

Meeting Times: Online, asynchronous
Instructors: Megan A. Quinn DrPH, MSc; Associate Professor
Lamb Hall 149E; Phone (423) 439-4427
Email quinnm@etsu.edu
Available by appointment

David L. Kirschke, MD
Medical Director, Northeast Tennessee Regional Health Office
1233 Southwest Ave Ext
Johnson City, TN 37604
Email david.kirschke@tn.gov
Available by appointment

RECOMMENDED TEXTS

Infectious Disease Epidemiology: Theory and Practice (2013), Nelson K, Williams CM, eds. Jones & Bartlett. ISBN: 978-1-44968-379-5

Control of Communicable Diseases Manual, 20th edition (2014), Heymann, DL. ed., Washington, DC: APHA, ISBN: 978-9-87553-018-5

RELATED INFECTIOUS DISEASE TEXTS

Inside the Outbreaks: the Elite Medical Detectives of the Epidemic Intelligence Service (2010), Mark Pendergrast. ISBN 978-0-15-101120-9

Deadly Outbreaks (2013). Alexandra M. Levitt. ISBN: 978-1-62636-035-8

Tinderbox, (2012). Craig Timberg & Daniel Halperin. ISBN: 978-1-59420-327-5

Spillover: Animal Infections and the Next Human Pandemic, (2012). David Quammen. ISBN: 978-0-393-06680-7

My Own Country: A Doctor's Story, (1994). Abraham Verghese ISBN: 0-679-72592-7

CATALOG DESCRIPTION

Infectious diseases remain an important public health problem, even in industrialized countries. This course covers many important groups of infectious diseases in the United States, focusing on the mode of transmission, epidemiology, risk factors, and prevention.

COURSE PURPOSE

This course examines infectious diseases of public health importance from an epidemiologic viewpoint. Students will acquire the knowledge and skills that will enable them to understand and apply the principles of epidemiology to the evaluation, prevention, and control of infectious diseases. Although there has been much progress made in the diagnosis, prevention and treatment of infectious diseases over the past century, infections remain a major global public health problem in both developing and developed countries. The first half of the course will focus on epidemiologic concepts and methods for infectious diseases. The second half of the course covers specific infectious diseases of major public health importance.

COMPETENCIES AND LEARNING OBJECTIVES

This course addresses the following **MPH Epidemiology Concentration** competencies. The competencies are numbered, and the associated course-specific learning objectives are lettered.

- 1. Demonstrate skills in intermediate epidemiologic methods to access, evaluate, and interpret public health data**
 - a. Demonstrate the use of epidemiologic principles in the control and prevention of infectious diseases.
 - b. Illustrate the components of infectious disease active and passive surveillance, including strengths, weaknesses, and reportable diseases.
 - c. Explain how issues of privacy and confidentiality influence the process of data gathering and the use of infectious disease epidemiologic data.
 - d. Analyze and interpret infectious disease data.
- 2. Assess and synthesize epidemiologic literature for issues of public health importance to include chronic or infectious disease from historical and contemporary contexts**
 - a. Describe how the public health impact of infectious diseases varies by time and geography, both historically and currently.
 - b. Describe how communications between public health agencies, governmental and private organizations, and the general public influence the investigation and control of infectious diseases.
 - c. Summarize infectious disease epidemiologic findings in clear and understandable language to different types of audiences. Explain the importance of such communication in disease outbreak investigations.
- 3. Distinguish and defend the theoretical principles, procedures, and applications of epidemiologic study designs used to address epidemiologic issues of consequence**
 - a. Explain the different study designs used in infectious disease epidemiology
 - b. Illustrate how microorganisms interact with humans in the transmission and resistance to infectious diseases.
 - c. Identify the microorganisms associated with specific infectious diseases.
 - d. Distinguish different sources of information regarding infectious diseases of public health importance.
- 4. Critique epidemiologic methods (e.g., study designs, measurement, analytic methods) used in published literature**
 - a. Examine evidence regarding different components of infectious disease prevention and control in the context of the strengths and limitations of available data.
 - b. Discuss and explain the epidemiology of different important infectious diseases of public health importance.

COURSE OUTLINE AND ASSESSMENT of STUDENT LEARNING

Class	Topics and Learning Objectives ¹	Assessment ¹	Readings and Resources ²
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Aug 23	Topic 1: Introduction to Infectious Disease Epidemiology Objectives: 1a, 1b, 4b	ICS Trainings Courses 100, 700; Contact tracer training	<ul style="list-style-type: none"> Nelson – Chapter 2 Heymann (20th) p. 693-706 PowerPoint slides
Aug 30	Topic 2: History of Infectious Disease Epidemiology Objectives: 1d, 2a, 3c	CITI training	<ul style="list-style-type: none"> Nelson – Chapter 1 PowerPoint slides
Sept 6	Topic 3: Infectious Diseases: Nutrition, Natural History, and Microbiology Objectives: 1a, 1b, 3a, 3b, 3c	Data Analysis Project Assigned	<ul style="list-style-type: none"> Nelson – Chapters 8 & 12 PowerPoint slides
Sept 13	Topic 4: Surveillance Objectives: 1b, 1c, 1d, 2b, 2c, 3d, 4a		<ul style="list-style-type: none"> Nelson – Chapter 2 (pg 33), Chapter 5 (pg 106) PowerPoint slides
Sept 20	Topic 5: Mathematical Models, Measuring Infectivity, Contact Patterns Objectives: 1a, 1b, 2b, 5a	<i>Optional Epi Info Training</i>	<ul style="list-style-type: none"> Nelson – Chapter 6 PowerPoint slides
Sept 27	Topic 6: GIS and infectious disease Objectives: 1a, 2b, 4a, 4b	Presentation See guidelines for additional details	<ul style="list-style-type: none"> Nelson – Chapter 7 PowerPoint slides
Oct 4	Topic 7: Immune System and Vaccines Objectives covered: 1a, 3a, 3b, 3c, 4a		<ul style="list-style-type: none"> Nelson – Chapter 10 Nelson –Chapter 11 PowerPoint slides
Oct 11	Topic 8: Outbreak Investigation Objectives covered: 1b, 1d, 2b, 2c, 3a, 3b, 3c, 4a	Outbreak Investigation	<ul style="list-style-type: none"> Heymann (20th) User Guide p. xix-xx
Oct 17-21	Examination 1: Topics 1 through 8 Objectives: all	Exam 1	<ul style="list-style-type: none"> Materials from Topics 1 -8
Oct 25	Case Studies in Infectious Disease Example of Infectious Disease presentation CDC Presentation Style Guide Review Objectives covered: all		<ul style="list-style-type: none"> Materials will be posted on D2L Heymann for reference
Nov 1 Nov 8	Presentations of Specific Infectious Diseases of Public Health Importance: Student presentations Objectives covered: all		<ul style="list-style-type: none"> PowerPoint slides Articles and Handouts Heymann for reference
Nov 14-18	Exam 2: Covers Specific Infectious Diseases presented Objectives covered: all	Exam 2	<ul style="list-style-type: none"> Infectious disease presentations PPT slides from presentations
Nov 22	No class- Thanksgiving break		
Nov 29	Data Analysis Project Work Time		
Dec 5	Data Analysis Project Due <i>No specific lecture content, time to work on finalizing abstract and poster</i> Objectives covered: all	Final Abstract and Poster Presentation Due 12/5	

¹ Assessments will be provided on the date listed, due dates are listed on D2L. ² Additional readings may be assigned.

MAJOR ASSIGNMENTS, LEARNING ACTIVITIES, and RELATED MATERIALS

In order to do well in this class and to learn the professional competencies and associated learning outcomes, students need to complete the course assignments, keep up-to-date with reading, and participate in course activities. Some specific features of the course are given below.

Desire2Learn (D2L) website: The course will use D2L for all course materials. It is the students'

responsibility to check the website frequently for announcements, course materials, changes, and assignments.

PowerPoint Presentations of the Topics: PowerPoint slides are used to help present and understand the course learning outcomes. The Topic PowerPoint slides will be posted on D2L.

Examinations: Examinations will be taken during the scheduled week unless alternate arrangements have been approved by the instructor. Examinations will be taken through D2L and will include multiple question formats. A proctor is not required for exams.

Notify the instructor immediately if you are unable take an examination when scheduled.

Exercises: Exercises will be posted on D2L. All exercises are weighted equally. Information about exercises will be posted on D2L.

Data Analysis Project: Each student will have a data analysis project using the Demographic and Health Survey data. Students will choose a country of their choice, develop a research question related to infectious disease, complete data management and analysis, and a research abstract and poster. Students will virtually present an electronic copy of their poster presentation that was created as part of their data analysis project. This can be completed through a voiceover PPT or a Zoom recording. Students will not be required to print their poster. Presentations will follow the guidelines of the Appalachian Student Research Forum poster presentation format. Details for the assignment will be given through D2L.

Infectious Disease Presentation: Each student will give a PowerPoint presentation. This will cover the epidemiology of a specific infectious disease topic. Details for this assignment will be given through D2L.

BASIS OF GRADES:

Student grades will be based on the following assignments:

Examination 1	15%
Examination 2	15%
Infectious Disease Presentation	20%
Data Analysis Project/ Abstract	25%
Data Analysis Poster Presentation	15%
Exercises/ Trainings	10%

GRADING SCALE

The letter grades for this course are assigned as follows:

A	95-100%	B-	83-85%
A-	92-94%	C+	80-82%
B+	89-91%	C	77-79%
B	86-88%	F	0-76%

The grade received is based on the student's individual performance for course assignments. Extra credit activities to compensate for poor performance undermine the integrity of the Professional Competencies and Learning Outcomes. *Extra credit activities will not be given.*

ATTENDANCE POLICY / MISSED CLASS ASSIGNMENTS

Participation in the course is expected.

10% is deducted for late assignments and the instructor's permission in advance is required. Assignments more than one week late will not be accepted. Flexibility will be provided for extenuating circumstances such as illness of you or a family member.

INCLEMENT WEATHER POLICY

The official radio station for reporting the status of classes and other activities of East Tennessee State University during inclement weather is WETS-FM 89.5. All students are to govern themselves according to the status as reported by this station for the University.

COVID -19

Learning and teaching during COVID-19 is a fluid process. The world around us is quickly changing and there are lots of unknowns. I want to create a compassionate learning environment that acknowledges the unique challenges you may be facing. But I need you to let me know if you're having challenges. Those may be related to virtual learning, COVID-19, or other things.

If anything is impacting your ability to learn, participate, or complete assignments, please let me know proactively (aka as soon as possible) so that we can work together to find a solution and to minimize any negative impact on your grade or experience in this class. Please do not wait until late in the semester to let me know that you were struggling all along. I can only help you if you let me know you need help. And it's okay to need help—that's why I'm here. Please reach out.



EAST TENNESSEE STATE
UNIVERSITY

SYLLABUS ATTACHMENT: ADDITIONAL INFORMATION AND RESOURCES

Diversity and Inclusivity:

Diversity means the fair representation of all groups of individuals, the inclusion of minority perspectives and voices, and the appreciation of different cultural and socioeconomic group experiences and practices. The academic community should be one that respects the rights, dignity, and welfare of all individuals and that is free from discrimination, harassment, exploitation, or intimidation. Every student in this classroom, regardless of personal history or identity categories, is a valued member of this group. Your experiences are valuable and important, and you should feel free to share them as they become relevant to our class. No student in this class is ever expected or believed to speak for all members of a group. All members of this class are expected to

contribute to a respectful, welcoming, and inclusive environment for every other member of the class. Please maintain courteous and respectful communication, regardless of differences of opinion. This does not guarantee that your viewpoint will not be challenged or unpopular. Rather, in the true spirit of education, we need to try to understand the culture and experiences that contribute to different perspectives, so society continues to advance in ways that are advantageous to all of our futures. The only way we can do this is through respectful, rational, and diplomatic discourse. I encourage you to welcome all viewpoints as tools for expanding your own awareness.

In this classroom, you have the right to determine your own identity. I will call you by whatever name you wish and do my best to pronounce it correctly. I will refer to you by whatever pronouns you wish. I will allow you to adjust those things at any point in your education. In this classroom, I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference so that I may make appropriate changes to my records.

If you find that there are aspects of course instruction, subject matter, or classroom environment that result in barriers to your inclusion, please contact me privately without fear of reprisal.

ETSU DIVERSITY STATEMENT: East Tennessee State University recognizes that the pursuit of knowledge and understanding is enriched by an environment in which people of diverse backgrounds learn together and from each other, and participate in free and genuine exchange of views. It recognizes that all members of the University community benefit from diversity and that the quality of learning, research, scholarship and creative activities is enhanced by a campus climate of inclusion, understanding, and appreciation of differences and the full range of human experience.

ETSU must prepare students to function successfully in a diverse society. A university diverse in its people, curricula, scholarship, research, and creative activities expands opportunities for intellectual inquiry and engagement, helps students develop critical thinking skills, and prepares students for social and civic responsibilities. ETSU aspires to be an institution that celebrates diversity by welcoming all students, faculty, administrators and staff as respected and valued participants in the University's educational mission. Therefore, ETSU welcomes people of different races, ethnicities, religions, creeds, national origins, genders, sexual orientations, physical abilities, ages, veteran status, and social, economic, or educational backgrounds. ETSU is particularly committed to welcoming groups that have been traditionally underrepresented or excluded. The University also supports and encourages the promotion of diversity in its curricula, programs, faculty research, scholarship, and creative activities.

Diversity, Equity, Inclusivity, and Belongingness Resources

If you or someone you know would like to know more about how to be affirmed in any aspect of your identity or how to be an ally for those who experience prejudice, discrimination, and/or oppression, please explore these resources.

- ETSU [College of Arts & Sciences \(CAS\) Office of Equity & Inclusion](#)
 - The CAS Office of Equity & Inclusion is the central resource for all faculty, staff, and students. We celebrate and promote diversity, equity, inclusion, and everyone being their authentic selves. We support all departments, offices, and units in the college with consultation, expertise, programming, workshops, all while working to build a welcoming, inviting, and inclusive culture. In CAS, all roads lead to equity and inclusion.
 - Dr. Carter, associate dean for equity and inclusion, can be found in 204D Gilbreath or 108 Rogers-Stout Hall.
 - Please email him at carterda@etsu.edu for any questions, concerns, or desires to chat anything diversity, equity, and inclusion related (and beyond)
- ETSU [Mary V. Jordan Multicultural Center](#)
 - “The Mary V. Jordan Multicultural Center is a place where our students can discuss, appreciate, and celebrate their identities, similarities, and differences through a variety of facilitated workshops, cultural programming and academic/leadership development opportunities, while also building a sense of community and belonging. It is both

a place to gather and an environment for the educational, social justice, and cultural matters that are significant to our students, faculty, staff, and the greater ETSU community.”

- ETSU [Dr. Patricia Robertson Pride Center](#)
 - “We support the university’s mission and dedication to social justice efforts through programming, trainings, community outreach, and advocacy on ETSU's main campus and across the region. Attention to gender and sexual minority related inequities also requires addressing all aspects of inequality, including heterosexism, cissexism, racism, misogyny, xenophobia, ableism, and more.”
 - Located on the 2nd floor of the D.P. Culp Student Center
- ETSU [Women’s Resource Center](#)
 - The ETSU Women’s Resource Center “facilitates programming dealing with an extensive variety of issues and concerns affecting women. Our goal is to enrich and enlighten women on the issues confronting them. The Center is dedicated to providing seminars, lectures, a book club, small library, and resources that explore a wide spectrum of interests and concerns. Our door and our events are open to the entire campus, community, and regional populations.”
 - Campus Center Building 220

Mental Health Resources

Students often have questions about mental health resources, whether for themselves or for a friend or family member. There are many resources available on the ETSU Campus, including:

- The [ETSU Counseling Center](#)
 - 423-439-3333
 - Provides free and confidential therapy services in person or via telehealth
 - Provides free and confidential [support groups](#) on a range of topics (e.g.,
 - Specific resources related to [COVID-related stress](#)
- The [ETSU Behavioral Health & Wellness Clinic](#)
 - 423-439-7777
 - Provides confidential therapy and assessment services on a sliding scale
- The [ETSU Community Counseling Clinic](#)
 - 423-439-4187
 - Free and confidential therapy services

If you or someone you know has a mental health emergency:

- Call BucsPRESS2, a 24-hour mental health helpline
 - 423-439-4841, then press 2
- Call 911
- Call the National Suicide Prevention Lifeline: 1-800-273-TALK (8255).

Faith-Based Resources

There are many faith-based organizations on campus. If you are a person of faith or feel that you would like to explore resources in this area, you can find ETSU organizations at this link:

<https://etsu.campuslabs.com/engage/organizations?categories=652>

Safe Zone*

My office is a safe space and I consider myself an ally for all students, including those who identify as LGBTQ+. I want you to know that you can feel safe from judgmental attitudes when interacting with me. More information can be found at [the Safe Zone web site](#).

NOTE: Any student that is receiving full Financial Aid (loans, scholarships, lottery, or grants) must authorize the university to use Financial Aid funds to pay the student account. A Financial Aid Agreement Promissory Note must be provided by the student either online or through the Financial Aid Office, unless payment in full is submitted. Fee payment must be completed by the close of business on the day before classes begin.

Important Dates can be found on the Academic Calendar. (<http://www.etsu.edu/etsu/academicdates.asp>).

ACADEMIC ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES: It is the policy of ETSU to accommodate students with disabilities, pursuant to federal law, state law and the University's commitment to equal educational opportunities. Any student with a disability who needs accommodation, for example arrangement for examinations or seating placement, should inform the instructor at the beginning of the course. Faculty accommodation forms are provided to eligible students by Disability Services. Disability Services is located in the D.P. Culp Center, Room 326, telephone 439-8346. <http://www.etsu.edu/students/disable/>

HONOR CODE: East Tennessee State University is committed to developing the intellect and ethical behavior of its students. Students found to be in violation of policies on plagiarism, cheating, and/or fabrication will be held accountable for their actions. It is up to the instructor to determine the level of consequence based on the violation. Plagiarism (of any kind) and cheating will not be tolerated in the course and are grounds for dismissal from the course or failure of the course. Any knowledge of academic misconduct should be reported. Students are expected to act with honesty, integrity, and civility in all matters.

HONOR PLEDGE: By becoming a member of the campus community, students agree to live by the standards of the honor code and, thereby, pledge the following: "I pledge to act with honesty, integrity, and civility in all matters." (Honor Code and Pledge as revised and adopted February 16, 2012.)

ACADEMIC MISCONDUCT APPEAL: Any act of dishonesty in academic work constitutes academic misconduct and will be subject to disciplinary action. This includes plagiarism, the changing or falsifying of any academic documents or materials, cheating, and the giving or receiving of unauthorized aid in tests, examinations, or other assigned school work. Charges of academic misconduct may be brought by members of the faculty, staff or student body. The administration of discipline for academic misconduct is in accordance with procedures specified in the Academic Misconduct Policy.

Appeal from a finding of guilt of academic misconduct and imposition of a sanction for the offense may be taken to the president of the university. A written notice of appeal must be submitted by the student to the university president within five days after being notified of the dean's decision on the case. The appeal must consist of a signed statement elaborating the respects in which the student considers the decision wrong.

WHAT YOU NEED TO KNOW!

Student email: ALL registered ETSU students have a campus email account (@etsu.edu). Please activate your account and check weekly. Email is our primary communication resource for students. To activate your account follow directions at: <http://www.etsu.edu/oit/studentinfo/goldmail.aspx>

PREREQUISITES: Many courses require prerequisites or special approval of the instructor prior to registration. Students should verify that they meet the requirements for course registration in the university undergraduate or graduate catalog. Failure to comply with the stated prerequisites may result in the student being withdrawn from a course.

PERMITS AND OVERRIDES: A student may add courses with special permission in the form of an electronic permit if the courses have reached the established maximum enrollment. To add any class that

has reached the enrollment limit requires permission of the instructor and department chair. After the registration/late add period, special permission in the form of a hard copy late add form and an electronic permit must be obtained from the instructor, the department chair, the dean and the registrar. Students may view permits on GoldLink under Registration Status.

HOW TO CONTACT A FACULTY MEMBER: If you have questions regarding your class, talk to your instructor. Faculty members usually include their office hours, phone number and/or email in your class syllabus. If you cannot locate this information, set a time to meet with your instructor by speaking with him/her prior to or immediately following your class session. You may also conduct a “People Search” on www.etsu.edu.

CLASS ATTENDANCE IS IMPORTANT! Attendance usually has a high correlation with how well you do in a course.

WHERE TO GO FOR HELP?

ADVISEMENT RESOURCES CAREER CENTER (ARC)

The ARC is located in Sherrod Library Room 104, phone 423-439-8650. The ARC is open Monday - Friday 8:00 a.m.-4:30 p.m. The ARC incorporates several academic and student support services listed below.

ADULT, COMMUTER, AND TRANSFER SERVICES: (423-439-5641) Personalized counseling advisement for adult, commuter, and transfer students. Commuting Student Services: rideshare, off-campus housing listings, transit schedules, area maps and childcare information. One-Stop Shopping: campus forms, applications and information. Scholarships: Reentry Student Scholarship. Student Organizations: Alpha Sigma Lambda (ASL), the adult student honor society and Tau Sigma, the honor society for transfer students. Advocates for: adult, commuter, and transfer students within the greater campus community. Visit our website at www.etsu.edu/students/acts.

CAREER EXPLORATION CENTER: (423-439-8651)-Located in the ARC, the Career Exploration Center is a starting place for students who are uncertain about their choice of academic major or career with the assistance of our professional staff, career interest inventories, personality inventories, and an extensive career library, we can help students identify career options that suit their personal needs. These services are free to current ETSU students. Limited services are available to potential students and ETSU alumni. Visit our website at <http://www.etsu.edu/students/careers/common/careerdevelop.aspx>

Scholarship Office: (423-439-7094) Located on the 2nd floor of the Culp Center. Coordinates most of the academic and need based scholarships. The office provides information and scholarship applications for ETSU scholarships and serves as a resource for external scholarship information. Visit our website at www.etsu.edu/scholarships

OTHER RESOURCES

CENTER FOR ACADEMIC ACHIEVEMENT:

(423-439-7111) Located on the first floor of the Sherrod Library, the Center for Academic Achievement (CFAA) is the place to go for help with writing and speaking, library research, core math and science courses, and other subjects. The center offers tutoring on a walk-in and appointment basis and is open

during library hours, including nights and weekends. Call 439-7111 or go to www.etsu.edu/academicaffairs/cfaa for more information.

STUDENT GOVERNMENT ASSOCIATION: (423-439-5325) visit:
<http://www.etsu.edu/sga> or email - SGA@mail.etsu.edu

CAMPUS RECREATION: (423-439-7980) Campus Recreation offers programs and services through the Center for Physical Activity and Basler Challenge Course in five areas: intramurals, fitness, outdoor adventure, non-credit instruction, and sports clubs. Any questions regarding the programs and services offered by the Department may be answered by visiting our website at

www.etsu.edu/rec or by calling 423-439-7980.

LIBRARIES	PHONE
Sherrod Library:	866-542-3878
ETSU at Kingsport Library:	423-392-8010
Medical Library:	423-439-6252

BOOKSTORES: The ETSU Bookstore has special hours at the beginning of each semester. For more information please call 423-439-4436.

For information about our off-campus location, the College Store, located on West Walnut Street, call 926-0838.

The Kingsport Bookstore is only available during the first week and last week of each term. For information about the Kingsport Bookstore's hours, call 392-8000.

COMPUTER LABS: For information on all OIT labs, call 423-439-8211. Information on equipment, location, and operating systems available at <http://www.etsu.edu/oit/facultystaffinfo/complabinfo.aspx>

Other open labs and contacts: Sam Wilson 318/320 (contact College of Business, 439-5271), Kingsport Center (contact main office, 392-8000).

GRADUATION: Students should file their Intent to Graduate two semesters prior to graduation.
<http://www.etsu.edu/reg/graduation/graduationforms.aspx>

SEEK ANSWERS TO YOUR QUESTIONS: The ETSU Faculty and Staff want you to be successful in your educational pursuits. If you have any questions or concerns, seek help EARLY. We are here to assist you.

Technology Services and Assistance: <http://www.etsu.edu/oit/>
Registration Help Line: 423-439-5584 (M-F, 8:00am – 4:30pm)

Policies and Procedures, Resources, Programs of Study and much more: ETSU Online Catalog:

<http://catalog.etsu.edu>

HAVE A GREAT SEMESTER!