**Course Information**

Course Title: Health & Science  
Course Code: GS/HLTH 5010 3.0  
Term: Winter 2019  
Class Time: Wednesdays 11:30 AM – 2:30 PM  
Location: VC 119

**Instructor:** Professor Claudia Chaufan  
**Office:** HNES 418  
**Tel:** N/A  
**Email:** cchaufan@yorku.ca  
**Office hours:** Wednesdays 10 AM to 11 AM, 3 PM to 4 PM  
By appointment

**Course Description:**
Introduces students to a range of areas of scientific inquiry that impact physical and mental health, comparing and contrasting the biomedical, behavioral, environmental, and politics of health paradigms. Investigates the emergence, reproduction, and uneasy coexistence of these paradigms in the context of the history and development of public health science, global capitalism and the nation-state. Explores the integration of scholarship, practice, and citizen activism.

**Revised by:** Prof. Claudia Chaufan

**Date:** November 24, 2018
Genomics is offering new possibilities for therapies and treatments for complex diseases. It is helping researchers discover why some people get sick from certain infections, environmental factors, and behaviors, while others do not. For example, some people exercise their whole lives, eat a healthy diet, have regular checkups, and die of a heart attack at age 40. There are also people who smoke, never exercise, eat unhealthfully and live to be 100. Genomics may hold the key to understanding these differences.

National Human Genome Research Institute (genome.org), 2014

There cannot be any doubt that the typhoid epidemic is the result of the poverty and underdevelopment of Upper Silesia. I am convinced that if you changed these conditions, the outbreak would not recur.

Rudolf Virchow, Report on the Typhus Epidemic, 1848

Course description

The concept of health – i.e., the answer to the question “what is health” -- and the science of health – i.e., the systematic study of health and of the causes of health or ill-health through observation, experiment, or theoretical reflection -- are embedded in, and informed by, the power dynamics,
institutional arrangements, and normative structures of human communities at particular historical
times. As the contrasting quotes above illustrate, different ideas about what is, what promotes, or
what undermines, health have very tangible consequences on human welfare, as they inform and
legitimate which courses of action will be taken and which ones will be neglected or ignored to protect
and promote human welfare.

The assumption underlying this graduate seminar is that in order to understand health or the scientific
attempts to study and influence health, including what explains health differences among different
social groups, we must uncover the ideologies that inform conceptions of health and science and
examine the political, economic, socio-cultural, and normative structures of society. We must also
develop counter-hegemonic discourses and practices to challenge dominant narratives about health
and the power dynamics that produces and maintains hegemonic ideologies and structures.
Therefore, seminar participants will read about, reflect on, and engage with, this power dynamics, the
questions it invites, and its implications for health, well-being, and health equity.

Because the field is very broad and potentially boundless, by necessity we will discuss only selected
authors, issues, and themes in the history and evolution of the concept and science of health, using
this selection as case studies of, and lenses into, the underlying power dynamics that informs health
theorizing, practices, and policies. We will also explore how to integrate the insights we gain into our
own lives as health scholars, practitioners, and activists.

Course learning outcomes
Upon completion of the course, students will be able to:
✓ Define the concepts of health, science, ideology, and human nature.
✓ Compare different conceptions of health and science across time and place.
✓ Identify key assumptions underlying diverse scientific understandings of health
✓ Evaluate the ideological role of the dominant narrative in the normalization of health
inequalities and develop tools of critical analysis to unpack this narrative
✓ Assess the implications of different conceptions of health and science for health and social
policy, practice and equity
✓ Articulate steps to take as scholars, citizens, and activists towards healthier public policy
and greater equity.

Course readings
All required readings will be available on the course website. To prepare, I strongly recommend that
books were published around 30 and 15 years ago, respectively, they both provide a highly readable,
yet intellectually sophisticated, introduction to the politics of biological, psychological and behavioral
development, a topic that is critical to understand the politics of health. This is especially important if
you have little or no background in the biological/mental health/health sciences, but even if you, do
these readings will offer novel insights. Inexpensive copies of both books are available online.

Course organization
This course is organized as a seminar, which means that, as with any seminar, its quality will depend
almost entirely on the quality of student preparation and participation. I will open the session with brief
remarks to lay out the framework of these themes and we will dedicate the remaining time to analyze
and discuss the implications and applications of weekly readings, led by rotating student facilitators.
The syllabus includes questions to orient your reading. Discussions will be complemented with critical
film, media, science and policy literature analyses and occasional guest speakers.

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1In the context of this seminar, “health” will always imply both physical and mental/emotional health
Course requirements

Participation: reflecting the importance of a solid preparation by seminar participants, it includes:

1. Active attendance: New York filmmaker Woody Allen once said that “95% of life is showing up, and indeed, the 1st requirement of this seminar is excellent attendance. Arriving on time, staying through the duration of the meeting, completing the required readings prior to meetings, and contributing your best to facilitated discussions will be worth 15% of your grade, yet 100% of your learning experience. I will do my best to make seminar activities worth your time and I trust that I will succeed if everybody collaborates. If you must arrive late/leave early, do so only exceptionally and alert me ahead of time.

2. Facilitation: Seminar participants will facilitate discussions on a rotating basis, individually or in pairs. We will distribute topics in our first meeting and I will provide guidelines to conduct productive discussions, keep track of time, and clarify/enrich/expand/redirect discussion when appropriate.

3. Weekly reflections: these reflections (250 to 350 words, 10 of 12) are designed to be written in 10 or 15 minutes and to provide you with a space to reflect on the insights you draw from engaging with weekly instructional material (readings/viewings) & activities. These are not summaries of material but reflections that show that you have engaged with both and elaborated on the implications for policy, equity and your own work. Because there is much going on in everybody’s lives reflections must be completed while your thoughts are fresh, no later than Sunday of each week, by 11 PM.

Research project: Seminar participants will conduct a research project and write a paper addressing the political dynamics underlying a topic of their choice with potential for publication in a refereed journal or related to their Major Research Paper or doctoral dissertation. I will provide a prompt to guide the investigation and we will devote class time to select a research topic and question, discuss the proposal, and peer-edit drafts. Steps in the project include:

1. Roadmap: On week 6, students will submit a proposal of their research project/paper (i.e., roadmap), including a working title, a research question or hypotheses, a brief background on the issue, one or two lines on its potential implications for health policy and equity, and a tentative list of sources that can provide information on the topic. This proposal should also make clear, even if tentatively, how the topic is relevant to conceptions of health and science. I will provide a detailed outline to prepare this proposal and we will hold a peer review session for students to share their work and provide feedback to one another.

2. First draft: On week 11, students will submit a full first draft of their research project, as close to the final draft as possible. We will hold a peer review session and I will also provide detailed feedback on this draft via mandatory conferences (in person or via Skype).

3. Presentation: In our last meeting, students will offer a brief, 5-minute presentation (modeled after the program “3-minute theses, more info on our course Moodle website) laying out their topic, research question, relevance to health and politics, findings, and practice, policy and equity implications of the investigation. I will provide a detailed prompt to prepare this presentation.

4. Final draft: The final draft will be turned in one week after the last meeting. Evaluation will be based on the originality and depth of the research, the insight of the analysis, its relevance to the themes and learning objectives of the seminar, and the quality of the writing and formatting (e.g. sentence structure, free from typos or spelling errors, numbered pages, etc.).
Course evaluation
Evaluation will be based on active attendance, preparation and participation, research proposal/1st and final draft/presentation, and timely submission of work. Marks will be distributed as follows:

**Participation:** 30%
- *Active attendance:* 15%
- *Facilitation:* 5%
- *Weekly reflections:* 10%

**Research project:** 70%
- *Roadmap:* 5%
- *First draft:* 10%
- *Presentation:* 5%
- *Final draft:* 50%

**Lateness policy:**
If you need an extension for your final project, please discuss it with me before the deadline so that I have time to consider your request. Unless prearranged, late papers will receive 5 p. less per day. Given the progression of the research project and the tightness of the term extensions for the proposal (roadmap), first draft and presentation cannot be granted. If you run into trouble with this portion of the assignment, please bring at least a basic outline. Some credit is better than no credit!

**Accommodations:**
Please refer to the guidelines and academic accommodation for students with disabilities, counseling and disability services, for detailed description on the responsibility of course directors and students. If you require accommodations, please let me know no later than the second meeting, preferably in person, so that I can better support your learning.

**Course schedule @ a glance**

**Unit 1**

*Key concepts and theories:* Health, science, ideology, human nature and social control

Module 1 - The concept of health
Module 2 - The concepts of science and ideology
Module 3 - Human nature and a science of health
Module 4 - The concept of health as social control – part 1
Module 5 - The concept of health as social control – part 2

**Unit 2**
A history: From capitalism, nationalism, and a “science” of race, to social medicine and public health science, to “race” medicine and public health genomics

Module 6 - Capitalism, nationalism, social medicine and public health science
Module 7 - The “biology” of race and the making of (global) capitalism
Module 8 - Biology as ideology
Module 9 - The trouble with “race” medicine
Module 10 - How much can public-health genomics contribute to (public) health?

Unit 3

Strategizing policy and political action: Towards an emancipatory science of health.

Module 11 - Developing a critical science of health
Module 12 - Rethinking human nature, democratizing health and science

General plan @ a glance

<table>
<thead>
<tr>
<th>Module/Date</th>
<th>Topic</th>
<th>Activity</th>
<th>Assignment due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 / Jan. 9</td>
<td>The concept of health</td>
<td>✓ Introduction to course participants, objectives, organization, requirements.</td>
<td></td>
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<td></td>
<td></td>
<td>✓ Distribution of weekly facilitation of discussion</td>
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<td></td>
<td></td>
<td>✓ Discuss weekly readings</td>
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<tr>
<td>2 / Jan. 16</td>
<td>The concepts of science and ideology</td>
<td>✓ Discuss weekly readings</td>
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<td></td>
<td></td>
<td>✓ Critical analysis</td>
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<tr>
<td>3 / Jan. 23</td>
<td>The concept of human nature and a science of health</td>
<td>✓ Discuss weekly readings</td>
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<td></td>
<td></td>
<td>✓ Critical video analysis</td>
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<tr>
<td>4 / Jan. 30</td>
<td>The concept of health as social control – Part 1</td>
<td>✓ Research project: brainstorm topic/question</td>
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<td>✓ Discuss weekly readings</td>
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<td></td>
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<td>✓ Critical media analysis</td>
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<tr>
<td>5 / Feb. 6</td>
<td>The concept of health as social control – Part 2</td>
<td>✓ Discuss weekly readings</td>
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<td></td>
<td></td>
<td>✓ Guest lecture: Dr. Erin Dej</td>
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<tr>
<td>6 / Feb. 13</td>
<td>Capitalism, nationalism, social medicine and public health science</td>
<td>✓ Research project: peer review roadmap</td>
<td>Research project: *Roadmap (hard copy draft for peer review)</td>
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<tr>
<td></td>
<td></td>
<td>✓ Discuss weekly readings</td>
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</tbody>
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# Course schedule (detailed)

## UNIT 1

### Key concepts and theories: Health, science, ideology, human nature and social control

#### Module 1

**The concept of health**

<table>
<thead>
<tr>
<th>Guiding questions</th>
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</thead>
<tbody>
<tr>
<td>✓ What is health?</td>
</tr>
<tr>
<td>✓ What drives differences in conceptions of health over time and place?</td>
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<tr>
<td>✓ How do different conceptions of health reveal its political nature?</td>
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</tbody>
</table>

### Required readings


### Activities

- ✓ Facilitated discussion of weekly readings
- ✓ Critical video analysis: How personalized medicine will transform health care.

### Further readings and viewings

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## READING WEEK

**February 16 – February 22**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Activities</th>
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</thead>
</table>
| 7 / Feb. 27 | The “biology” of race and the making of (global) capitalism | ✓ Discuss weekly readings  
✓ Guest lecture: Dr. Dahlia Wasfi, “Health and Empire” |
| 8 / March 6 | Biology as ideology | ✓ Discuss weekly readings  
✓ Critical video analysis |
| 9 / March 13 | The trouble with "race" medicine | ✓ Discuss of weekly readings  
✓ Critical analysis of academic literature |
| 10 / March 20 | How much can public-health genomics contribute to (public) health? | ✓ Discuss weekly readings  
✓ Interactive lecture: Prof. Claudia Chaufan, “How much can genomic science contribute to public health” |
| 11 / March 27 | Developing a critical science health | ✓ Research project: peer review first draft  
✓ Group-led discussion  
Research project:  
*First draft (Moodle AND hard copy)* |
| 12 / April 3 | Rethinking human nature, democratizing health and science | ✓ Research project: presentations & collective reflections  
✓ Conclusions  
Research project:  
*Presentations  
*Final draft (Moodle AND hard copy, April 6)* |
Module 2
The concepts of science and ideology

Guiding questions
- What is ideology?
- What is science?
- A science of ideas or the ideology of science?

Required readings
Sokal, A. (2014). "What is science and why should we care?" Scientia Salon

Activities
- Introduction to course participants, objectives, material, readings and requirements.
- Facilitated discussion of weekly readings
- Students sign on to facilitate discussion
- Critical image analysis: What is science? What is “ideological” about it?
- Weekly reflection

Further readings and viewings

Module 3
Human nature and a science of health

Guiding questions
- What is human nature?
How can science (social psychology) inform how we understand human nature, and how can this understanding in turn inform how we conceptualize health?

How can such conceptions of human nature inform our understanding of the political nature of health and our ethical decisions about health issues, i.e., health equity?

**Required readings**

Summaries of Solomon Asch, Stanley Milgram, and Philip Zimbardo’s classic experiments and social psychology. [https://www.simplypsychology.org/](https://www.simplypsychology.org/)


Aronson, E. (2001). Nobody left to hate: Teaching Compassion after Columbine (Ch. 1)


**Activities**

- Facilitated discussion of weekly readings
- Critical video analysis: How personalized medicine will transform health care.

**Further readings and viewings**


**Module 4**

**The concept of health as social control – Part 1**

**Guiding questions**

- What is social control? Who exerts control over whom in society?
- How do the concept of health and the institution of medicine exert social control? What are some potential effects of this control on interpersonal relationships, social practices, and institutional arrangements, normative structures and health equity?
- How can this control be resisted? Should it or should it not be resisted?

**Required readings**


**Activities**

- Research project: brainstorm topic/question
- Facilitated discussion of weekly readings
- Critical video analysis: Assessing ADHD in children

**Further readings and viewings**


The Battle of Algiers, Gillo Pontecorvo, Italy and Algeria, 1966
[https://youtu.be/m-lWF100yTM](https://youtu.be/m-lWF100yTM)

Edward Said On Orientalism | 1998 Documentary
[https://www.youtube.com/watch?v=3MYYDEj4flU](https://www.youtube.com/watch?v=3MYYDEj4flU)
Module 5
The concept of health as social control – Part 2

Guiding questions
✓ How do conceptions and ideologies of health shape theories of health?
✓ What is the social control role of neoliberal governmentality?
✓ What are the practice and policy implications of health ideologies, theories and practices?

Required readings
Foucault, M. (1973), Selections from "Birth of the Clinic"
Goffman, E. (1961), Selections from "Asylum"

Activities
✓ Facilitated discussion of weekly readings
✓ Guest lecture: Dr. Erin Dej, "The Making of the DSM"

Further readings and viewings
Michel Foucault Beyond Good and Evil, Truth and Subjectivity, & The Culture of the Self (lectures on you tube)

UNIT 2
A history: From capitalism, nationalism and a “science” of race, to social medicine and public health science, to “race” medicine and public-health genomics

Module 6
Capitalism, nationalism, social medicine and public health science
Guiding questions

✓ What is the relationship between the birth of public health science/social medicine, the nation-state, and capitalism, and what does this relationship reveal about the interplay between science and forms of political/social/economic organization?

✓ How does the interplay between science, health and politics shape causal accounts of health and disease, health promotion, disease prevention, and treatment?

Required readings


Activities

✓ Research project: peer review roadmap

✓ Facilitated discussion of weekly readings

Further readings and viewings


Module 7
The “biology” of race and the making of (global) capitalism

Guiding questions

✓ How have the health sciences contributed to the imperial/colonial enterprise and to the making of (global) capitalism?
What “ideological work” do the concept of race and the field of “race science” have performed (and continue to perform) in this enterprise? What ideological work has the concept of IQ performed in particular? How do these processes illuminate the relationship between science and social control?

How does the political economy of colonial rule draw from conceptions of health and illness, and how do such conceptions reinforce or challenge the political economy of colonial rule?

### Required readings

### Activities
- Guest lecture: Dr. Dahlia Wasfi, “Health and Empire" (Skype)
- Mid-term check in
- Facilitated discussion of weekly readings

### Further readings and viewings

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### Module 8
Biology as ideology

### Guiding questions
- How may differences in human phenotypes (e.g. inequalities in health) reflect relations of power in society?
How may scientific explanations of human differences (e.g. inequalities in health) reflect the use of biology as ideology (i.e. social control tool)?

How may these insights help understand the relationship between capitalism and developments in the health sciences (medical breakthroughs, “race” science, genomics, etc.)?

**Required readings/viewing**

**Activities**
- Facilitated discussion of weekly readings
- Critical video analysis -- DDT, weapon against disease

**Further readings and viewings**
Conversations with history: Science and Politics -- An interview with Richard Lewontin (YouTube)
The Concept of Race with Richard Lewontin (YouTube)
Gene, Organism and Environment with Richard Lewontin (YouTube)

### UNIT 4
#### The trouble with “race” medicine

### Module 9
The social construction of race

**Guiding questions**
- How has racialization shaped research, practice and policy in the health sciences? What makes racial categories explaining health and disease differences persuasive? How can it be challenged?

- What are the implications of these ideas and different concepts of race for health policy and equity?

**Required readings**

**CRITICAL MEDIA ANALYSIS**

**Activities**
Facilitated discussion of weekly readings
Critical analysis of academic literature

**Further readings and viewings**

**Module 10**
How much can public health genomics contribute to (public) health?

**Guiding questions**
- What are the three critical problems of the public health genomic approach to common diseases? What evidence supports defenders and critics? How is the nature / nurture question answered (or not) through the study of twins?
- How can a critical assessment of public health genomics and twin studies help us understand the nature of health, disease, and inequalities in the distribution of disease? How can it help us understand science as a means of social control?
- How do these issues relate to health policy and equity?

**Required readings**

*Supporters of genomic paradigm*

*Critics of genomic paradigm*

**Activities**
- Critical comparative discourse analysis on the diabetes epidemic
- Interactive lecture on public-health genomics, Prof. Claudia Chaufan

**Further readings and viewings**
### Module 11
**Developing a critical science of health**

#### Guiding questions
- How can we apply theories and concepts learned to our own specific interests?

#### Required readings
None. Time to work on best possible first full draft of research project.

#### Activities
- Research project: peer review of first full draft

#### Further readings and viewings
None

### Module 12
**Rethinking human nature, democratizing health and science**

#### Guiding questions
- How can rethinking human nature help us to rethink the meaning of a science of health?
- How can science be "democratized" to become a tool for human emancipation? What would such a science look like?

#### Required readings
Olin Wright, E. (2009), The Task of an Emancipatory Social Science, in *Envisioning Real Utopias*. Available from: [http://www.ssc.wisc.edu/~wright/Published%20writing/UtopiasCh2.pdf](http://www.ssc.wisc.edu/~wright/Published%20writing/UtopiasCh2.pdf).

#### Activities
- Research project:  
  - Presentations & collective reflections  
  - Final draft due April 6 (Turnitin and hard copy – please refer to “lateness policy”)  
- Conclusions

#### Recommended readings