Directions:

Please read these instructions carefully; we will deduct points if you do not comply with them exactly:

1. Write your full name, Yale ID number, and TF’s name at the top of this page.

2. This exam consists of SIX (6) questions. Each question is on a separate page. You need to answer FIVE of the six questions. **You should answer only FIVE questions.** If you answer all six, we will grade and count only #1-5, and you will have made bad use of your finite time. The last page is scrap paper that will not be graded (you may rip it off to use it, but leave the rest of the exam stapled together).

3. **On every page except the scrap paper, write your Yale ID and name at the top. DO THIS NOW.**

4. Leave blank the page with the question you are not answering. If you start writing on it, put a large X through the page. **It must be clear to the graders which question you are choosing not to answer.**

5. A good answer will refer to readings or lectures where relevant (you can mention a name or the title or just the article’s topic – we do not expect precise citations). Your answer should be as organized, clear, and concise as possible. **Remember we are NOT expecting a full essay; two paragraphs should be sufficient for each question.** You are not required (or even encouraged) to use all the space provided to answer a question. It is fine to be brief, as long as you answer all parts of the question. **Make sure to write legibly.**

6. Please raise your hand to speak with a TF if you have any questions.

   Good luck!

Question 1: ________________   Question 4: ________________

Question 2: ________________   Question 5: ________________

Question 3: ________________   Question 6: ________________

Total: ________________
(a) Briefly define the terms “human capital” and “social capital” and give two examples of each type of capital.

(b) Given the way this term was described in the reading by Coleman (Coleman, J. “Social Capital in the Creation of Human Capital” American Journal of Sociology 1988; 94: S95-S120) and in lecture, can one think of social capital as a property of individuals? Why or why not?

(c) Briefly describe why social capital is so hard to create and maintain.
According to the Centola reading (D. Centola, “The Spread of Behavior in an Online Social Network Experiment,” *Science* 329: 2010), in which of the two illustrated networks in the figure below (which you can term “LEFT” and “RIGHT” or describe some other way, if you wish) would a complex health behavior (such as smoking cessation in a population of smokers) diffuse more easily and completely? Explain why.

b) Name three “actual causes of death” according to the McGinnis and Foege approach.

c) If policymakers in the Federal Government adopted this approach, suggest *one* way that it might affect how the government responds to the burden of illness in our society.

(a) Briefly explain what the graph shows with respect to income inequality.

(b) Discuss why the relevant effect might be different for the poor and the high income groups compared to the other two groups.

(c) Briefly explain how the data in the graph and in the paper from which it was taken relate to the debate over whether the relationship between income inequality and health reflects contextual or compositional effects.

(a) The investigators in both these studies go to the trouble of conducting actual experiments in which people are randomly assigned to neighborhood exposures and (different) resulting outcomes are then measured. Why do you think they do this? What is the main advantage of doing an experimental study rather than simply observing the relationship between where people live and what happens to them?

(b) The Keizer et al study investigates the “broken windows” theory and specifically the issue of “cross norm” neighborhood effects. What is meant by cross-norm effects?

(c) How does the time scale involved in the neighborhood effects differ in the two studies?
Below is a graph that was shown in lecture and is based on one of your readings.

(a) Use the figure to explain if, and if so, how so, deaths from natural causes differ around the Chinese Harvest Moon Festival between Chinese and Jewish elderly women.

(b) What does this finding say about the mechanism(s) by which religion might affect health? What mechanism involving religion is most likely at play here?

Use the back of this page if you need more space, and put an arrow here:
Scrap Paper

**NOTHING ON THIS PAGE WILL BE GRADED**