

## Faculty of Arts Department of Economics

# **New Student Orientation**

August 30, 2024

## Agenda



- Opening remarks and welcome
  - Dr. Rob Oxoby, Professor and Department Head
- Learning objectives for an economics major
  - Dr. Lucia Vojtassak, Associate Professor (Teaching) and Undergraduate Program Director
- Looking for guidance and advice?
  - Mr. Raj Lakhan, Academic Program Specialist (Economics)
  - Society of Undergraduates in Economics (SUE)
- Final Remarks
- Pizza, pops, and profs

## What is Economics?



- At its core, economics is the study of human behaviour.
  - Ultimatum game
  - Institutions: markets, law, rights, environment
- Economics studies the allocation of scarce resources among (largely) unlimited wants.
  - Goods, time, labour, natural resources, energy
- Due to scarcity, choices involve trade-offs.
- Economics studies these trade-offs how the possible resource allocations affect the economy/society.

## **How to Learn Economics?**



- Pay attention in your courses
- Think about how the simple stories of economics apply in the real world?
- Think about what is missing in the logic of our economic models?
  - Get the full picture.
  - Where can economics be applied?
- What are societies pressing issues?
  - Climate change, opioid crisis, human suffering, AI

## Learning Objectives for an Economics Major



### **Toolbox of the economic major**

- Economic theory
  - Economics is a theoretical science
    - Deduce how choices will be made based on the interaction of selfinterest and constraints
    - Think at the margin (the costs and benefits of a little bit more or less)
- Statistics and econometrics
  - Test predictions using data and statistical analysis
  - Measure magnitude of responses



- Apply theory and econometrics to create new knowledge
  - Research is problem solving
  - Communicate results
- Knowledge base
  - When and why markets work well
  - When and why government intervention is required
  - Understanding of economic history and effects of different institutions

## **Economics at a Glance**



- B.A. major in economics
  - 14 to 20 courses in economics (ECON)
- Required courses in economics for the major
  - ECON 201, 203, 301, 303, 357, 359 and 395 (7 courses)
  - Four ECON courses at 400+ level
  - At least three ECON at the 300 level (or above)
- Other requirements
  - MATH 249, STAT 213 and 217



## **Major: Course Clusters**

#### **Principles**

- ECON 201 and 203

#### **Economic theory and calculus**

- ECON 301, 303, 357, and 359
- MATH 249 or 265

#### **Statistics and econometrics**

- STAT 213 and 217, ECON 395

#### Application courses at the 300 level

- Institutional and historic focus

#### Application courses at the 400+ level

- 4 courses (all have ECON 357 and 359 as a prerequisite)
- Serious economic analysis using tools

## **Major: Course Sequencing**



#### **First Year**

- ECON 201 and 203
- STAT 213 and 217
- MATH 249 or 265
- MATH 211 (optional)

#### **Second Year**

- ECON 301, 303, 357, and 359
- ECON 395
- MATH 211 (optional)
- ECON options

For example: ECON 311 (Excel), ECON 321 (Trade), ECON 355 (Public Finance), ...

## **Major: Course Sequencing**

## **Third Year - ECON Options**

#### **Contextual courses**

ECON 339 (Canadian Economic History), 349 (Social Problems), 379 (Health), 479 (Experimental), 481 (Behavioural), 483 (History of Thought), 485 (Welfare State)

#### **Skills-based courses**

- ECON 491 (Managerial Economics)
- ECON 495 (Econometrics)
- ECON 457 (Accounting and Finance)
- ECON 411 (Python)

#### Fourth Year - Upper-Level Courses

• 400- and 500-level courses (apply the theories you'll learn in ECON 357 and ECON 359)





## **Honours Degree: Additional Requirements**

B.A. honours in economics: 20 to 24 courses in ECON

Math and Statistics		Theory
MATH 211		ECON 557 and 559
ECON 38	7 and 389 (Math Econ)	
ECON 49	5 and 497 (Econometrics)	
Sequencing	5	
<u>MATH 211</u> &	$\underbrace{\text{ECON 387}}_{\leftarrow} \xrightarrow{\leftarrow} \xrightarrow{\leftarrow} \xrightarrow{\leftarrow} \xrightarrow{\leftarrow} \xrightarrow{\leftarrow} \xrightarrow{\leftarrow} \xrightarrow{\leftarrow} \xrightarrow$	$\rightarrow$ ECON 557 & ECON 559
2nd year	3rd year	4th year
	ded for graduate schoo 271, 277, 335	

## **Course Selection: Build Your "Portfolio"**



- Professional economist after graduation
- Recent job postings have highlighted the following qualifications:
  - Demonstrated experience applying concepts from economic theory and literature, principles, and techniques in field(s) of economics.
  - Demonstrated ability to define relevant questions, establish hypotheses (answers), analyze complex data to test hypotheses, measure relevant magnitudes, evaluate results, and draw conclusions.
  - Demonstrated experience with statistical software. Experience with SQL, R, or Linux is an asset.
  - Strong written and oral communications skills, including the ability to effectively present information to colleagues, management, industry professionals, and public groups, including writing reports and making presentations.
  - Ability to work effectively on teams and under inflexible time constraints.

## **Professional Skills**



- Use of Excel in economic analysis [ECON 311]
- Greater facility and familiarity with quantitative reasoning, modelling, and mathematical tools [ECON 387]
- Data analysis and programming [ECON 411]
- Familiarity with the tools and language of business, in particular, accounting and finance [ECON 457]
- Greater facility and familiarity with statistics and econometrics [ECON 495]



## **Field Expertise**

- Knowledge base
  - Multiple courses in the same field
    - Industrial Organization
    - ECON 471, 477, and 571
- Expertise in performing and communicating economic analysis
  - Research requirements/Capstone Experience
    - Applied analysis, real-world problem solving, directed research
    - ECON 477 and 571 papers
- Compete with graduates of MA programs
- Substitute for 2 to 3 years of work experience

## **Pathways to Differentiation**



- Data Science Specialization
  - ECON 588 involves matching teams of students with sponsors to develop insight into a question of interest using economics and data science.
- Summer Internship in Regulatory Economics
  - Students completed the industrial organization course sequence are placed in paid internships.
- Bank of Canada Governor's Challenge
  - The BCGC has two rounds in which a Department team competes: the first round is in November, with selected teams advancing to a second round in February in Ottawa at the Bank of Canada. Key courses ECON 303, 341, 359, and 541.
- Rotman Trading Competition
  - Students participate in a fall competition on campus (the BP Trading Competition) and based on the results of this competition are selected for the RTC competition in Toronto. Key course ECON 443 (software platform is required component).

## Not Surviving, Thriving!



- Intellectual, personal, and social development
- Intellectual development: be aggressive!
  - Love of learning
  - Thrill of discovery
  - Thirst for knowledge
  - Hunger for challenge
- What can I do versus what do I know?
  - Add value by being able to solve new problems and communicate results. That is research!
- Master material, grades will take care of themselves
  - More than memorization
- Develop a logical hypothesis (potential answer) to a problem
  - What will happen if? What are the effects of a change?
  - Test hypothesis or measure the effect.

## Learn About and Use Resources that are Available



- Go to class!
  - Tutorials and PASS (ECON 301, 357, and 395)
- Keep up with material through the term
  - Practice, practice, practice
  - Learn from mistakes so DEMAND solutions
- Form communities of practice
  - Discus course material
  - The Economist
- Use office hours of the TA and the Professor

## **Great Expectations**



- Take pride in your work
  - "The quality goes in before the name goes on"
- Don't avoid difficult classes
- Take classes you will enjoy as well as classes you think will make you employable
- Get yourself noticed
- Watch out for Ws
- Have GREAT EXPECTATIONS! EXPECT MORE!

### Danger, Watch Out



- Be aware of ECON 201 and 203
  - Large classes
  - Multiple choice assignments and exams
  - Promotes passive memorization, not learning
  - Not representative of higher-level courses Econ 301 and 357
  - Resist temptation, develop good learning habits in first year
- Prerequisites are not waived
  - Developing expertise, prerequisites are the foundation
  - Avoid "I just have to pass". Not true, C- in ECON 357 not likely going to do well in 400 level courses.
- Almost never is a third attempt granted for ECON 301 and 357
  - Without passing grade in ECON 301 cannot get into 357, without passing grade in ECON 357 cannot take any 400 level courses.

## **Need Advice?**



- ASC (Arts Student Centre) Undergraduate Program Advisors
  - Economic specialist Ms. Rachel Blake
  - artsads@ucalgary.ca
  - Program advising questions, e.g., Prerequisite waivers, Course overloads, Transfer credit assessments, Program requirements
  - <u>https://arts.ucalgary.ca/current-students/undergraduate/academic-advising</u>
- Undergraduate portal for economics majors
  - <u>https://arts.ucalgary.ca/economics/current-</u> <u>students/undergraduate/student-advising</u>
- Undergraduate Program Specialist Mr. Raj Lakhan
  - ECON updates in your email every two weeks!
- Degree requirements [University of Calgary Calendar]
  - <u>https://arts.ucalgary.ca/economics/current-</u> <u>students/undergraduate/economics-program-requirements</u>

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## **Need Advice?**



Undergraduate portal for economics majors

Degree requirements [University of Calgary Calendar]





Undergraduate Program Specialist Mr. Raj Lakhan ECON updates in your email every two weeks!