Objectives
This course introduces participants to the science and practice of cancer prevention and control. The course emphasizes current controversies and events, with a focus on the interdisciplinary nature of the field. Because cancer prevention and control encompasses a multitude of topics, the course is not comprehensive. Instead, learning focuses on selected topics. You are, of course, free to read as widely on the topics assigned, or related others, as you wish, and to share whatever questions you may have, or knowledge you may glean, with the class during our discussions.

Assignments and Grading - Summary
*Seminar:* An advanced or graduate course often featuring informality and discussion. *(Webster’s New Collegiate Dictionary)*

The class is a seminar. Most sessions will feature short student presentations and class discussions. Presentations will focus on the assigned readings. Discussion will build on the presentations and readings. In addition, several experts in cancer prevention and control will be guest speakers during the course.

Some class work is organized through groups. The number of groups and individual group assignments will be determined once we have a final class roster. We will aim for four equal-sized groups.

The course has three graded assignments.

1. **Seminar Presentations and Participation (40%)**
   
   The purpose of the seminar presentations is to gain knowledge and to stimulate discussion of issues in cancer prevention and control. For most seminar sessions, selected readings are assigned to everyone to read and other articles are assigned to each group. A representative from each group will present and critique the group’s assigned article. Over the course of the semester, students are expected to make an equal (or a nearly equal) number of seminar presentations. Students are also expected to contribute to each class discussion.

2. **Debates (30%)**
Each student will participate in a debate. Debate groups will be determined when we have a final class roster. The topic for each debate will be a current controversy in cancer prevention and control that the NC Advisory Committee on Cancer Coordination and Control must confront. Each group will constitute a team of experts representing the 'pro' or 'con' side of the issue. Each group will try to convince the Committee to adopt their position on the issue.

3. **Priority Brief – Elevator Speech (30%)**

Each student will prepare a written brief for state legislators that advocates a cancer prevention and control action that will lower North Carolina’s cancer burden.

**Details**

**Readings**

Please read the readings marked “everyone,” and those assigned to your group for the day. We recommend you also look at the abstracts of papers assigned to other groups. In addition to journal articles and other short pieces, we will discuss Atul Gawande’s recent book, *Being mortal: medicine and what matters in the end*, on Tuesday, November 29. This book has been assigned as UNC’s 2016 summer reading and cost $15.60 at Student Stores.

**Seminar Presentations**

We’ll be using Michael O’Malley’s Seminar Presentation Guidelines:

#1 Relax.

#2 Do the impossible. Briefly tell us what we should know about the article(s). You have *seven* minutes to present. You don't have time to present every detail. Focus on the most important issues.

Here are key issues to consider:

* **Basic Facts**
  Who did the study, when, where? What kind of a study was it -- case/control, randomized controlled trial, etc? How big was it? Who paid for it?

* **Purpose**
  What is/are the main point(s) of the study? What is/are the main hypothesis or hypotheses?

* **Results**
  What are the most important findings?

* **Good, Bad, Ugly**
  What are the study's major strengths and weaknesses?

* **Punch Line**
  Given the above, what is the study's conclusion and do you buy it?
**Why Should We Care?**
What is the study's and or result's relevance for cancer prevention and control? Or, why did we have you read this?

**What else?**
Please conclude with a good discussion question.

Most but not all articles will lend themselves to the above outline. Some articles will more closely resemble review or data summary articles rather than analytic studies. Do the best you can.

And, whenever possible, resist the temptation to conclude with “more research is needed.” When that urge hits you, click the following link:


**#3** Re read Rule #1.

Here is how the seminar sessions will generally work:

Each group will be assigned readings for which they are responsible. A representative from each group will take [seven*](http://www.theonion.com/article/new-study-shows-people-with-panic-disorders-respon-20892) minutes to present the main ideas and offer a brief review of the paper's/study's strength and weaknesses. Again, please conclude with a good discussion question.

Each group will decide who should make the presentation on a given date. Each member of the group should present about the same number of times during the semester. The math may not always work out so that everyone is equal, but it should be close.

It’s up to each group to determine to what extent you will collaborate or work independently to prepare each presentation. Some groups, for example, might choose to meet outside of class time to prepare. Others might prefer just to share presentation notes with other group members a day or two before class for feedback. Your group will find the model that suits your styles and schedules.

You don’t need props or power points for your presentations. If you use visuals, keep them simple. Limit them to handouts, please.

We need to be done with all four presentations in about half an hour. Following all the presentations, the class as a whole will discuss the general themes of the articles, and address questions, comments, etc.

To conclude each day’s discussion, the class will collectively generate a succinct bullet point summary of the day’s main points. The teaching team will edit and compile these summaries in a class document for you to have for the future.
Grading will be individually, not for the group as a whole. The grade will be based 80% on quality of content (how well you described and critiqued the article) and 20% on quality of presentation (clarity, organization, style).

**Guest Speaker Days**
The procedure on guest speaker days will vary to some extent from speaker to speaker. However, the basic idea is that speakers will present then answer questions or lead discussion, staying with the class for 40-50 minutes. Upon their departure, students will be asked to spend a few minutes writing a SHORT reflection statement (3 – 4 sentences). You will not turn this reflection in. It will be shared in class to spur further discussion.

Readings are assigned for most guest speaker days. In most cases, the assigned readings are for everyone to read, although on some occasions we have assigned different readings to each group. We will *not* have student presentations on guest speaker days, even when groups are assigned different readings.

In addition to the readings, please spend some time looking over our guests’ bios in advance to learn about their work. (Links provided in reading list).

**Debate Process**
October 11th and 13th we will have debates. The NC Advisory Committee on Cancer Coordination and Control is meeting with us to consider adopting a policy position on two issues. (Well, not really. Students not participating in each debate will constitute the Committee).

In a semi-formal point/counterpoint discussion, the Committee has given each expert group 12 minutes to present a case using PowerPoint (or other visual aids) for or against the position. The first group to present will be decided by a random process (coin flip).

Following the initial presentations, each group will have three minutes to collect thoughts and then five minutes for rebuttal of the opposing viewpoint. Following the rebuttals, each group will have three minutes to collect thoughts and then present a two minute concluding summary.

Following the presentations, rebuttals, and summaries, the moderator will allow questions from the Committee. Questions will be directed to one group or the other; however, both groups will be allowed to respond.

Following the question and answer period, the Committee will vote whether to adopt the policy position.

We’ll *really* have to stick precisely to the time guidelines.* Please come on time and be prepared to start right away at 3:30. Load any powerpoints you may be using before the class. Here are the guidelines in table format:
**Steps in debate process**

<table>
<thead>
<tr>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committee votes on issue. Tallies kept secret.</td>
</tr>
<tr>
<td>First debate group presents its case.</td>
</tr>
<tr>
<td>Second group presents opposing position.</td>
</tr>
<tr>
<td>Debaters collect their thoughts.</td>
</tr>
<tr>
<td>Second group rebuttal</td>
</tr>
<tr>
<td>First group rebuttal</td>
</tr>
<tr>
<td>Debaters collect their thoughts.</td>
</tr>
<tr>
<td>First group presents concluding summary.</td>
</tr>
<tr>
<td>Second group presents concluding summary.</td>
</tr>
<tr>
<td>Committee asks questions.</td>
</tr>
<tr>
<td>Committee votes.</td>
</tr>
<tr>
<td>Class compares, discusses pre/post debate tallies.</td>
</tr>
<tr>
<td><strong>Total time</strong></td>
</tr>
</tbody>
</table>

The debate outcome/vote is **not** related to students’ grades!

Debate grades will be individual, and will be based upon quality/accuracy of the content provided, rhetorical quality of the position (logic, etc.), and quality of the presentation (clarity, appropriate slides, timing, etc.). In addition, the ability to think on one’s feet, as demonstrated in rebuttal and summary, will also be considered. Preparation, including research into the opposing position, helps considerably.

**Policy brief**

Each student will prepare a written 500 word* brief for state legislators that advocates a cancer prevention and control action that will lower North Carolina’s cancer burden. The chosen action will be a specific intervention or a policy (e.g., institute a free QuitLine) rather than a general concept (increase smoking cessation). The brief should identify the action, explain why it will lower cancer burden, and demonstrate that the proposed action will be effective.

Please let us know what policy or action you will be writing about by Thursday, **November 10**. Send this information to the TAs and Jo Anne via email. Briefs are due (submitted via Sakai) on Monday, **December 12, at noon**, though we would be delighted to receive them as early as December 8 or 9.

You should include references. They do not count against your word limit.

*The Power of Brevity*

From the Presidential Sublime to the Ridiculous
Lincoln’s Gettysburg Address – Two Minutes, 278 Words
November 19, 1863

Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

But, in a larger sense, we can not dedicate -- we can not consecrate -- we can not hallow -- this ground. The brave men, living and dead, who struggled here, have consecrated it, far above our poor power to add or detract.

The world will little note, nor long remember what we say here, but it can never forget what they did here. It is for us the living, rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us -- that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion -- that we here highly resolve that these dead shall not have died in vain -- that this nation, under God, shall have a new birth of freedom -- and that government of the people, by the people, for the people, shall not perish from the earth.

Supposed interchange between President Calvin “Silent Cal” Coolidge – a New Englander known for his brevity -- and his wife on the occasion of her missing a Sunday church service.

First Lady Coolidge:  How was the sermon?”
President Coolidge:  “Fine.”

First Lady Coolidge:  “What did the minister talk about?”
President Coolidge:  “Sin.”

First Lady Coolidge:  “What did he say about it?”
President Coolidge:  “He’s against it.”
HBEH 765 Seminar Reading List

The reading assignments are numbered 1-4 corresponding to each group number. The order in which the articles are listed is the preferred order of presentations. Readings have been posted to Sakai.

Class 1. Tuesday, 8/23. Introduction
No readings

Class 2. Thursday, 8/25. Cancer Prevention and Control Overview/Trends

Everyone

1

2

3

4

Class 3. Tuesday, 8/30. Cancer disparities: Black and White in the US

Everyone


What, three “everyone” papers!? Well, the Jones papers are short. Besides, she’s president of the APHA and you should be familiar her work.

2

If, like me, you are confused by their matching process, eAppendix part 6 may help. Thankfully, Tables 1 and 2 clarify their results/main points.

3

4

1

This editorial about the Ellis et al. paper could help you frame your presentation:


Class 4. Thursday, 9/1. Cancer disparities: Global snapshot

Everyone


*OK just to skim. Focus on the big picture and the figures and tables, as opposed to methods.*

3

4

1

2

**Class 5. Tuesday, 9/6. Early detection and screening, part 1**

**Everyone**

UK National Screening Committee: Criteria for appraising the viability, effectiveness and appropriateness of a screening programme.


Everyone


“Annual mammography in women aged 40-59 does not reduce mortality from breast cancer beyond that of physical examination or usual care when adjuvant therapy for breast cancer is freely available.”

“*Invitation to modern mammography screening may reduce deaths from breast cancer by about 28%.*”

3


4


Class 7. Tuesday, 9/13. Lifestyle, physical activity, and diet

Everyone


*Just skim, to get a sense of how much we’re exercising.*

Tomasetti C, Vogelstein B. Cancer etiology: variation in cancer risk among tissues can be explained by the number of stem cell divisions. *Science*. 2015 Jan 2;347(6217):78-81.

2


3


4


**Class 8. Thursday, 9/15. Obesity and weight loss**

**Everyone**


*Skim this one if you wish*

3


4


1


2


**Class 9. Tuesday, 9/20. Guest: Lauren McCullough, Ph.D. (Physical activity and obesity)**

**Everyone**

Dr. McCullough’s faculty website at Emory:

[https://www.sph.emory.edu/faculty/profile/#!mccull](https://www.sph.emory.edu/faculty/profile/#!mccull)


**Class 10. Thursday, 9/22. Alcohol**

**Everyone**


**Class 11. Tuesday, 9/27. UV exposure and melanoma**

**Everyone**
Watch “Dear 16 year old me video”: [https://www.youtube.com/watch?v=_4jgUcxMezM](https://www.youtube.com/watch?v=_4jgUcxMezM)

Watch “How the sun sees you”: [https://www.youtube.com/watch?v=o9BqrSAHbTc](https://www.youtube.com/watch?v=o9BqrSAHbTc)


*The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of visual skin examination by a clinician to screen for skin cancer in adults (I statement).*

1

2

3

4

**Class 12. Thursday, 9/29. Precision medicine**

**Everyone**

2
Your challenge is to describe precision medicine for us without getting bogged down in alphabet soup and biochemistry. Try to lay out for the class where precision fits in the cancer control continuum, and what categories of potential intervention points these authors are talking about. The Mendelsohn piece is a nice overview…but Sheri finds the final sentence amusing. Why, do you suppose?

Just FYI, about the painting referred to in the Mendelsohn article:
http://www.gauguin.org/where-do-we-come-from-what-are-we.jsp

3
Wait! Don’t freak out at the long reading list. It’s absolutely OK to read these selectively, skimming and even skipping sections, paying minimal attention to methods details and the pervasive genetic alphabet soup. The point is to share with the class specific examples of precision prevention, screening, and treatment. See suggestions for reading the Couch piece as a model of how to approach these articles. In your presentation, provide just basic info about the disease and targeted subgroup in each article, the promise and challenges you see in these examples of precision medicine, and consider public health and individual patient perspectives.


- **Precision prevention and screening.** Read Abstract and first section. Skim “Landscape of Mutations” subsection - to get a sense of range of disease risk (and uncertainty of disease risk) in BRCA mutation carriers. Read Clinical Management subsection, skipping its final paragraph.


- **Precision chemoprevention**


- **Precision treatment.** Focus on the intro, abstract, tables and figures. Skim the rest.

4
The NCI website details a trial referenced in the Rubin piece. In your presentation, describe this study design for us. The other two readings are both very short, and in your presentation you are asked to play devil’s advocate for precision medicine.


‘Moonshot’ medicine will let us down – M. Joyner, NYT opinion piece, 1/29/2015
http://www.nytimes.com/2015/01/29/opinion/moonshot-medicine-will-let-us-down.html?_r=0
mentioned in Rubin piece

1

Class 13. Tuesday, 10/4. Guest: Jim Evans (Genomics/Precision Medicine)
Dr. Evans has been invited to talk about precision prevention. While these readings—all short!—don’t focus on precision prevention per se, they’ll provide context for our conversation with him. They focus on his research interests in policy, healthcare providers, the public, and personal genetic information.

Everyone
Look over Dr. Evans’s UNC faculty webpage:
http://www.med.unc.edu/genetics/people/faculty/evans

Biologist Teaches the Nation’s Judges About Genetics –Claudia Dreifus. NY Times 7/1/2008
http://www.nytimes.com/2008/07/01/science/01conv.html?_r=0


Abstracts only:


Class 14. Thursday, 10/6. Tobacco

16
Everyone

3

4

1

2

Class 15. Tuesday, 10/11.  Debate 1

Class 16. Thursday, 10/13.  Debate 2

Class 17. Tuesday, 10/18.  Guest: Dr. Ron Chen (Prostate Cancer)
*There are no group presentations today. However, to jump-start our conversation with Dr. Chen, we assigned articles to be read by groups so that a few people in the class will have read about various dimensions influencing prostate cancer screening and treatment decision-making. Also, please be sure to read the abstracts of the articles you have not been assigned for today.*

Everyone
Dr. Chen’s faculty profile.  [https://unclineberger.org/people/ronald-c.-chen](https://unclineberger.org/people/ronald-c.-chen)

Look over USPSTF screening guidelines


Thursday, 10/20. Fall break

Class 18. Tuesday, 10/25. Infection: Focus on HPV

Everyone


3 Brewer NT, Hall ME, Malo TL, Gilkey MB, Quinn B, Lathren C. HPV vaccine recommendation training: A randomized clinical trial. (under review)

**Class 19. Thursday, 10/27. Environment**

**Everyone:**


*Abstract only*


Class 20. Tuesday, 11/1. Guest: Dr. Deborah Mayer (Survivorship)

Dr. Mayer’s faculty profile: https://unclineberger.org/people/deborah-mayer


Class 21. Thursday, 11/3. Guests: Drs. Stephanie Wheeler and Katie Reeder-Hayes (Breast Cancer Screening and Treatment)


Class 22. Tuesday, 11/8. Chemoprevention of breast and colon cancers


2

3

4

1

23. Thursday, 11/10. Tobacco control interventions

Everyone
Husten CG, Deyton LR. Understanding the Tobacco Control Act: efforts by the US Food and Drug Administration to make tobacco-related morbidity and mortality part of the USA’s past, not its future. Lancet. 2013;381(9877):1570-80.

Song AV, Dutra L, Neilands TB, Glantz SA. Association of smoke-free laws with lower percentages of new and current smokers among adolescents and young adults. JAMA Peds. 2015;169(9):e152285.

3


**Class 24. Tuesday, 11/15. More policy interventions 2**

**Everyone**

Golden SD, McLeRoy KR, Green LW, Earp JA, Lieberman LD. Upending the social ecological model to guide health promotion efforts toward policy and environmental change. *Health Educ Behav*. 2015 Apr 1;42(1 suppl):8S-14S.


These readings are for everyone. (They are short). There are no group presentations today. Each group, please email 2 discussion questions to the TAs by Wednesday, 11/16, at 6pm.


Class 26. Tuesday, 11/22. Guest: Dr. Barbara Rimer (Presidents Cancer Panel) – readings TBA

-Thursday, 11/24. Thanksgiving-

Everyone

Recommended

Class 27. Tuesday, 11/29. Book Discussion

Each group, please email two good discussion questions to the TAs by Monday at 6 pm.


Class 28. Thursday, 12/1. Guest: Dr. Robert Croyle (NCI Perspective on Cancer Prevention and Control)
Everyone
NCI Division of Cancer Control and Population Sciences. Meet the Director website:
http://cancercontrol.cancer.gov/od/director_rc.html

Class 29. Tuesday, 12/6. LDOC: Last thoughts

Everyone
Masters GA, Krilov L, Bailey HH, Brose MS, Burstein H, Diller LR, Dizon DS, Fine HA,
progress against cancer from the American Society of Clinical Oncology. J Clin Oncol. 2015
Mar 1;33(7):786-809.

Skim!

1
Bray F, Jemal A, Torre LA, Forman D, Vineis P. Long-term realism and cost-effectiveness:
Primary prevention in combatting cancer and associated inequalities worldwide. J Natl Cancer
Inst. 2015 Dec 1;107(12):djv273.

2
1;108(5):djv370.

3
Philipson T, Eber M, Lakdawalla DN, Corral M, Conti R, Goldman DP. 2012. An analysis of
whether higher health care spending in the United States versus Europe is ‘worth it’ in the case

4
Goldman DP, Philipson T. Five myths about cancer care in America. Health Aff (Millwood).