


Concepts over Calculations from the University of Chicago





Concepts over Calculations: Economics for Everyone

Fundamentals, Markets, & Special Topics

E4E THE UNIVERSITY OF CHICAGO
ECONOMICS
FOR EVERYONE

Certificate Requirements

To earn professional development hours for webinars, you must:

- Watch a minimum of 75% for all sessions
- You will automatically receive a professional development certificate via e-mail within 24 to 48 hours.

Economics for Everyone

“Economics is the science of how a **particular society solves its economic problems**. An economic problem exists whenever **scarce means** are used to **satisfy alternative ends**. If the means are **not** scarce, there is **no problem** at all; there is Nirvana.”

-Milton Friedman, Price Theory: A Provisional Text

Welcome!

Carl Coates, Director, Economics For Everyone

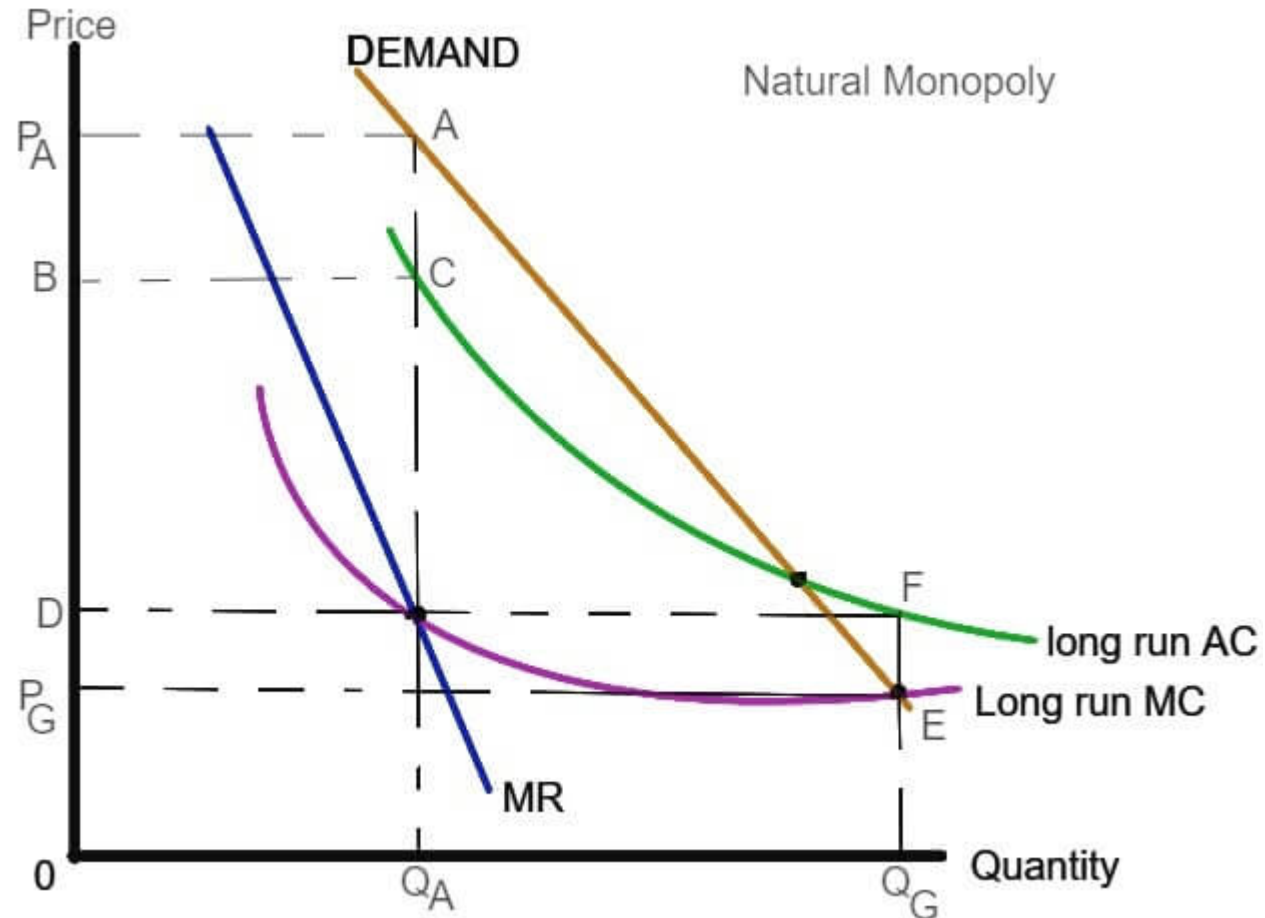
Carl brings over 25 years of classroom experience teaching AP, IB, and academic levels of high school economics. Dedicated to empowering teachers and students alike, Carl believes the power of economic reasoning lies in its ability to connect theory, research, and practical solutions to the societal challenges that future economists will face.

Opening question for the chat

Let's say you ran into one of your students on the street 10 years after they had your class and asked them, "what do you remember from the class I taught you?"

What would you hope they would say?

Is this what we're *really* hoping they remember?



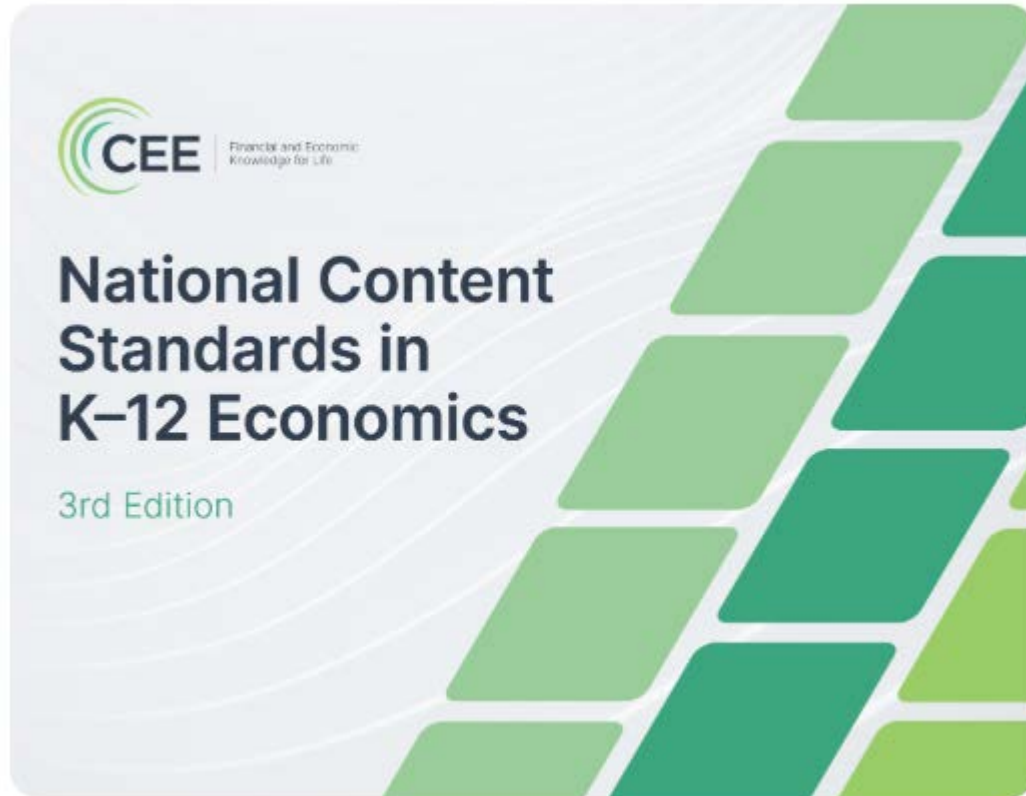
Webinar Outcomes

1. **The U Chicago E4E Foundations & Themes:** Optimization, Equilibrium and Empiricism
2. **Markets, markets, markets:** Market basics, market structures & market failures
3. **Special Topics:** applying an economic lens to the “business of everyday life.”

Agenda

1. Review available resources.
2. View some video clips.
3. Experience a sample lesson plan activity

National Standards

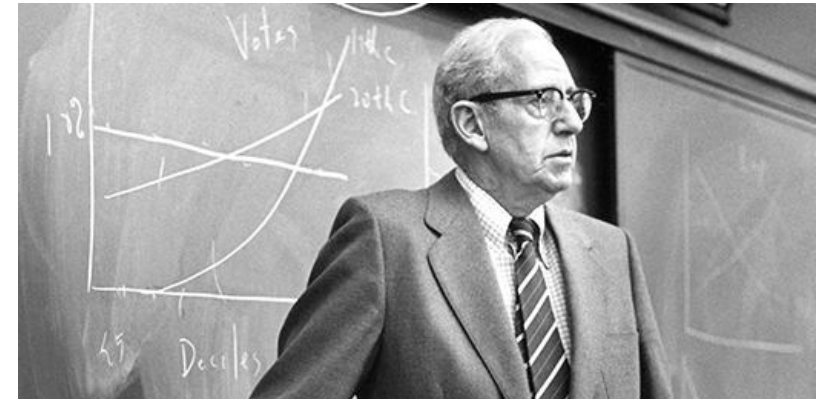


- Standard 1: Scarcity and Allocation
- Standard 2: Decision Making
- Standard 3: Specialization and Exchange
- Standard 4: Markets
- Standard 6: Market Failure

Pervasive concepts: key for new economics students

“An introductory-terminal course in economics makes its greatest contribution to the education of students if it concentrates upon a **few subjects** which are developed in **sufficient detail** and applied to a **sufficient variety of actual economic problems** to cause the student to **absorb the basic logic** of the approach.”

-George J. Stigler, Nobel Laureate



A somewhat remodeled approach to teaching economics

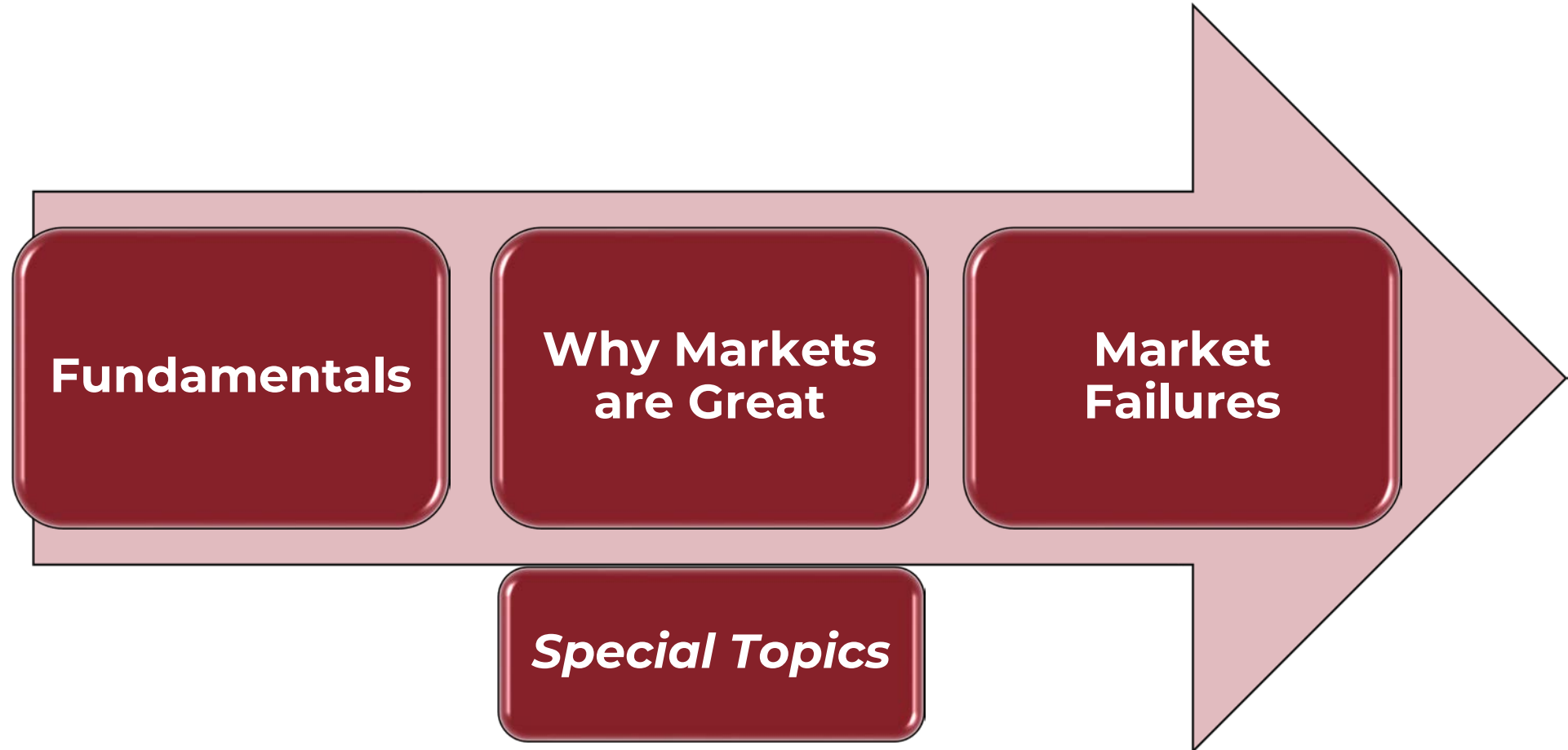


Literacy Targeted Approach

- Vocabulary & Academic Language
- Conceptual Scaffolding through Text
- Writing to Learn
- Disciplinary Thinking through Routines
- Integration of Real-World Contexts

[TEACH ECONOMICS PODCAST SERIES](#): St. Louis Fed

Structure to the E4E Resources



Our resources

Encouraging students to apply economic reasoning to everyday situations.



Our resources

Anchored by engaging videos



Aligned to classroom activities:

Economics for Everyone Unit: The Buyer's Problem Lesson 1 of 2: The Buyer's Problem

Unit: The Buyer's Problem Lesson Title: **The Buyer's Problem**
From Wants to Wallet: Navigating Preferences, Budgets, and Surplus

Fundamentals	Steps #1-4	1.5 Class Periods
Deeper Dive	Steps #5-7	+1 Class Periods

Context

The buyer's problem describes the decision-making process consumers go through when making purchases, which involves considering what they like, the prices of goods and services, and their budget constraints. When choosing between options—such as selecting a college or deciding between coffee from Dunkin or Starbucks—individuals evaluate the characteristics they prefer, the cost of their choices, and how much money they have available. Prices reflect the relative cost of goods, influencing opportunity costs. For instance, buying an expensive pair of jeans over two cheaper sweaters indicates a stronger preference for the jeans. Ultimately, consuming decisions signal personal tastes and preferences, and understanding these elements helps optimize decision-making in everyday life.

Lesson Outcomes

By the end of the lesson, students will be able to:

- Understand the concept of the buyer's problem, which involves considering individual preferences, the prices of goods and services, and budget constraints in

Our approach

- Concepts over calculations
 - “Deep dives” + “Explainer videos”- *some math, some models!*
- Academic research + real-world relevance
- Connect abstract concepts to tangible experiences

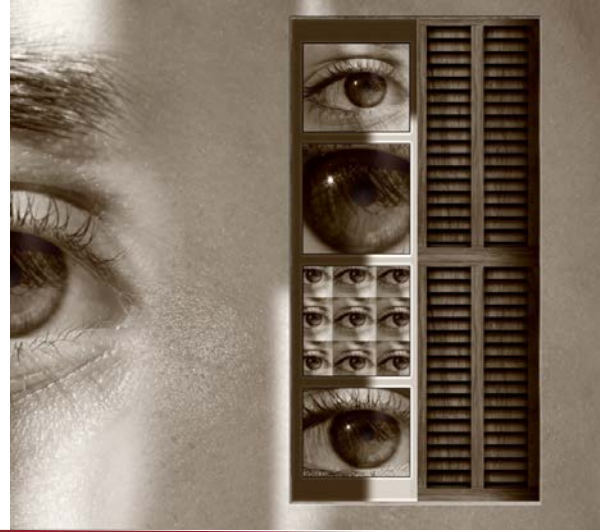
Flexibility



Prix fixe menu



Buffet table



Our desired learning outcomes

Habits of Mind

Using an economic lens

Disagreeing Better

Complexity awareness

The Three Pillars

Optimization

- Maximize utility
- Maximize profit
- Maximize welfare

Equilibrium

- “direction of forces”
- Facilitates predictions!
- Neither INSTANT nor ALWAYS

Empiricism

- Correcting assumptions
- Means test for theories vs reality
- Understanding systems
- Policy implications

Interpreting Outcomes

The **Economic Lens** remains the same regardless of the situation:

- People look to **optimize** their situation.
- Economic activity moves towards **equilibrium**.
- **Empiricism** allows for testable data to confirm assertions of economic reasoning.

Optimization



Applying the pillars

1. Micro
2. Macro
3. Financial literacy

[Handout Link here](#)

Markets, markets, markets

“The advantage of a free market is that it allows **millions of decision-makers** to respond individually to **freely determined prices, allocating resources-labor, capital and human ingenuity**- in a manner that **can’t be mimicked by a central plan**, however brilliant the central planner.”

Friedrick August von Hayek

Unpacking markets



Explainer Video: Total Factor Productivity



Activity Alignment

Using the idea of Total Factor Productivity in a case study scenario.



TEACHER PRINTABLE

WidgetWorks vs GadgetMakers

Directions: The following case study compares two fictitious companies that produce widgets. This will help further your understanding of productivity and Total Factor Productivity, discussed in the previous two videos. Though similar on paper, they produce very different results. Check your understanding with the questions that follow and see if you are thinking like an economist by making some predictions based on the information provided.

WidgetWorks and GadgetMakers are two companies that look almost identical on paper. Each employs 50 workers, operates out of a 10,000-square-foot factory, and uses similar amounts of land, labor, and capital. Here's a reminder about what economists mean by those terms:

- Land: All natural resources and physical space used in production (e.g., fields, minerals, water).
- Labor: Human work (physical and mental) used to create goods and services.
- Capital: Man-made tools and equipment that help produce goods and services.

At WidgetWorks, management has invested in modern machinery and regular employee training. Their capital—new, automated equipment—allows workers to produce more widgets with less effort and fewer mistakes. The workspace is laid out to minimize wasted movement, and employees know exactly what to do thanks to clear processes and strong teamwork. This efficient use of land, labor, and capital means WidgetWorks produces twice as many widgets as GadgetMakers each month, even though both companies have the same resources.

Two firm summary table

Factor	WidgetWorks (High TFP)	GadgetMakers (Low TFP)
Land	Efficiently organized factory	Same size, less organized
Labor	Well-trained, team-based	Less training, more idle time
Capital	Modern, automated machines	Older, slower machines
TFP	High: good management, newer tech	Low: outdated methods
Output	10,000 widgets/month	5,000 widgets/month

Check for Understanding Questions

1. Which company, WidgetWorks or GadgetMakers, has higher productivity, and what

Market Specifics

Market Structures:

- Perfect Competition
- Monopoly
- Monopolistic Competition
- Oligopoly

Strategic Decision Making:

- Game Theory
- Winning Strategies
- Extensive vs Simultaneous Form Games

Market Failures

Externalities & Solutions

Public & other non-private goods

Economics of Information &
Adverse Selection

Externalities and Solutions

Command-and-Control

Taxes and Subsidies

Market Solutions



Public and other Non-Private Goods





Investigating solutions- Overfishing case study

Fictitious overfishing case:
"Quartzhead Banks"

- Tragedy of the Commons!
- Fishing season limits =
"Race to fish"



Challenge:

- Support sustainable fish stocks
- Allow fishers to (at least) break-even
- Find the right incentives



Adverse Selection: Peaches & Lemons



The Case for Special Topics

“Along with others, I have tried to pry economists away from **narrow assumptions about self-interest**. Behavior is driven by a much **richer set of values and preferences**.”

-Gary Becker, “The Economic Way of Looking at Behavior: The Nobel Lecture.”

Special Topics

1. An **economic lens** to help students **interpret economic actions** of individuals, businesses and governments.
2. New ideas on economic topics to explore with your students **beyond consumers, producers and markets**.
3. Information on how economists **use research to improve outcomes** for schools, charities and other organizations.

Special Topics

Behavioral Economics

- “People have self-control problems.”
- “We mostly care about our own material payoff; *we also care about the outcomes of others.*”

Experimental Economics

- Components of effective field experiments
- Student-centered inquiry opportunities

Economics of...

Charity

Environment

Education

Discrimination

Scaling

Diversity & Gender Disparity

Special Topics

1. How do some consumers unwittingly subsidize discriminatory hiring practices?
2. *Is there an impact on the gender & racial makeup of orchestras based on how auditions are structured?*
3. How do we get more people to donate to charities?
4. *Why do solutions that work in a small environment fail in larger environments?*
5. Why does paying students for improved grades (sometimes) work?
6. *How do economists quantify environmental benefits to guide policy decisions?*

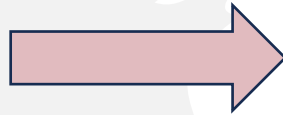


Personal Finance in Economics


- Optimization is the basis
- Consumption today vs consumption in the future
- “Get the most satisfaction over their entire life taking into account how future happiness is valued today.”

Personal Finance in Economics

- “How to become a millionaire?”
- “Which investment is best?”
- Future Value and the Compounding of Interest






TEACHER PRINTABLE #1 STEP #1: Which Investment is Best?




 **Team Challenge:** You have \$10,000 to invest in one of the following bundles for three years. Discuss with your group:

- 1) Which bundle of investments will you purchase? Why?
- 2) Which factors were MOST and LEAST important in your choice?
- 3) Based upon what you experienced, what does it mean to “diversify” your portfolio? Why might economists recommend you do so?




Bundle A: U.S. Government Bonds

- **Annual Revenue (Flow of Benefits):**
 \$300 per year (guaranteed)
- **Estimated Resale Value (After 3 Years):**
 \$10,000
- **Risk Level:**
 **Very Low** – this is considered “risk-free”

Bundle B: Stocks (Index Fund)

- **Annual Revenue (Flow of Benefits):**
 \$0 - \$250 dividend yield (very unpredictable)
- **Estimated Resale Value (After 3 Years):**
 \$9,500 - \$14,000 (unpredictable)
- **Risk Level:**
 **High** – value of stock bundle could be more/less than estimate above

Bundle C: Half U.S. Government Bonds/Half Stocks

- **Annual Revenue (Flow of Benefits):**
 \$150-275 per year
- **Estimated Resale Value (After 3 Years):**
 \$9,750 - \$12,000 (less predictable)
- **Risk Level:**
 **Medium** - value of bundle could be more/less than estimate above

Questions? Thoughts? Takeaways?



Links

[Educator Hub- Overview](#)

[E4E Educator Hub- Register page](#)

[Contact page](#)

Confirm Password

Confirm Password

Subscribe for updates

Subscribe for updates

Register

Login

When you register, click on “Subscribe for updates” to receive our monthly newsletter with blogs and Perfect-Pairing articles.

If you have already registered but did not choose to receive the newsletter and would like to now, reach out to Carl Coates:

ccoates@uchicago.edu