

# BUSN 5000

## Weekly Schedule

Chris Cornwell

Fall 2025  
(updated 09 Aug 25)

Class Room: Amos B010  
Recitation Room: TBA

Class Hours: TR, 935a and 1110a  
Recitation Hours: TBA

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### Deadlines

The *deadline* for submitting all homework and project assignments is 1159p on the *due date*. *Late submissions will not be accepted.*

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### Week 0 (Aug 14, 18-22) :: Syllabus Day and Getting Started

*Reading:* [Healy, ch 2](#); BUSN 5000 R orientation and getting started guide

*IRL:* [“Brown Forman: How Posit allowed us to harness our data science and gain massive efficiencies”](#), Posit Customer Stories.

*Due:* Homework 0 – **Fri, Aug 22**

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### Week 1 (Aug 25-29) :: Data Fundamentals

*Reading:* Bekes and Kedzi, ch 1; Bueno de Mesquita and Fowler, ch 1

*IRL:* [“How Bad Data Traps People in the US Justice System”](#), *Ted Talks*, April 2022.

*Due:* pre-Project exercise – **Mon, Aug 25**

*Due:* Homework 1 – **Fri, Aug 29**

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### Week 2 (Sep 1-5) :: Beginning to Learn

*Reading:* Bekes and Kedzi, chs 2-3

*IRL:* [“What Can Uber Teach Us About the Gender Pay Gap?”](#), *Freakonomics Radio*, Episode 317.

*Due:* Homework 2 – **Fri, Sep 5**

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### **Week 3 (Sep 8-12) :: Models for Exploration**

*Reading:* Bekes and Kedzi, ch 4; Bueno de Mesquita and Fowler, ch 2,4

*IRL:* [“Two Paths for A.I.”](#), *The New Yorker*, 27 May 2025.

*Due:* Homework 3 – **Fri, Sep 12**

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### **Week 4 (Sep 15-19) :: Making Inferences**

*Reading:* Bekes and Kedzi, chs 5-6; Bueno de Mesquita and Fowler, ch 6

*IRL:* [“The Effects of Facebook and Instagram on the 2020 Election: A Deactivation Experiment”](#), *PNAS*, May 2024.

*Due:* Homework 4 – **Fri, Sep 19**

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### **Week 5 (Sep 22-26) :: Measurement Error and Sample Selection**

*Reading:* Bueno de Mesquita and Fowler, ch 16

*IRL:* [“Using internal CPS data to reevaluate trends in labor-earnings gaps”](#), *Monthly Labor Review*, August 2009.

*Due:* Homework 5 – **Fri, Sep 26**

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### **Week 6 (Sep 29-Oct 3) :: Confounding and the Bayesian Approach to Learning from Data**

*Reading:* Bueno de Mesquita and Fowler, ch 15; [“Bayes theorem, the geometry of changing beliefs”](#), 3Blue1Brown. 22 Dec 2019.

*IRL:* [“Using Bayesian Updating to Improve Decisions under Uncertainty”](#), *California Management Review*, 2020.

*Due:* Project progress submission – **Fri, Oct 3**

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### **Weeks 7-8 (Oct 6-10, 13-17) :: Regression Fundamentals + Part I Exam**

*Reading:* Bueno de Mesquita and Fowler, ch 5; Bekes and Kedzi, chs 7-10; Angrist & Pischke, ch 2

*IRL:* [“Anybody Can Win, but Everybody’s Gonna Lose”](#), *Against the Rules*, Season 4, Episode 10.

**PART I EXAM:** **Thu, Oct 9 at 700p**

*Due:* Homework 6 – **Fri, Oct 17**

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### **Week 9 (Oct 20-24) :: Potential Outcomes and Causal Inference**

*Reading:* Bekes and Kedzi, chs 19-20; Bueno de Mesquita and Fowler, chs 3, 9-11; Angrist & Pischke, ch 1

*IRL:* [“The Cybernetic Teammate: A Field Experiment on Generative AI Reshaping Teamwork and Expertise”](#), Harvard Business School Strategy Unit Working Paper No. 25-043, 21 Mar 2025.

*Due:* Homework 7 – **Fri, Oct 24**

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### **Week 10 (Oct 27-31) :: Regression Discontinuity**

*Reading:* Bueno de Mesquita and Fowler, ch 12; Angrist & Pischke, ch 4

*IRL:* [“Does Advertising Actually Work? Part I”](#), *Freakonomics Radio*, Episode 440.

*Due:* Homework 8 – **Fri, Oct 31**

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### **Week 11 (Nov 3-7) :: Difference in Differences**

*Reading:* Bekes and Kedzi, ch 22; Bueno de Mesquita and Fowler, ch 13; Angrist & Pischke, ch 5

*IRL:* [“Does Advertising Actually Work? Part II”](#), *Freakonomics Radio*, Episode 441.

*Due:* Homework 9 – **Fri, Nov 7**

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### **Weeks 12-13 (Nov 10-14, 17-21) :: Introduction to Machine Learning**

*Reading:* Bekes and Kedzi, chs 13-14; [“Machine Learning: An Applied Econometric Approach”](#), *Journal of Economic Perspectives*, Spring 2017.

*IRL:* [“In Defense of Zillow’s Besieged Data Scientists”](#), Medium, 16 Nov 2021.

**WITHDRAWAL DEADLINE, Nov 12**

*Due:* Homework 10 – **Fri, Nov 21**

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### **Week 14 (Nov 24-25) :: Part II exam**

**PART II EXAM: Mon, Nov 24 at 700p**

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### **Week 15 :: Project submission**

*Due:* Project final submission – **Tue, Dec 2**

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