University of New Hampshire UNH Graduate School Master of Arts in Community Development Policy and Practice DPP 953: Community Medicine and Epidemiology (3 Credits)

Instructor Contact Information:

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Course Session: DPP 953: Community Medicine and Epidemiology is an asynchronous, online course offered from July 13, 2020 – August 14, 2020.

Course Description

Good health is a critical determinant for the continued success of industrialized countries and for the potential of developing countries to be realized and achieved. There are many determinants that are instrumental to the progression of societies and access to quality and affordable health care is essential to this success.

DPP 953 surveys the fundamental principles of epidemiology and its importance as an analytical tool in the fields of public health and policy development to assure the health of populations in the developing world. Emphasis is placed on providing the student with a firm foundation of epidemiological concepts via a historical perspective of the field, measures of disease occurrence and association, practical applications to policy, data sources, and study designs to reduce community health problems. For the student to be able to utilize epidemiology as a health management tool, special emphasis will be placed on understanding and applying descriptive and analytical epidemiologic techniques to assess the health of diverse communities. The student will gain an appreciation for the role epidemiology plays in helping to produce and maintain healthy populations on both a local and global scale.

Course Pre-requisite: None

Course Objectives

A. Knowledge

At the conclusion of the course, students should be able to describe and generally assess the following:

1. The historical roots of epidemiology and its contribution to the scientific method

2. The role of epidemiology as a tool to assess the health of diverse populations and health care systems

3. The use, strengths, and limitations of public health data sources

B. Skills

After taking this course, students will be able to:

1. Utilize disease frequency measures (e.g., prevalence and incidence) and measures of effect (e.g., risk versus rate, crude, specific, and adjusted rates) to analyze the health of a population and express the amount and distribution of health-related outcomes

2. Given the distribution of a health-related outcome, generate hypotheses that might explain that distribution

3. Assess the health of a community and develop a plan for resource allocation

C. Values

At the conclusion of this course, students will:

1. Appreciate the critical role epidemiology plays in securing and maintaining the public health of the world's populations and its significant impact on health management practices

2. Appreciate the complex task of generating hypotheses to explain the causal link between exposure and disease in human populations

3. Appreciate the challenge of working with limited resources

Course Materials

Readings Required Textbook:

Caron, Rosemary. *Population Health: Principles and Applications for Management*. Health Administration Press, Chicago, Illinois, 2017. (ISBN: 978-1-56793-861-6).

This book is available for purchase or as a rental via Amazon and Barnes and Noble.

Additional readings, videos, and websites will be posted to the course's Canvas site to supplement the course concepts and applications.

Canvas

You are responsible for all information (e.g., announcements, assignments, readings, etc.) posted on Canvas for this course. Class Notes for DPP 953 will be available on Canvas (accessed at http://mycourses.unh.edu). This will provide you with a detailed agenda and record for each class topic and is meant to be used as a guide for discussion and studying purposes. Please check Canvas frequently since this is where I will post announcements, class assignments, and any schedule changes.

Please check and make sure that Canvas is set up to an e-mail address that you frequently use. Canvas defaults to your UNH e-mail address, thus it is your responsibility to change the default e-mail address in Canvas to your preferred e-mail address, if necessary. See the "Settings" page of Canvas <u>http://mycourses.unh.edu</u> for instructions on changing your Canvas e-mail address.

<u>Course Requirements, Grading Philosophy, and Professional Conduct Policies,</u> <u>and Student Resources</u>

Canvas

Canvas is the primary learning platform by which the course is delivered in a traditional, face-to-face format. *It is your responsibility to know how to use Canvas prior to the beginning of the course. Requests to submit assignments late or make up assignments following their due date because you are not familiar with how to navigate Canvas will not be granted.* Questions pertaining to Canvas should be directed to IT Support Services at 603-862-4242; or you may access assistance online at http://www.unh.edu/eunh/student-resources.

Attendance

Due to the great deal of information covering a wide range of topics in each class, staying current with the readings, discussions, and assignment due dates is imperative for the successful completion of the course. Attendance in your group work via our online learning environment is required. Failure to attend and participate in your group work will result in a failing grade for the course.

Class Participation and Preparation

Student participation is a critical element of this course as the sharing of ideas, opinions, and experiences can help shape the learning process for oneself and his/her peers. You are expected to have done the assigned readings and based upon your reflection of the readings and course material you should demonstrate your ability to add value to the class discussion.

I expect you to participate and submit work that demonstrates your absolute best efforts and talents and to be prepared for each class session.

I reserve the right to adjust your grade positively or negatively based on participation and engagement.

Professional Conduct

Students are expected to conduct themselves as professionals. This standard includes the demonstration of respect and cooperation towards other students and faculty. I expect an online classroom environment where everyone behaves in a mature manner and feels safe to communicate ideas, as well as respects and abides by the requirements of the course.

Teaching Methods and Grading Components

Each class will include the following pedagogical components:

- **1**. Introduce basic principles and theory
 - Lecture
 - Use of literature and the arts
- 2. Explore and question basic principles and theory in depthDiscussion
- **3**. Application of basic principles
 - Written Assignments
- **4**. Practical application of basic principles in a "real world" setting
 - Media
- 5. Reinforcement
 - One-on-one and/or group meetings
- **6**. Evaluation and assessment
 - Examinations, Written Assignments, Case Studies

Assignment	Due Date	Percentage
Class Participation and	July 13, 2020 – August 14, 2020	Expected
Group Contract	Group Contract due by 7/15/20	
Discussion Boards (Group	Discussion #1	30%
Assessment; See Canvas for	Group Questions: 7/15/20	
details)	Group Post: 7/17/20	
	Group Response: 7/19/20	
	Discussion #2	
	Group Questions: 7/22/20	
	Group Post: 7/24/19	
	Group Response: 7/26/20	
	Discussion #3	
	Group Questions: 7/29/20	
	Group Post: 7/31/20	
	Group Response: 8/2/20	

	<i>Discussion #4</i> Group Questions: 8/5/20 Group Post: 8/7/20 Group Response: 8/9/20	
Epidemiology Workshops (Group Assessment; See Canvas for details)	<i>Epidemiology Workshop #1</i> : Due 7/26/20	30%
	<i>Epidemiology Workshop #2</i> : Due 8/2/20	
	<i>Epidemiology Workshop</i> #3: Due 8/9/20	
Community Health Assessment (Individual Assessment; See Canvas for details)	Due no later than 8/14/20 (Extension is available; please email Instructor)	40%

Grading Scale and Final Course Grades

Final course grades are based on several elements. They may be raised or lowered one-half letter grade (+/-) based on class participation.

The University uses the traditional letter grading system ("A" through "F"). The following numerical/letter scale is used for this course:

95 - 100	=	Α	73 – 76	=	С
90 - 94		A-	70 - 72		C-
87 - 89		B+	67 - 69		D+
83 - 86		В	63 - 66		D
80 - 82		B-	60 - 62		D-
77 - 79		C+	0 - 59		F

When I need to convert between letter and numerical grades, A= 100. Other letter grades are the midpoint of the numerical range (e.g., B+ = 88.5. If numerical rounding is required, it is done using the appropriate rules from mathematics).

The following letter grades, in conjunction with the numerical scale above, are used for this graduate course:

- A Performance of the highest quality. Outstanding.
- A- Performance of high quality. Above the expected.
- B+ Satisfactory performance. At above the expected level.
- B Satisfactory performance. But somewhat below the expected level
- B- Performance at the minimum level of acceptable quality.
- C Repeat course.

UNH Graduate School credit is granted only for course work completed with a grade of B- or higher.

You are responsible for all the readings, as well as all the topics and materials discussed in class.

I reserve the right to adjust your grade positively or negatively based on participation and engagement.

The grading of each assignment is based upon the following criteria:

- Completeness of addressing the requirements for each assignment
- Breadth and depth of literature review and application
- Adherence to standards of writing style and grammar
- Quality of analysis and level of critique for each assignment

Late assignments will not be accepted.

All writing assignments will be typed, double-spaced, and adhere to recognized writing conventions, such as spelling, grammar, page numbers, punctuation, and appropriate use of bibliographic citations. Spelling and grammar mistakes will lower the grade on all written work.

Grading Philosophy¹

When I grade papers and presentations *you GET points – you do not LOSE points*. You start every assignment with a zero (not 100) and you build your points upon what is included in the assignment.

When appropriate, show me that you have considered a point or perspective by including a reference or citing the point using the author's name. Try to incorporate all or most of the required readings and class discussions into your answers. As you design your answer, for each reading, consider how it might contribute to your perspective. Many questions may require you to "agree" or "disagree" with a stated perspective or position. Confirm that your position and argument in support of your position are clear and well focused. Consider the questions and then formulate an argument and indicate your critical points.

When I grade assignments, I determine whether the response answers the question(s), appropriately and accurately uses the course experience (classes, readings, *etc.*) as a foundation for the answer, and whether the answer is logical, reasoned, and presented flawlessly. I then make a judgment as to the grade. Consider the following:

The "A" answer demonstrates a high level of understanding and the ability to use course materials (readings, class discussion, and assignments, *etc.*) to provide a reasoned and logical answer to the overall question and any components thereof. <u>Major points are easy to find and are underlined</u>. Examples are frequently used to explain specific points. The answer is succinct, well organized, based upon multiple

¹ This description was developed by Lee F. Seidel, Professor of Health Management and Policy and Founding Director, UNH Center for Excellence in Teaching and Learning.

identified perspectives (*e.g.*, authors), and must contain no flaws in its presentation. The "A" answer uses the question as an opportunity to demonstrate knowledge and understanding.

- The "B" answer demonstrates an awareness and command of the material covered in the course. It provides a direct answer to the question(s) but rarely goes beyond the obvious. It accurately reports what others think is relevant to the question. It is responsive but often lacks focus. Major points may be hard to find or are cluttered by less relevant points and/or information.
- The "C" answer partially answers the question and typically fails to provide a comprehensive and organized answer. It demonstrates incomplete and/or inaccurate knowledge. Often "random" information is provided hoping for the Instructor to find the "right" answer somewhere in the jumble. Demonstrated understanding is "basic" at best. Typically, many readings are overlooked.
- The "D/F" answer is deficient. It fails to demonstrate adequate understanding of course materials. It is usually very poorly organized, and it fails to answer the question. It does not demonstrate a significant command of the course materials and required understanding based upon the question. Sometimes, however, it is a "good" answer but to a different question(s).
- Note: flaws in presentation (e.g., spelling, grammar, punctuation, etc.) lower all grades.

Academic Integrity

This course will enforce the UNH policy on integrity, as described in the **Student Rights, Rules, and Responsibilities** handbook. If the Instructor determines that you have plagiarized the work of others or committed academic dishonesty (e.g., cheating on an examination) you will fail this course and be subject to other penalties as determined by university officials. Depending upon the nature of the violation, further action may be taken. **University policy can be found in your copy of Student Rights, Rules, and Responsibilities found at** <u>http://www.unh.edu/student/rights/</u>. (See UNH policies concerning Academic Honesty - Section 9.0).

Students with Disabilities

"According to the Americans with Disabilities Act (as amended, 2008), each student with a disability has the right to request services from UNH to accommodate his/her disability. If you are a student with a documented disability or believe you may have a disability that requires accommodations, please contact Student Accessibility Services (SAS) at **201 Smith Hall**. Accommodation letters are created by SAS with the student. Please follow-up with your instructor as soon as possible to ensure timely implementation of the identified accommodations in the letter. Faculty have an obligation to respond once they receive official notice of accommodations from SAS but are under no obligation to provide retroactive accommodations.

For more information refer to <u>www.unh.edu/studentaccessibility</u> or contact SAS at 603.862.2607, 711 (Relay NH) or <u>sas.office@unh.edu</u>."

Emotional or Mental Health Distress

Your academic success in this course is very important to me. If, during the semester, you find emotional or mental health issues are affecting that success, please contact <u>Psychological and Counseling Services (PACS)</u> (3rd fl, Smith Hall; 603 862-2090/TTY: 7-1-1) which provides counseling appointments and other mental health services.

Classroom Behavior Expectations

To ensure a climate of learning for all, disruptive or inappropriate behavior may result in exclusion (removal) from this online class.

Confidentiality and Mandatory Reporting

The University of New Hampshire and its faculty are committed to assuring a safe and productive educational environment for all students and for the university. To this end, the university requires faculty members to report to the university's Title IX Coordinator (Donna Marie Sorrentino, <u>dms@unh.edu</u>, 603-862-2930/1527 TTY) any incidents of sexual violence and harassment shared by students. If you wish to speak to a confidential support service provider who does not have this reporting responsibility because their discussions with clients are subject to legal privilege, you can find a list of resources here (<u>privileged confidential service providers/resources</u>). For more information about what happens when you report, how the university considers your requests for confidentiality once a report is made to the Title IX Coordinator, your rights and report options at UNH (including anonymous report options) please visit (<u>student</u> reporting options).

Durham Campus Student Writing Support Services

The Connors Writing Center provides free online writing assistance (as well as assistance with oral presentations), <u>http://www.unh.edu/writing/cwc/</u>.

The Center for Academic Resources (CFAR) provides academic support services, <u>http://www.cfar.unh.edu/</u>

Course Evaluation

University policy requires that each student be given the opportunity for an anonymous evaluation of each course and Instructor at the conclusion of the course. This is important input for the Instructor and the Department. Each year this course will be

revised based upon this and other input. The Instructor is also available to discuss the course readings, requirements, grading or other aspects of this course.

Description of Assignments

Due to the short duration of this course, online participation is mandatory. If you have any questions, please e-mail the Instructor at <u>Rosemary.Caron@unh.edu</u>.

A. Class Participation

Student participation is a critical element of this course and will influence your grade. You are expected to have done the assigned readings and bring discussion questions based upon the reading and lecture material to our online class. Each student will be responsible for contributing to discussions based upon assigned case studies, peerreviewed journal articles, and a research topic, for example.

Group Work

"Group projects can help students develop a host of skills that are increasingly important in the professional world".² Positive group experiences have been shown to contribute to student learning, content and skill retention and overall [college] success.^{3,4,5}

Each group is expected to submit a group-developed contract that outlines how you will conduct yourselves and your work. The format and component of this contract is up to you but representative issues to discuss include work ethic, work allocation, work dissemination, assurance of work quality, assignment submission, handling of disputes, and management of unequal work contribution. Many such group contracts exist online. Each student in a group must send me an email stating their contribution and approval of the groupgenerated contract. Each member of a group receives the same grade on assignments. Peer evaluations can influence the student's overall course grade. Failure to submit a group contract by the deadline will lower the group's overall course grade.

You will be given the opportunity to evaluate the effort of your peers on group assignments. This is a required component of the course. Failure to complete this requirement will result in a negative grade adjustment.

² Caruso, H.M., & Wooley, A.W. (2008). Harnessing the power of emergent interdependence to promote diverse team collaboration. Diversity and Groups. 11, 245-266.

³ Astin, A. (1993). What matters in college? Four critical years revisited. San Francisco: Jossey-Bass.

⁴ Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition. Chicago: University of Chicago Press.

⁵ National Survey of Student Engagement Report. (2006).

http://nsse.iub.edu/NSSE 2006 Annual Report/docs/NSSE 2006 Annual Report.pdf.

B. Writing Assignments

The written assignments (e.g., Discussion Board, Epidemiology Workshops, and Community Health Assessment) are designed to allow students to explore course topics in further depth and encourage practical application of course skills to the area of community health and epidemiology. Each written assignment is designed to be completed based on course readings and discussion. These questions are thoughtprovoking and require you to utilize information from the course itself, as well as conduct research about the specific issue to answer the questions. Members of each group will receive the same grade.

All writing assignments must adhere to all academic conventions and rules. For assistance with your writing, do not hesitate to use the UNH Writing Center at <u>http://www.unh.edu/writing/index.html</u>.

All writing assignments will be typed, double-spaced, with one-inch margins and 12 type, Times New Roman font and adhere to recognized writing conventions, such as spelling, grammar, page numbers, punctuation, and appropriate use of bibliographic citations. Spelling and grammar mistakes will lower the grade on all written work.

Plagiarism will automatically result in a failing grade for the paper and for the course.

All assignments should be submitted via Canvas (unless otherwise noted).

Please cite the references you use in the narrative of the work using the American Psychological Association's (APA) Style and include a bibliography of works cited at the end of the paper - see Canvas for reference information.

Do NOT use Wikipedia as a source of information as it is not peer-reviewed.

Acceptable web sites to consult during your research are located on Canvas. Use peer-reviewed sources (i.e., journals) only. Do not use more than two news media sources for information.

Plagiarism will automatically result in a failing grade for the paper and for the course.

Be sure to appropriately cite and reference all sources. Spelling and grammar mistakes will lower the grade on all written work.

C. Discussion Board (Group Assessment)

Discussion is an integral part of this course. Over the duration of our online course, we will have four (4) Discussion Boards. There will be four course-related topics to consider and associated questions.

You will work in your assigned group to discuss the week's materials. Your group is responsible for the following:

1. Each group will be assigned a Discussion Board for which they are responsible for leading.

2. Develop and post 1-2 questions based on the week's readings.

3. Each group not responsible for leading the given week's Discussion Board will post a response to the questions posed that is reflective of your group's discussion about the week's topic. Each group should identify one member (editor) who is responsible for responding to the week's questions. The editor is responsible for assuring the group's various viewpoints, perspectives, experiences, and research findings are comprehensively and accurately communicated.

4. For the group responsible for leading the assigned week's Discussion Board, one member (editor) of your group will be responsible for responding to each peer group in a constructive manner that moves the discussion and learning forward based on the leading group's preparation for the given week.

5. The Instructor will conclude each week's Discussion Board by highlighting themes, perspectives, and examples from the literature and practice that offer insight into considerations for how to assure the health of populations.

I recommend that the editor, that is the person responsible for communicating the group's discussion points, rotate among your assigned group so this responsibility is shared among the group members.

Posting must be (as judged by the Instructor) substantive, significant, germane and contribute to insights involving the specific question. Guidelines are posted in Canvas. **Late posts are not accepted**.

Failure to participate in the Discussion Board for the course are grounds for failure of the course.

Final course grades for student groups who make few (if any) substantive contributions in the online discussion portion of the course will be lowered.

All readings and media sources are posted in Canvas. I will conclude each week's Conference Session by highlighting themes, perspectives, and examples from the literature and practice that offer insight into considerations for how to assure the health of populations.

Criteria for evaluation of class participation and helpful guidelines for contributing to the Conferencing Sessions are posted in Canvas.

Each member of an assigned group will receive the same grade.

D. Epidemiology Workshops (Group Assessment)

Students will be organized into groups during the semester and you will work on three (3) graded assignments that allow for the practice of the epidemiological skills taught in the course.

A scientific calculator is required for the Epidemiology Workshops.

Each element of the assignment contributes to a total of 100 points. Partial credit will be awarded where appropriate.

Each member of an assigned group will receive the same grade.

E. Community Health Assessment (Individual Assessment)

Parts I – III: Community Health Assessment – Your Community and its Needs

You have been hired by a consultant firm who specializes in development work. You are part of a team and your job is to assess the health of the community. Your project team leader would like a formal presentation on your findings so that she can use your results to plan accordingly for the other related development work that needs to be accomplished.

Your findings will be prepared as a "Report" not a "Final Paper." There is no set format for the report other than it should be no more than ten (10) pages, typed, one-inch margins, 12 point, Times New Roman font, *spacing can be of your choosing*. The use of tables and graphs and images to convey the information you have researched is encouraged. Please cite the references you use in the narrative of the work (e.g., websites, reports, newspapers, briefs, white papers, journal articles, etc.) A bibliography of works cited should be included in the report. Your report should be comprehensive.

Keep in mind that although you will be using research to inform your work, the audience of this work is your team, as well as the community, so plan how you will prepare the report. I encourage you to be creative in your presentation and to search on the format of how other Community Health Assessments were prepared.

Part I – Demographic Information

What is the community like? Where is it? Your team has not been to this community before – you need to virtually bring the team to this community. Report on indicators that would help you describe and determine the health of the population in the community (e.g., gender, age, race/ethnicity, birth rates, morbidity and mortality rates,

oral health care, infectious disease prevalence, chronic disease prevalence, etc.) What is the family structure generally like in the area? What is the culture – practices, nutrition, etc.? What are the employment venues and occupations? Describe the transportation and housing options in the community. Include other indicators that will help you report on the demographic information for the community. This section of the assignment is worth 33 points.

Part II – Health Status of the Community

What are the major health issues that are affecting the population? Why are these health issues for the community? What are the root causes of these health problems? How will these issues potentially impact your development work? How does the community access health care? Who provides the health care? Describe the public health infrastructure present in the community. What groups/organizations are working to address these issues? Are they effective? Why or why not? Based on your research, who would be an advocate your team could approach to assist with the development work – is it a local official, NGO, community coalition group, etc? Include other indicators that will help you report on the health status of the community. This section of the assignment is worth 34 points.

Part III – Recommended Solutions and Future Impact

Propose feasible solutions (e.g., policy, program implementation, evaluation) to the above-identified health issues. What stakeholders should be a part of the proposed solution and why? How would you use the science of epidemiology to monitor whether your proposed solution was effective or not? What are the potential costs of these solutions? Is there a cost-benefit rationale for implementing these solutions? Describe the risks to the population's future health (e.g., unhealthy behaviors, physical environment, social environment, education, economic circumstances, etc.) Propose how the community should prepare to respond to these potential future health risks. Describe how your findings would impact the rest of the team's development work. This section of the assignment is worth 33 points.

Tips for the Successful Completion of DPP 953

- I expect each student's work to be above average at this level of graduate study. Therefore, all written and presented work should have no spelling and/or grammar errors. Please proofread your papers – do not let your computer do it!
- Your class assignments should be well developed, well written, and should flow easily.

- Provide the background and significance of the issue and present not only evidence-based responses, but also include your thoughts and rationale.
- I recommend that you start your research on the above-described assignments early in the course.
- Please note that I am available for discussion. I view each class as a journey for both the student and me. To me, the real joy of academia is what we will both learn as we embark on this journey together!

Course Schedule:

• The Instructor reserves the right to change the following schedule as necessary, in order to meet course objectives.

Week #1

Topics: Introduction to Public Health Epidemiology and Social Determinants of Health

Lecture, Readings, Media

Chapter 1: Public Health: Organization and Function (see required text) Chapter 2: Epidemiology: The Basic Science of Public Health (see required text)

See additional readings and media posted in Canvas

Group Contract Due 7/15/20 (See Canvas)

Discussion Board #1 (See Canvas)

Group Questions: 7/15/20 Group Post: 7/17/20 Group Response: 7/19/20

Week #2

Topics: Descriptive Epidemiology Public Health Data

Lecture, Readings, Media

Chapter 3: Descriptive Epidemiology: The Significance of Person, Place, and Time (see required text) Chapter 4: Public Health and Healthcare Data (see required text)

See additional readings and media posted in Canvas

Discussion Board #2 (See Canvas) Group Questions: 7/22/20 Group Post: 7/24/19 Group Response: 7/26/20

Epidemiology Workshop #1 Due 7/26/20 (See Canvas)

Week #3

Topics: Epidemiologic Measures Analytic Epidemiology

Lecture, Readings, Media

Chapter 5: Epidemiologic Measures (see required text) Chapter 6: Analytic Epidemiology Study Design (see required text)

See additional readings and media posted in Canvas

Discussion Board #3 (See Canvas)

Group Questions: 7/29/20 Group Post: 7/31/20 Group Response: 8/2/20

Epidemiology Workshop #2 Due 8/2/20 (See Canvas)

Week #4

Topic: Infectious Disease Epidemiology

Lecture, Readings, Media

Chapter 7: Infectious Disease Epidemiology (see required text)

See additional readings and media posted in Canvas

Discussion Board #4 (See Canvas) Group Questions: 8/5/20 Group Post: 8/7/20 Group Response: 8/9/20

Epidemiology Workshop #3 Due 8/9/20 (See Canvas)

Week #5 – Community Health Assessment Due 8/14/20

See additional readings and media posted in Canvas