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Course Focus
The aim of this course is to introduce the core concepts of social and behavioral determinants and how they influence the health of individuals, communities, and populations.

Course Objectives
By the end of the course, students should be able to:
- Describe how various social and behavioral determinants impact population health.
- Critique the validity of behavioral and social science research.
- Apply the prevention paradox to a range of public health issues.
- Identify ways to measure socioeconomic status and discuss how and why income, education, occupation and wealth are associated with health.
- Explain the history, context, and mechanisms/pathways leading to health disparities.
- Discuss how neighborhood characteristics influence population health.
- Apply the work/stress model to health outcomes.
- Define social networks, social support, and social capital and describe how these constructs are associated with health.
- Compare theories of health behavior and analyze their applicability to different types of health problems and populations.
- Formulate social and behavioral change interventions that are appropriate and responsive to the social and cultural context.
- Develop logic models and evaluation plans for public health programs or policies.
- Develop program and policy implementation skills, including communication, advocacy, and media engagement.
Course Organization, Format, and Requirements
Class format consists of online modules and on-site seminars led by the instructor. The purpose of the on-site seminars is to apply concepts covered in the online modules to cases and discuss concepts within the context of clinician-led health care organizations.

Online modules
1. Prevention Paradox
2. Socioeconomic Status and Health
3. Racial/Ethnic Health Disparities
4. Neighborhoods and Health
5. Job Stress and Health
6. Social Support, Social Networks, and Social Capital
7. Health Behavior Change: Challenges and Theories

Take-home module
8. Intervention Design (readings and homework assignment)

On-site Seminars
1. Course Introduction
2. Intervention Design
3. Logic Models
4. Evaluation Design
5. Guest presentation; wrap-up

Final Course Grade Distribution
Final Course Grades will be distributed as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>1 homework assignment</td>
<td>15%</td>
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<tr>
<td>Participation in online activities (blog posts, comments)</td>
<td>25%</td>
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<tr>
<td>Participation in on-site sessions</td>
<td>10%</td>
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<tr>
<td>Final paper</td>
<td>50%</td>
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Blog Post Reflections
All responses for the blog posts should be posted online and use a short essay response format (i.e., complete sentences, paragraph form, no bullet points). Limit to 250-500 words. Introduction and conclusion paragraphs not needed. Studies and resources discussed should be referenced accordingly.

Expectations
- Submit all assignments online via the course website.
- Read assignments before the online module/onsite class, view module/attend class, and participate in discussions.
- Turn in assignments on the specified due date, unless prior permission is granted from the instructor. Late assignments will be penalized half a letter grade (e.g., 5 points) per day late.
- As detailed in the Harvard T.H. Chan Student Handbook, students are expected to adhere to the highest standards of academic honesty.
<table>
<thead>
<tr>
<th>Session #</th>
<th>Date</th>
<th>Topic</th>
<th>Objectives</th>
<th>Assignments</th>
<th>Assignment Due Date</th>
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<tbody>
<tr>
<td>1</td>
<td>9/18</td>
<td>Course Introduction</td>
<td>• Overview of course content, format, and expectations</td>
<td>None</td>
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</table>
| 2 Online  | Week of 9/25 | Prevention Paradox                        | • Apply the prevention paradox to public health issues  
• Critique the prevention paradox                                      | • Complete readings  
• View online module and complete activities  
• Post response to course blog | Due 10/8 by midnight |
| 3 Online  | Week of 10/9 | Socioeconomic Status (SES) and Health     | • Define SES and describe measures of SES  
• Articulate mechanisms/pathways between SES and health                                     | • Complete readings  
• View online module and complete activities  
• Post response to course blog | Due 10/22 by midnight |
| 4 Online  | Week of 10/23 | Racial/ethnic Health Disparities          | • Define race/ethnicity and health disparities  
• Describe forms of discrimination  
• Explain history, context, and mechanisms/pathways leading to racial/ethnic health disparities | • Complete readings  
• View online module and complete activities  
• Post response to course blog | Due 11/2 by midnight |
| 5 On-site | 11/3       | Intervention Design                       | • Identify various types of behavior change interventions  
• Develop SMART objectives  
• Formulate public health interventions that are appropriate and responsive to the social and physical context | • Complete readings |                     |
| 6 Online  | Week of 11/13 | Neighborhoods and Health                  | • Identify neighborhood and environmental factors associated with health  
• Understand the use of multilevel methods to disentangle individual and environmental factors linked with health  
• Determine modifiable neighborhood characteristics to promote health | • Complete readings  
• View online module and complete activities  
• Post response to course blog | Due 11/26 by midnight |
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<tr>
<th></th>
<th>Element</th>
<th>Date</th>
<th>Event Details</th>
<th>Course Details</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>7</td>
<td>Online module</td>
<td>Week of 11/27</td>
<td>Job Stress and Health</td>
<td>• Apply the job stress model to various health behaviors and outcomes</td>
<td>Due 12/10 by midnight</td>
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<td>• Identify modifiable psychosocial job stressors in the health care setting</td>
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<td>• Complete readings</td>
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<td>• View online module and complete activities</td>
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<td>• Post response to course blog</td>
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<td>8</td>
<td>On-site seminar</td>
<td>1/5</td>
<td>Suffolk County case</td>
<td>• Identify core components and structure of logic models</td>
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<td>• Design logic models</td>
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<td>• Complete readings</td>
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<tr>
<td>9</td>
<td>Online module</td>
<td>Week of 1/15</td>
<td>Social Support, Social Networks, and Social Capital</td>
<td>• Define social networks, social support, and social capital</td>
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<td>• Describe the function and structure of social networks</td>
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<td>• Describe how these constructs are associated with health</td>
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<td>• Complete readings</td>
<td>Due 1/28 by midnight</td>
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<td>• View online module and complete activities</td>
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<td>• Post response to course blog</td>
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<td>10</td>
<td>Online module</td>
<td>Week of 1/29</td>
<td>Health Behavior Change</td>
<td>• Understand motivators of health behavior change</td>
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<td>• Critique existing health behavior change theories</td>
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<td>• Complete readings</td>
<td>Due 2/11 by midnight</td>
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<td>• View online module and complete activities</td>
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<td>• Post response to course blog</td>
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<td>11</td>
<td>Take-home module</td>
<td>Week of 2/12</td>
<td>Homework Assignment: Intervention Design and Logic Models</td>
<td>• Apply concepts of intervention design and logic models for homework assignment</td>
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<td>• Complete readings</td>
<td>Due 3/4 by midnight</td>
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<td>• Brainstorm ideas for final paper</td>
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<td>• Homework assignment (draft logic model and 1-page description)</td>
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<td>12</td>
<td>On-site seminar</td>
<td>3/5</td>
<td>Evaluation Design</td>
<td>• Utilize logic models to design evaluation frameworks for public health interventions</td>
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<td>• Describe components and methods of evaluation</td>
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<td>• Complete readings</td>
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<tr>
<td>13</td>
<td>On-site seminar</td>
<td>4/28</td>
<td>Guest presentation</td>
<td>Peter Pisters, MD, MHCM President and CEO of University Health Network in</td>
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<td>Course wrap-up</td>
<td>Toronto</td>
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<td>Final paper due Sunday, 5/6 by midnight</td>
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</table>
1. Onsite Session – Course Introduction 9/18/2017

Course Overview
- What are the social determinants of health? How and why are social factors relevant in the clinical and health care settings?
- Course and syllabus overview
- Overview of online module navigation

No readings or assignments due

2. Online Session – The Prevention Paradox Week of 9/25/2017

Readings:

Blog discussion prompt
Describe one adverse health-related outcome (i.e., chronic disease, infectious disease, injury, drug abuse, mental health conditions) that is preventable in your field of work. Discuss how the prevention paradox can be applied (or does not apply) to this outcome among relevant populations in your practice.

3. Online Session – Socioeconomic Status and Health Week of 10/9/2017

Readings:
Blog discussion prompt
Describe your patient population’s SES and how patients’ SES may influence patterns in their health behaviors and health status. Discuss how your practice/clinic might address some of the challenges that lower SES patients may face to achieve better health.

4. Online Session – Racial/ethnic Health Disparities

Readings

Blog discussion prompt and activity
- Describe discriminatory practices or instances (can be based on gender, weight, race, religion, SES, disability status, sexual orientation…etc) that you have observed or in the health care setting (can be intentional or unintentional, subtle or overt, internalized, interpersonal, or institutional). Discuss potential ways to address and prevent discrimination in the health care setting.
- Complete at least one of the Harvard Implicit Association Tests (IAT). https://implicit.harvard.edu/implicit/selectatest.html

5. Onsite Session – Intervention Design

Readings


5. Suffolk County case ([PDF on course isite](#))

**Discussion Questions**

- How do you identify the determinants driving heart disease in Suffolk County?
- Given limited resources, how will you decide which strategies to invest in to target heart disease in Suffolk County? Who or what will be accountable for the implementation, monitoring, dissemination, and financing of these strategies?

### 6. Online Session – Neighborhoods and Health  Week of 11/13/2017

**Readings**


**Blog discussion prompt**

Describe neighborhood features (physical, service, and/or social) that influence the behaviors and health of your patients. Would changing any of these features be enough to motivate patients to utilize health services, preventive care, and/or engage in healthier behaviors? Discuss why or why not.

### 7. Online Session – Job Stress and Health  Week of 11/27/2017

**Readings**

Blog discussion prompt
Reflect and describe the psychosocial aspects of your job that need improvement in order to enhance any of the following: provider health; provider performance; provider-patient relationships. Discuss how this might be feasibly implemented.

8. Onsite Seminar – Logic Models

Readings
3. Suffolk County case (PDF on course isite)

Discussion Questions and Activities
- Design a logic model for the class-developed intervention.
- What components should be included? How are inputs, outputs, and outcomes linked?

9. Online Session – Social Support, Social Networks, and Social Capital

Readings
http://journals.plos.org/plosmedicine/article/asset?id=10.1371%2Fjournal.pmed.1000316.PDF


**Blog discussion prompt**

Reflect on the role of social support, social networks, and social capital in your patients’ health. Discuss situations (if any) in which you might support a health intervention that includes improving social support. What are potential barriers to delivering these interventions? How might clinicians access or create social networks to help patients?

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**10. Online Session – Health Behavior Change**  Week of 1/29/2018

**Readings**


http://www.ijbnpa.org.ezp-prod1.hul.harvard.edu/content/3/1/11


**Blog discussion prompt**

How can we achieve balance between personal responsibility and the "nanny state" to improve population health? What is the role(s) of the health care system and health care providers in this debate?

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**11. Take-home Session & Homework Assignment**  Week of 2/12/2018

**Readings**

1. Revisit readings on Intervention Design and Logic Models

**Assignment**

2. Brainstorm ideas for an exposure, outcome, and population-based intervention of interest
for your final paper.

3. Prepare and submit your homework assignment (1-page logic model and 1 page text description). This homework assignment will serve as a foundation for what you propose in the final paper.

****Homework Assignment DUE by Sunday, March 4th at midnight****

12. Onsite Session – Evaluation Design  

Readings

1. McNamara C. Basic Guide to Program Evaluation (Including Outcomes Evaluation) © Copyright Carter McNamara, MBA, PhD, Authenticity Consulting, LLC.  
   http://managementhelp.org/evaluation/program-evaluation-guide.htm#anchor1577333 
   (scroll down to read through the contents on the entire website)

   https://www.cdc.gov/mmwr/PDF/rr/rr4811.pdf

3. Sugary Drink Legislation in Massachusetts case (PDF on course isite)

Discussion Questions and Activities

- Identify and operationalize three outcome indicators that you would want to measure for a sugary drink tax. Justify why you would want to measure these indicators.
- Discuss and determine key evaluation components needed to assess the impact of a sugary drink tax.
- What type of study design(s) might achieve an appropriate balance between feasibility and establishing causal inference?

13. Onsite Session – Guest Presentation & Course Wrap-Up  

Peter Pisters, MD, MHCM. President and CEO of University Health Network in Toronto. MHCM alumnus (cohort 14).

Readings

None

Teaching Cases

1. Kane NM, Alidina S. Heart Disease in Suffolk County. Copyright © 2008 by the President and Fellows of Harvard College.

Homework Assignment

All responses for the homework assignment should be double-spaced, with 1-inch margins, typed in 12-font, using a short essay response format (i.e., complete sentences, paragraph form, no bullet points. Introduction and conclusion paragraphs not needed). Cite references accordingly.

DUE DATE: Sunday, March 4th by midnight

Provide the following information in no more than 2 pages.

- Identify and describe a social or behavioral determinant of health issue (exposure) related to a health outcome that is relevant to a population of interest. (1/2 page)
- Briefly describe an intervention or policy that can be feasibly implemented in the clinic or health care setting that you think might address the association between exposure and outcome and improve health outcomes for your target population. (1/2 page)
- Construct a logic model detailing how and why the proposed intervention or policy would work. (1 page)
**Final Paper Guidelines**

**Context**
Currently, traditional methods of preventing and treating adverse health outcomes, particularly chronic conditions, are ineffective. **Identify** a social or behavioral determinant of health issue relevant to your field of work, **propose** an intervention that can be feasibly delivered to reduce adverse health outcomes associated with the social or behavioral determinant of health, and **design** a logic model and evaluation plan for the proposed intervention.

The paper should be *no more* than 8 pages excluding references and figures, *double-spaced*, with 1-inch margins, typed in 12-font.

**DUE DATE:** Sunday, May 6th by midnight

**I. Introduction (~1-2 pages)**
1. Describe your chosen social or behavioral determinant of health issue (exposure), related health problem or issue (outcome), and target population. Include cited references from scientific articles and sources.
2. Identify 2-3 specific health objectives for your target population. Provide justification for the significance of addressing these objectives.

**II. Intervention (~3-4 pages)**
- Propose an innovative intervention or policy approach to address your health problem that can be feasibly delivered in the clinical or health care setting. In designing your intervention, you may develop a novel intervention or adapt from existing interventions or policies to better suit your target population and exposure and outcome of interest. Include an overview of the intervention or policy, including the following:
  1. Description of intervention concept, components and strategies
  2. Evidence base and justification for the intervention
     - Sample discussion points include: theory base, advantages of intervention compared with other potential interventions, existing research to support the evidence base for the intervention, feasibility, sustainability...etc.).
  3. Description of who will deliver the intervention and resources needed
  4. Identification of stakeholders/partners needed for the intervention
  5. Brief discussion of potential for sustainability and scalability

**III. Logic Model (1 page)**
1. Develop a logic model (include this as an appendix) that visually displays the rationale behind your intervention and your outcomes of interest.
2. Describe your logic model (1 page) and HOW the intervention will lead to the intended outcomes.

**IV. Evaluation (~2 pages)**
Describe and justify the evaluation plan, including:
1. Who will conduct the evaluation?
2. Evaluation design components:
   a. *Comparison groups* - will there be a comparison group that is not exposed to the intervention? If so, to what extent will the comparison group be equivalent or comparable to the intervention group? What will the comparison group receive?
   b. *Intervention assignment* - randomized vs. nonrandomized
   c. *Sample* - Will you collect data on all participants? A random, representative sample? Oversample any groups? How will you recruit them?
   d. *Measurement time points* (number, frequency, and evaluation duration)

3. Measures
   a. *Measures/Indicators* (e.g., knowledge, attitudes, health behaviors, health status/conditions, sociodemographics, community-, organizational-, or environmental-level characteristics)
   b. *Target population and data sources*
   c. *Type of data* (quantitative, qualitative, mixed)
   d. *Measurement instruments and resources*
      i. Identify validated instruments (if existing) that assess the measures/indicators you have specified and adapt as needed.
      ii. Include measurement tools (e.g., surveys) as appendices (does not count towards page limit).

4. *Data collection methods* (e.g., surveys, focus groups, interviews) and *platform* (in-person, phone, online)

5. How will you define “success” of your intervention? How will results be used?