## **Economics of Crime Syllabus**

Colby College EC256 (Jan Plan 2019)

last updated January 8, 2019

#### subject to change

Instructor: Anne Burton Office: Diamond 373 Email: amburton@colby.edu Office Hours: Tuesdays 2:30 p.m. - 3:30 p.m. and Thursdays 2:30 p.m. - 3:30 p.m.

#### Lecture Times and Location:

- Tuesdays 9:30 a.m. 11:30 a.m. in Diamond 344
- Wednesdays 9:30 a.m. 11:30 a.m. in Diamond 344
- Thursdays 9:30 a.m. 11:30 a.m. in Diamond 344
- Fridays 9:30 a.m. 11:30 a.m. in Davis 308 (computer lab)

## 1 Course Description

Proceeds from the assumption that criminals are rational to the extent that higher costs of crime will lower criminal activity. Use of economic models to examine topics such as the criminal justice system, law enforcement, markets for drugs and other illegal goods and services. Major projects include creation of a data portfolio examining one of several sources of national crime data using tables, graphs, and statistical relationships and a group presentation on a major episode or issue in U.S. crime policy.

### 1.1 Prerequisites:

- Economics 133 (Principles of Microeconomics)
- Economics 134 (Principles of Macroeconomics)
- Sophomore or higher standing

## 2 Course Objectives

- 1. Study how public policies affect incentives to commit crime, and learn how to think through consequences of proposed policies
- 2. Learn how to think critically about empirical economics research papers
- 3. Improve writing, speaking, and presentation skills
- 4. Learn how to analyze data and describe correlations and trends

## 3 Assessments

Item	% of Grade
Group Presentation	40%
Draft of Slides	5%
Final Slides	10%
Presentation	15%
Summary	10%
Crime Data Portfolio	15%
Attendance	11%
Participation	34%

Table 1: Determinants of Course Grade

#### 3.1 Group Presentation

You will take turns presenting major episodes and issues in U.S. crime policy. These include:

- the current opioid/heroin epidemic
- marijuana legalization
- mass incarceration
- the crack epidemic
- gun violence and gun control

# I will assign you to groups of approximately four students to prepare 30-minute class presentations that include the following components:

- 1. a description of the key features of the crime episode or issue
- 2. graphical economic modeling of the incentives faced by the major actors and the market effects of these incentives
- 3. a discussion of whether the incentives you modeled have positive or negative societal consequences
- 4. a proposed policy change to amplify the positive societal consequences and/or mitigate the negative societal consequences
- 5. an analysis of the effects of your proposed policy change on the incentives faced by the major actors

A draft of your slides (and notes) will be due (via email) on Tuesday, January 22 at 5 p.m. We will not have class on Wednesday, January 23: instead your group will meet with me to go over your slides.

The final version of your slides will be due (via email) on Monday, January 28 at 5 p.m. Your slides will be evaluated on how well they address the 5 components (above), clarity, readability, and organization. I will hand out a more specific rubric at some point.

You will present in class on Tuesday, January 29 or Wednesday, January 30. Your group will present for 30 minutes and then there will be 5-10 minutes

for questions. Your presentation will be evaluated on clarity, how well you explain things, and how you respond to questions. I will hand out presentation tips at some point.

In addition, each of you will be required to write a summary (1-2 pages, single spaced) of another group's presentation. I will assign you to the group. Your summary should include the following:

- a brief description of the key features of the crime issue
- the incentives faced by each of the major actors and the market effects of these incentives
- a brief description of the proposed policy change
- the effects of the proposed policy change on the incentives of the major actors
- your own analysis of the proposed policy change: what could be some unintended consequences of the proposed policy change? could there be effects on markets that were not targeted with the proposed change? (hint: think about substitutes and complements for whatever "good" the policy is targeting)

The summary will be due (via email or hard copy) at the beginning of the last day of class (Thursday, January 31). The summary will be evaluated on how well you describe the crime issue, incentives, and policy change, and by how clear and thorough your analysis of the proposed policy change is.

#### **3.2** Crime Data Portfolio

Most (if not all) of the papers we read in this class will be focusing on *causal identification*, as in does policy x cause outcome y? As you will see from the readings, causal identification is challenging and requires tools that you learn in econometrics, which is not a prerequisite for this course.

Causal identification is not the only part of an empirical paper, however. Empirical papers also include descriptive statistics (also known as summary statistics). Some papers include graphs of trends or correlations as motivation for the paper (as in, why is this question worth asking?). These descriptive statistics and motivational graphs are important components of an empirical paper.

To that end, you will conduct your own descriptive analysis of a large crime and/or law enforcement dataset. You will explore one such dataset, discover an interesting story or theme, and produce a report that uses descriptive analysis to tell this story. You will use tables and graphs, correlation coefficients and scatterplots, and hypothesis tests.

You may use Excel, Stata, or R to conduct your analysis. If you have not taken a statistics or econometrics course, you are encouraged to use Excel. If you have taken econometrics, you may use Excel or Stata. If you have experience using R, you may use R but be warned that I will not provide any programming help for R users (please ask for advance permission to use R).

There will be 3 classroom workdays for this project (the 3 Fridays). Each day will include a brief statistics lesson. On these days, class will meet in one of the computer labs (Davis 308). You will be able to make good progress on your data portfolio during these in-class days but you will also need to work with the data (and write up your analysis) on your own time.

The data portfolio will be due (via email) at 5 p.m. on the last lab day (Friday, January 25). The data portfolio will be evaluated on how well you tell a story from the data, how thorough your tables, graphs, figures, hypothesis tests, etc. are, and on how well you format and organize your portfolio (e.g. clearly labeled graphs and figures). I will go over more specific instructions on the first lab day.

#### **3.3** Attendance

#### from the 2017 faculty handbook:

You are expected to attend all classes and scheduled course events and you are responsible for any work missed due to absence. Failure to attend can lead to an academic warning, grading penalties, and/or dismissal from the course with a failing grade. Excuses may be granted (at my discretion) for the following reasons: critical emergencies (normally verified by the Dean of Students office), illness (normally verified by the health center), or athletic or organizational trips *approved by me at least one week in advance*. Students on academic probation should know that they cannot be excused from any class because of extracurricular or academic activities.

This class meets for a total of 14 days, 2 of which are presentation days. Attendance at the 2 presentation days is mandatory for obvious reasons, unless you have extenuating circumstances as described above.

For the 12 remaining days, attendance is a binary variable. If you show up to class, you earn 1 percentage point towards your course grade. If you don't show up to class, you earn 0 percentage points. Note that there are 12 days but attendance

is only worth 11% of your grade: you get 1 unexcused absence with no attendance grade penalty (it may affect your participation grade, however).

For excused absences on regular class days, to earn your attendance and participation points you will be required to write a summary of the reading for the day that answers each of the questions in the participation section.

For excused absences on the presentation days, I will decide how you will make up the work.

#### **3.4** Participation

Class participation is an essential component of this course. Notice that there is no final exam. Think of class participation as a substitute for assessing your knowledge and understanding of the readings. Participation is also one of the best ways to improve your speaking skills.

Many of the questions I ask will have several answers or will require you to think before you answer. It's okay to think for a minute before you speak. It's okay to give wrong answers sometimes (just not all the time). It's okay if you don't understand something (just say so).

Your participation grade will depend mostly on the quality (and to some extent, the frequency) of your answers and comments in class. Participation is a continuous variable. I hope this doesn't need saying, but just in case, disrespectful and disparaging remarks will not be tolerated and will negatively affect your participation grade.

I will ask the following questions for each journal article reading. To facilitate participation by *everyone* in the class, I will go around the room (starting from a new spot each time) and call on you to answer these questions:

- What is the research question?
  - Why is it worth asking?
  - What did earlier papers have to say about this research question? (what is the previous literature?)
  - What is this paper's contribution?
- What data are being used in this paper?
  - How were they collected? (panel survey, cross-sectional survey, administrative records, experiment, etc.)

- What are the important variables? How are they defined?
- What is the unit of observation? (state-year, person-month, etc.)
- What is the empirical strategy (method) for answering the research question? (randomized controlled trial, differences-in-differences, instrumental variables, regression discontinuity, etc.)
  - What would be the ideal dataset (think randomized experiment) to answer this research question?
  - What would be the empirical strategy to use on this ideal dataset?
  - How is this paper's dataset different than the ideal one? (what variables are missing or measured in a different way, etc.)
  - What is the main equation being estimated in this paper?
  - How does identification work? Imagine the simplest case: you have 2 people (or states), and 1 is exposed to to the policy change. What has to be true for you to be able to say that the difference in the outcome is due to the policy change (in what ways do the people have to be the same or different)?
  - What are the sources of exogenous variation? What are the differences between people (or states) that are due to chance and not due to things that people (or states) can control?
  - Bonus: do you find the identification assumptions credible? Why or why not?
- What are the main results?
  - What are some alternative explanations for the results?
  - Does the author test for alternative explanations?
  - What new questions arise from the paper's results? (hint: what are areas for future research?)
  - What are the policy implications of the results?
  - Do you buy the main conclusions of the paper? Why or why not?
- Overall, what did you think about the paper?

### 4 Academic Honesty

# I will be following the academic honesty guidelines from the Colby website (https://www.colby.edu/academicintegrity/academic-integrity-on-the-syllabus/):

Honesty, integrity, and personal responsibility are cornerstones of a Colby education and provide the foundation for scholarly inquiry, intellectual discourse, and an open and welcoming campus community. These values are articulated in the Colby Affirmation and are central to this course. You are expected to demonstrate academic honesty in all aspects of this course. If you are clear about course expectations, give credit to those whose work you rely on, and submit your best work, you are highly unlikely to commit an act of academic dishonesty.

Academic dishonesty includes, but is not limited to the following: violating clearly stated rules for taking an exam or completing homework; plagiarism (including material from sources without a citation and quotation marks around any borrowed words); claiming another's work or a modification of another's work as one's own; buying or attempting to buy papers or projects for a course; fabricating information or citations; knowingly assisting others in acts of academic dishonesty; misrepresentations to faculty within the context of a course; and submitting the same work, including an essay that you wrote, in more than one course without the permission of the instructors.

Academic dishonesty is a serious offense against the college. Sanctions for academic dishonesty are assigned by an academic review board and may include failure on the assignment, failure in the course, or suspension or expulsion from the College.

For more on recognizing and avoiding plagiarism, see the library guide: libguides.colby.edu/avoidingplagiarism

## 5 Course Schedule and Reading List (see section 3.4 for the reading questions!)

#### • Tuesday, January 8: Introduction and Trends in Crime

- Chettiar, Inimai M. 2015. "The Many Causes of America's Decline in Crime." Atlantic.com February 11. Available at https://www.theatlantic.com/politics/archive/2015/02/the-many-causesof-americas-decline-in-crime/385364/
- Introduction to understanding regressions, causal inference, and empirical strategies

- Introduction to how to read an empirical paper in economics

#### • Wednesday, January 9: Incarceration

 Aizer, Anna and Joseph J. Doyle, Jr. 2015. "Juvenile Incarceration, Human Capital, and Future Crime: Evidence from Randomly Assigned Judges." *Quarterly Journal of Economics*, 130(2): 759-803, https://doi.org/10.1093/qje/qjv003

#### • Thursday, January 10: Deterrence and Recidivism I

 Hansen, Benjamin. 2015. "Punishment and Deterrence: Evidence from Drunk Driving." American Economic Review, 105(4): 1581-1617, https://doi.org/10.1257/aer.20130189

#### • Friday, January 11: Lab Day I

#### • Tuesday, January 15: Deterrence and Recidivism II

 Doleac, Jennifer. 2017. "The Effect of DNA Databases on Crime." American Economic Journal: Applied Economics, 9(1): 165-201

#### • Wednesday, January 16: Crime and the Labor Market

 Agan, Amanda Y. and Makowsky, Michael D. 2018. "The Minimum Wage, EITC, and Criminal Recidivism." SSRN http://dx.doi.org/10.2139/ssrn.3097203

#### • Thursday, January 17: Police and Crime

- Chalfin, Aaron and Justin McCrary. 2018. "Are U.S. Cities Underpoliced? Theory and Evidence" *The Review of Economics and Statistics* 100(1): 167-186
- Friday, January 18: Lab Day II
- Tuesday, January 22: Drugs
  - Dobkin, Carlos and Nancy Nicosia. 2009. "The War on Drugs: Methamphetamine, Public Health, and Crime." American Economic Review 99(1): 324-349
  - Draft of slides and notes due via email at 5 p.m.
- Wednesday, January 23: group meetings re slides (no class)

- Thursday, January 24: Sexual Assault
  - Lindo, Jason M., Peter Siminski, and Isaac D. Swensen. 2018. "College Party Culture and Sexual Assault." *American Economic Journal: Applied Economics*, 10(1): 236-265
- Friday, January 25: Lab Day III
  - Crime data portfolio due via email at 5 p.m.
- Monday, January 28: final version of slides due via email at 5 p.m.
- Tuesday, January 29: Group Presentations I
- Wednesday, January 30: Group Presentations II
- Thursday, January 31: Sex Work
  - Cunningham, Scott and Manisha Shah. 2018. "Decriminalizing Indoor Prostitution: Implications for Sexual Violence and Public Health." *The Review of Economic Studies*, 85(3): 1683-1715
  - Group presentation summary due via email or hard copy at beginning of class