Instructions (for Policy 1st field): Answer Question I, Question II, and one other
        Question. Time limit: 4.5 hours

Instructions (for Policy 2nd field): Answer Question II and one other Question
        Time limit: 3 hours

Question I:
Develop a research design to evaluate the impact of an ongoing public program, policy, or institutional design; to compare the impact of program, policy, or institutional design alternatives; to examine cause (or causes) of policy or institutional choice by legislators, legislatures, bureaucrats or bureaus; or to examine reasons for the differential implementation of policy by bureaucrats or bureaus.

Choose any policy area that you are familiar with. The application MUST be theoretically non-trivial. For example, it should relate to important normative questions of designing institutions that are representative, accountable, and efficient, or to tradeoffs among those values. Or it could relate to theoretically important disputes (for example, about government or market failure, or about cooperation versus self-interest). Discuss the theory or theories that motivate the experimental or statistical model. Briefly describe the program or policy alternatives, or policy decisions, that you are examining, and discuss and justify the outcome measure(s) you will use. Based on theory, what do you expect to find? Why will your findings be theoretically important? Cite relevant literature and previous findings.

Develop a feasible research design to estimate the parameters of your theoretical model. In your design, consider some of the problems you anticipate in making unbiased and efficient estimates, and suggest how you might go about coping with these problems. Include in your discussion the following items, as well as others you believe are pertinent:
        *how you propose to collect data;
        *problems of measurement;
        *how you will analyze the data you collect;
        *given your analytical strategy, what are the important threats to internal and
                statistical validity (that is, threats to getting BLU estimates and steps to
                minimize these threats)
        *issues of external validity;
        *how you will interpret the data you collect in light of the theory you are testing.

Question II: Economics

Introduction: For most people, whenever we fold ourselves into an automobile, we immediately strap ourselves into a seat belt, but that has been a gradual transition. In fact, years ago no one used seat belts. Seat belts are intended to reduce the severity of automobile accidents. Most states require drivers to wear seatbelts, but the level of enforcement varies. In some states, drivers cannot be arrested for failure to wear a seatbelt unless they are also charged with another offense (secondary enforcement). California in 1993 was the first state to upgrade to primary enforcement, which allowed police to arrest drivers for failure to use a seat belt, even if there is no other traffic violation. Since then, 14 other states have followed suit at various times; South Carolina was the last to upgrade to primary enforcement in 2005.

a) What kind of a good are seat belts? (Hint: they are not a public good.) What are the implications of your answer for an efficient public policy response? (Note that one possible answer might be that no policy response is the efficient response.) Explain your response, and use (and label) diagrams to illustrate your answer.

b)
What do the results in Tables I and II below tell you about the impact of primary and secondary seat belt laws on driver fatalities? Interpret the parameter estimates for these variables. What, if any, are the policy implications of the estimates? What do the results in the table above tell you about the impact of all of the other factors on driver fatalities? Do you believe the results reported in the above table regarding the impact of primary and secondary seat belt laws? Specifically, do you believe the parameter estimates for these variables? The significance test results? Discuss how well or how poorly the model above meets the assumptions necessary for valid parameter estimates and hypothesis tests. Why did the author bother to make the AR-1 serial correlation adjustment? How would you improve the model? (Consider using a different observational design.) Assuming the results from the above model are valid, how might they relate to your response in part (a) (Be brief.)

Question III: Obesity
Obesity is a growing (!) problem in the U.S., Europe, and even in developing countries. There are many calls for public attention to the problem, including taxing foods based on caloric content, labeling foods, providing exercise programs in workplaces, and other proposals as well.

a) Explain the likely market failure(s) (if any) that might justify public (governmental) intervention to reduce obesity. (In your answer, be sure to consider how labor markets might respond to obesity. Also consider how social pressures and irrationality might affect your answer.)

b) If there is a market failure rationale (or several market failures), what policy responses are likely to be an efficient response, at least in theory. What empirical considerations might mitigate their effectiveness in the real world? What political considerations might reduce the chance that the most efficient response would be adopted, and what alternative might be an effective substitute? Why?

Question IV:
There is a large theoretical and empirical literature in public policy and political economy on corruption. Use previous research and theory to answer the following questions. (If you like, use a particular policy area to answer this question, such as public personnel, including police; defense or national security, including anti-terrorism.)
(a) What is corruption?
(b) What are the likely consequences of corruption? (Use a diagram, if it aids your discussion.)
(c) What are the likely causes of corruption? Why?
(d) How would you test your preferred hypothesis regarding the causes of corruption and your preferred hypothesis regarding the consequences of corruption? Specify the theoretical equation(s). Consider issues of research design as well as estimating the parameters of the theoretical equation. Also consider issues of measurement: how would you measure corruption, as well as the other key variables?

Question V:
Policy researchers can choose among three major types of designs: randomized field experiments (RFEs), quasi-experiments, and non-experiments.

a) In general, briefly discuss the primary characteristics, advantages, and disadvantages of each of these three types of designs.
b) Which of these three types of designs would you use to test the hypothesis that women who earn higher salaries are more likely to return to work after childbearing than women with lower salaries? Justify your answer with a discussion of internal validity, external validity, and feasibility. (You do not need to describe the details of your design; however, it may be useful to identify a specific type of design within the general category of design that you recommend.)
c) What underlying general theory (if any) underlies this expectation, and how (if at all) does the use of a general theory help you to evaluate the validity of your design?

Question VI:
Brehm and Gates (and many other scholars) point out that discretion potentially entails some mix of "working, shirking, and sabotage." What do they mean? What does the general literature (including, but not limited to Brehm and Gates) on discretion in public (and private) bureaus say about the sources of discretion, how it is used, and its consequences for efficiency, effectiveness, equity, responsiveness, and accountability? To what extent is discretion and its consequences a matter of different principles or different principals (or both)? More specifically, how are discretion and its consequences with respect to quantity of output, quality of output, and cost per unit of output likely to vary among public, nonprofit, and for-profit bureaucracies? Outline a research design that tests your theoretical expectations using a specific policy area where public, nonprofit, and/or for-profit agencies are used to deliver services--e.g. day care, primary and secondary schools, hospitals, nursing homes, universities, job training, caseload management, housing management, arts organizations, A-76 competitions, prisons, or other areas of your choice.

Primary and Secondary Seatbelt Laws

Table I. Descriptive statistics for state time series data: 1990–2002 ($N = 663$).

	Mean	Standard Deviation	Minimum	Maximum
Driver fatality rate	105.16	28.92	40.87	200.42
(driver fatalities per 10 billion vehicle miles traveled (BVMT))				
Seat belt law (reference=no law)				
Primary enforcement	0.24	0.42	0	1
Secondary enforcement	0.67	0.46	0	1
0.08 blood alcohol content level				
illegal per se	0.26	0.43	0	1
Graduated driver's license	0.19	0.38	0	1
65_ mph speed limit	0.88	0.32	0	1
15–24 years old as percent of				
population 15yrs+	18.19	1.87	13.16	27.38
Per capita alcohol consumption—all				
beverages (ethanol gallons)	2.30	0.52	1.20	4.78
Unemployment rate (%)	5.25	1.49	2.20	11.3
Personal income per capita ($)	15262.65	2517.72	10065.80	24108.39
Population density (population per				
square mile)	326.49	1162.28	0.94	9058.21

Table II. Cross-sectional time series feasible GLS estimates of annual state driver fatality rate (driver fatalities per 10 billion VMT): 1990–2002

	All States (1990–2002)
Seat belt law:	
Primary enforcement	--9.852
	(2.061)
Seat belt law:	
Secondary enforcement	−5.185
	(1.544)
0.08 illegal per se	1.893
	(1.170)
Graduated driver's license	1.569
	(1.109)
65_ mph speed limit	3.076
	(1.341)
15–24 years old percent of	1.114
population 15 +years	(0.560)
Per capita alcohol consumption—	8.029
all beverages (ethanol gallons)	(4.064)
Unemployment rate (%)	−0.144
	(0.457)
Personal income per capita	0.003
	(0.001)
Population density (population per square mile)	−0.017
	(0.010)
N = 663	
Log likelihood	−2266.2
Wald chi-sq	10834.
Adjusted R^2	0.906

Note: Cell entries are unstandardized coefficients. (Numbers in parentheses are standard errors, corrected for groupwise heteroskedasticity and AR(1) serial correlation.) Intercepts for each state are estimated but are not reported here, and an intercept for each year is also estimated but not reported.