# **ECONOMICS OF RISKY BEHAVIORS**

Instructor: Melissa Spencer, mkm8kf@virginia.edu

### **Course Description**

This course provides a non-technical introduction to the economics of risky behaviors, including crime, alcohol and drug use, risky sexual behavior, and risky health behaviors. Students will learn basic economic concepts and gain insight into the wide range of topics that can be studied with a degree in economics. This course is ideal for introductory level students who are considering a major or minor in economics.

## By the end of this course, students should be able to:

- 1) Explain and provide examples of key economic concepts, including rational choice, costbenefit analysis, expected value, utility, risk aversion, causal inference, spillover effects, and moral hazard.
- 2) Demonstrate skill in:
  - a. Identifying the main conclusions in complex academic articles
  - b. Using Excel to make graphs and conduct numerical analysis
  - c. Writing about economic concepts
- 3) Apply economic theory to analyze and discuss a risky behavior.

### **Prerequisites**

Competency in algebra is needed for this course. Students are encouraged to take this course concurrently with introduction to microeconomics or introduction to macroeconomics, though this is not required.

### Assignments

Participation 5% Homework 15% Midterm 1 15% Midterm 2 20% Final Exam 30% Final Project 15%

#### **Accommodations**

It is my goal to create a learning experience that is as accessible as possible. If you anticipate any issues related to the format, materials, or requirements of this course, please meet with me outside of class so we can explore potential options. Students with disabilities may also wish to work with the Student Disability Access Center to discuss a range of options to removing barriers in this course, including official accommodations.

### **Diversity and Inclusion**

It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength and benefit. It is

my intent to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally, or for other students or student groups.<sup>ii</sup>

### **COURSE TOPICS AND MATERIALS**

All students will receive a link to a Zotero folder containing links to assigned readings, podcasts, and videos, as well as citations. \*Indicates you should read only the introduction.

## An Economic Approach to Risk – Part 1

- ✓ Rational Choice Theory and Cost-Benefit Analysis
- ✓ Risk, Probability, and Expected Value

Lecture notes

Lee, J. (2017, December 30). How to Read Academic Papers without Freaking Out.

Medium. https://medium.com/ai-saturdays/how-to-read-academic-papers-without-freaking-out-3f7ef43a070f

## An Economic Approach to Risk – Part 2

- ✓ Utility and Risk Aversion
- ✓ Applying the economic theory of risk to crime

Lecture notes

Doleac, J. (2019, January 21). *Jennifer Doleac on Crime*. EconTalk. http://www.econtalk.org/jennifer-doleac-on-crime/

Lofstrom, M., & Raphael, S. (2016). Crime, the Criminal Justice System, and Socioeconomic Inequality. *Journal of Economic Perspectives*, *30*(2), 103–126.

#### Crime

- ✓ Factors that affect crime rates and causal inference
- ✓ Deterrence and law enforcement
  - Weisburd, S. (2020, July 21). *Episode 32: Sarit Weisburd*. Probable Causation. Police presence, rapid response rates, and crime prevention. https://www.probablecausation.com/podcasts/episode-32-sarit-weisburd
  - \*Miller, A. R., & Segal, C. (2019). Do Female Officers Improve Law Enforcement Quality? Effects on Crime Reporting and Domestic Violence. *The Review of Economic Studies*, 86(5), 2220–2247.
  - Deza, M., & Litwok, D. (2016). Do Nighttime Driving Restrictions Reduce Criminal Participation Among Teenagers? Evidence From Graduated Driver Licensing. Journal of Policy Analysis and Management, 35(2), 306–332.

Jackson, K. (2020, March 31). *Episode 26: Kirabo Jackson*. Probable Causation. The Effect of single-sex education on academics, arrests, and teen motherhood. https://www.probablecausation.com/podcasts/episode-26-kirabo-jackson

## **Alcohol and Drugs**

- ✓ Rational choice versus addiction theory
- ✓ Spillover effects
- ✓ The opioid epidemic
  - Holden, C. (2001). "Behavioral" Addictions: Do They Exist? Science, 294(5544), 980-982.
  - Cook, P. J., & Moore, M. J. (2002). The Economics Of Alcohol Abuse And Alcohol-Control Policies. *Health Affairs*, 21(2), 120–133.
  - \*Fernandez, J., Gohmann, S., & Pinkston, J. C. (2018). Breaking Bad in Bourbon Country: Does Alcohol Prohibition Encourage Methamphetamine Production? *Southern Economic Journal*, 84(4), 1001–1023.
  - Gruber, J. (2001). Tobacco at the Crossroads: The Past and Future of Smoking Regulation in the United States. *Journal of Economic Perspectives*, 15(2), 193–212.
  - \*Cannonier, C., Burke, M. G., & Steward, K. (2019). Smoking, health and academic outcomes: Evidence from a limited smoking campus policy. *Health Economics, Policy and Law, 14*(2), 205–230. https://doi.org/10.1017/S1744133118000245
  - Lynch Schuster, J. (2014). Down The Rabbit Hole: A Chronic Pain Sufferer Navigates The Maze Of Opioid Use. *Health Affairs*, *33*(7), 1294–1297.
  - Lapinski, Z. (2020, January). The Opioid Tragedy, Part 1: "We've Addicted an Entire Generation" (Ep. 402). *Freakonomics*. https://freakonomics.com/podcast/opioids-part-1/
  - Doleac, J., Mukherjee, A., & Schnell, M. (2018, December 7). Research roundup: What does the evidence say about how to fight the opioid epidemic? *Brookings*. https://www.brookings.edu/blog/up-front/2018/12/07/research-roundup-what-does-the-evidence-say-about-how-to-fight-the-opioid-epidemic/

## **Sexual Behavior**

- ✓ Unintended pregnancy
- ✓ Sexually transmitted infections
  - Guttmacher Institute. (2019, January). *Unintended Pregnancy in the United States*. https://www.guttmacher.org/sites/default/files/factsheet/fb-unintended-pregnancy-us.pdf
  - \* Bailey, M. J. (2012). Reexamining the Impact of Family Planning Programs on US Fertility: Evidence from the War on Poverty and the Early Years of Title X. American Economic Journal: Applied Economics, 4(2), 62–97.

- \*Kearney, M. S., & Levine, P. B. (2015). Media Influences on Social Outcomes: The Impact of MTV's 16 and Pregnant on Teen Childbearing. *American Economic Review*, 105(12), 3597–3632.
- CDC. (2018). Reported STDs in the United States, 2018.
- Tertilt, M. (2019, October 28). Where do we stand in the fight against HIV? https://www.youtube.com/watch?v=uNyI-CT3S-Y&list=PLt9jC4Ylzr6CmS0hWyQzOlypqSkvRMKKs&index=22
- Canning, D. (2006). The Economics of HIV/AIDS in Low-Income Countries: The Case for Prevention. *Journal of Economic Perspectives*, 20(3), 121–142.
- \*Johnson, R. C., & Raphael, S. (2009). The Effects of Male Incarceration Dynamics on Acquired Immune Deficiency Syndrome Infection Rates among African American Women and Men. *The Journal of Law & Economics*, *52*(2), 251–293. JSTOR.
- \* Francis, A. M. (2008). The economics of sexuality: The effect of HIV/AIDS on homosexual behavior in the United States. *Journal of Health Economics*, *27*(3), 675–689.

#### **Health Behaviors**

- ✓ Moral hazard
  - Johnson, R. C. (2018). Addressing Racial Health Disparities: Looking Back to Point the Way Forward. *The ANNALS of the American Academy of Political and Social Science*, 680(1), 132–171.
  - Dubner, S. J. (2010, February). The Dangers of Safety (Ep. 1). *Freakonomics*. https://freakonomics.com/podcast/freakonomics-radio-super-bowl-edition-what-happens-to-your-head-inside-the-helmet-after-a-nasty-hit/
  - Bhattacharya, J., & Sood, N. (2011). Who Pays for Obesity? *The Journal of Economic Perspectives : A Journal of the American Economic Association*, 25(1), 139–158.

<sup>&</sup>lt;sup>i</sup>This syllabus has been developed using text from the following sources: https://provost.virginia.edu/subsite/coaa/instructional-resources/new-page

ii https://www.brown.edu/sheridan/teaching-learning-resources/inclusive-teaching/statements