC Solve the Outbreak](#) online web application. Each class participant in advance will be assigned to lead the other learners through a particular outbreak investigation. Score on the final exam simulation will be tabulated based upon participation, leadership, and judgement – each weighed equally. A minimum score of  $\geq 80\%$  is required.

## Simulation Exercise Grading Rubric

- Leadership (weight: 40%)
  - Satisfactory
    - Learner effectively guides other participants
    - Learner speaks clearly and concisely with other participants
  - Not Satisfactory
    - Learner does not effectively guide other participants
    - Learner does not speak clearly and concisely with other participants
- Presentation (weight: 40%)
  - Satisfactory
    - Presenter is organized
    - Rationales are logically organized
  - Not Satisfactory
    - Presenter is not organized
    - Rationales are not logically organized
- Participation (weight: 20%)
  - Satisfactory
    - Learner asks thoughtful questions of the other presenters
    - Learner makes recommendations to the other presenters
  - Not Satisfactory
    - Learner does not ask thoughtful questions of the other presenters
    - Learner does not make recommendations to the other presenters

## Explanation of Assignments:

**Due Dates:** All assignments are due on Sunday at 11:55 pm of the week they are assigned.

**Participation:** Learners are required to fully participate in the course content, including readings, discussions, and essay.

**Punctuality:** This is a professional level course. All assignments are expected to be submitted on time. Any learner who becomes more than two weeks behind in submitting any assignment is subject to dismissal from the course.

**Professionalism Requirement:** This is a learning experience for professionals. Assignments are expected to be completed with excellence.

**Assigned Articles:** Each week, a journal article is assigned for learners to critically review, including questions posed on the subjects of each article. Articles are selected to represent a breath of relevant topics in contemporary healthcare administration, management and leadership. Articles originally published more than 10 years ago are intentionally selected for their ground-breaking impact and contributions to the fields of Management and Leadership. Up-to-date articles are preferentially selected when relevant.

**Discussion Board Participation:** Learners are required to post at least one response to each of the questions posed, and respond to at least one fellow classmate's responses, stating with what they agree or disagree about the response and why. A post that simply agrees with something someone else said without further explanation is not satisfactory and will be counted as if there were no post.

Inadequate learner performance will be managed according to the *Student Probation, Suspension, Dismissal, and Readmission Policy*. This policy is located within the Student Resources tab on the INMED website.

### **Requirements for Successful Completion & Course Grade Determination:**

<i>Element</i>	<i>Weight</i>
6 satisfactory article discussion board posts	10%
6 satisfactory book discussion board posts	10%
Communicable Disease Control Mid-Term Exam	10%
Communicable Disease Control Essay	20%
Communicable Disease Control Presentation	10%
Communicable Disease Control Final Exam	20%
Virtual classroom participation	20%

In addition, course completion also requires:

- Participation in *all* weekly virtual classes
- Achievement of  $\geq 80\%$  on the Communicable Disease Control Essay and Communicable Disease Control Final Exam
- Cumulative course score  $\geq 80\%$
- Complete course evaluation and credit claims forms at the course conclusion.

Course grades will be assigned according to the INMED Course Grading System:

A	90–100 %	4.00
B	80–89 %	3.00
C	70–79 %	2.00
D	60–69 %	1.00
F	0–59 %	0.00

### *Grade Definitions*

Following are definitions used for the assignment of grades.

A: Mastery of course objectives is at the highest level of expected achievement.

B: Adequate performance in attaining the course objectives has been achievement.

C: An inadequate level of course objective attainment has been achievement.

D: Only marginal inadequate performance towards the course objectives have been achieved.

F: Grossly inadequate performance has been demonstrated.

IN: Incomplete status. This is a temporary grade indicating that the learner has been given and the opportunity to submit outstanding requirements. IN automatically converts to F at the end of eight weeks following the close of a term.

W: Withdrawal from a course without credit.

### **Remediation:**

If a learner does not complete this course and achieve the required competencies, the faculty may require the learner to 1) remediate the component(s) that the learner did not satisfactorily complete, or 2) repeat the entire course. Learners must repeat payment of tuition in order to retake a failed course.

### **Academic Integrity:**

Honesty is a fundamental necessity of life. This is a professional-level learning experience. All students are expected to be self-motivated, to perform with excellence, and to be thoroughly honest throughout their process of learning. If any INMED faculty suspects a student has engaged in Academic Dishonesty, the INMED faculty may initiate the posted [Academic Integrity Policy and Process](#).

### **Withdrawal and Refund Policy:**

Please refer to the posted [Withdrawal and Refund Policy](#).

### **Course Faculty:**

Joseph LeMaster, MD, MPH, DLSHTM  
Professor, Institute for International Medicine

Dr. Joseph LeMaster is a tenured full professor of Family Medicine and Community Health at Kansas University Medical Center (KUMC), where he is an active researcher (since 2011) and provides targeted primary care for Nepali-speaking refugees (now mostly new Americans) from the Himalayan nation of Bhutan. Himself a graduate of KUMC, Dr. LeMaster and his wife Judy lived in Nepal from 1990-2000, LeMaster in 1994 completed the Public Health in Developing Countries 1-year course from the London School of Hygiene And Tropical Medicine (a tool-box course for public health leaders in developing countries). He served first at Okhaldhunga Hospital, an affiliate of the United Mission to Nepal and the only medical care facility for 300,000 people, where he promoted maternal-child health; and later at Anandaban Hospital, a facility operated by The Leprosy Mission International, where he conducted research in leprosy (Hansen's Disease). He went on to earn a Master's in Public Health focused on epidemiology from the University of Washington School of Public Health.

Dr. LeMaster has been teaching with INMED since 2008, with special contributions in epidemiology, cross-cultural skills, public health leadership, and participatory health research. His research primarily focuses on improving healthcare for US primary care patients (mostly refugees and

immigrants) who have limited English proficiency. He has received funding from the National Institutes of Health, the Patient-Centered Outcomes Research Institute, the Robert Wood Johnson Foundation and other private foundations. He currently Chairs the Committee on Advancing the Science of Family Medicine and is a Board member of the North American Primary Care Research Group; and directs the American Academy of Family Medicine National Research Network (a US-based nationwide practice-based research network). He is also the Medical Director and Local Health Officer for Johnson County, Kansas (population 613, 000), and was responsible for public health orders during the COVID-19 pandemic. He is an avid skier and a self-confessed audiophile. His wife Judy is a retired obstetric and public health nurse, a local leader of Community Bible Study, and is a member of the INMED Board. They live in urban Kansas City KS and are active volunteers in the community.