

ECON5640 Course Syllabus

Policy Impact Evaluation Course

Instructors: Yae Eun Han & Hyuncheol Bryant Kim

Overview

Significant resources are dedicated to social programs and public policies, yet a fundamental question remains: **how do we know whether observed outcomes are actually driven by the intervention?** To answer this reliably, evaluators must carefully select and implement rigorous impact evaluation designs.

This course equips students with the analytical principles and practical skills needed to conduct empirically defensible impact evaluations. Through real-world case studies and hands-on design activities, students will:

1. **Develop an intuitive and technical mastery** of major policy evaluation methods.
2. **Bridge theory and practice** by critically evaluating published literature and real-world development interventions.

Throughout the course, students will explore key operational questions: *Which evaluation design is most credible and feasible for a given program and setting? What can each method tell us—and what can it not? What are the practical trade-offs?*

By the end of the semester, students will understand core empirical methods—including Randomized Controlled Trials (RCTs), Regression Discontinuity Design (RDD), Difference-in-Differences (DiD), Instrumental Variables (IV), Matching, and Mixed Methods—at the depth required to choose appropriate designs, defend their choices, and anticipate potential threats to validity. This represents the core professional skill set required for evaluation specialists working with NGOs, governments, and international donors.

Learning Objectives

The course is structured around three foundational pillars of competency:

- **Knowledge and Understanding:** Develop fluency in the core concepts, methodologies, and technical practices of impact evaluation.
- **Critical Thinking:** Assess the strengths, limitations, and underlying assumptions of various evaluation designs to determine whether reported impact results can be trusted.
- **Application:** Design robust, practical impact evaluation proposals for specific policies, programs, or interventions in complex real-world settings.

Primary Textbook: *Impact Evaluation in Practice*, 2nd Edition (World Bank Group).

This book serves as the foundational textbook and primary technical reference for our course. While classroom lectures focus on intuitive frameworks and hands-on design applications, *Impact Evaluation in Practice* offers comprehensive, step-by-step explanations of each methodological tool. Students are strongly encouraged to consult this text for deeper theoretical detail, mathematical intuition, and supplementary real-world case studies whenever further clarification is needed on concepts covered in class.

Course Format and Daily Quizzes

- **Daily Quiz & Attendance Check:** At the very beginning of each session, students will take a brief, simple quiz covering core concepts. Completing the quiz automatically grants 1% toward your final grade, serving as the official attendance record for that day. Additionally, providing high-quality, correct answers will earn an extra 0.5% bonus per session.
- **Methodological Lecture:** An exploration of the method's underlying logic, key assumptions, and practical trade-offs, anchored by a real-world program evaluation from the field.
- **In-Class Design & Critique Activities:** Hands-on collaborative application focusing on research design rather than heavy data analysis. Activities alternate between:
 - **Weekly Method Critiques (Weeks 2–3):** Students analyze flawed, realistic program evaluations to diagnose design errors, identify the direction of bias, and propose methodological fixes.
 - **Method-Selection Scenarios (Week 4):** Given a specific real-world program and setting, students select, design, and defend the most appropriate impact evaluation strategy.
 - **Classroom Contribution Bonus:** Separate from the structured activities above, active intellectual engagement is highly valued throughout the entire class. Students who ask thought-provoking questions or offer exceptionally insightful comments during lectures or discussions will receive an **extra 0.5 point bonus** per contribution toward their final grade.

Course Requirements and Grading

Component	Weight	Purpose
Evaluation-design proposal (concept note → full proposal)	25%	Core individual project: design a rigorous impact evaluation for a real program (concept note → full proposal).

Final exam	35%	Cumulative assessment of theoretical foundations, methodological logic, and applied design judgment.
Proposal presentation	10%	Live defense of your evaluation design proposal and constructive Q&A with peers (Week 4).
In-class design activities / participation	30%	Quizzes (Total 15%), Active engagement in weekly design critiques, peer discussions, and method-selection exercises (15%).

Milestones: concept note (~end of Week 2), full proposal due (~Week 4), presentation (Week 4). Students pick a real development program and design its evaluation — choosing and defending a method, not running one.

Course schedule

Note: Instruction rotates by week. Prof. Bryant Kim leads Weeks 1 & 4; Prof. Yaeun Han leads Weeks 2 & 3.

Week · Day	Topic	Activity	Instructor
1 · Mon	Introduction to Impact Evaluation: Why evaluate? IE vs. monitoring; aid-effectiveness debate	Sort real evaluation questions — which need an impact evaluation?	Bryant Kim
1 · Wed	Causal Inference Foundations	Econometric Refresher: OLS	Bryant Kim
1 · Fri	Causal Inference Foundations	Econometric Refresher: reading the regression table, omitted variable bias.	Bryant Kim
2 · Mon	RCT II: Randomization logic and design variations (lottery, phase-in, encouragement), Practical threats, ethics & feasibility (attrition, spillovers, compliance, ITT/ToT)	Critique a flawed RCT (“Healthy Start” school feeding), Critique an RCT plan for feasibility + ethics	Yaeun Han
2 · Wed	Difference-in-Differences (DiD): Program rollouts, natural experiments & parallel trends	Critique a flawed DiD evaluation (broken parallel trends)	Yaeun Han

2 · Fri	Regression Discontinuity Design (RDD): Programs with eligibility cutoffs (poverty, age, test scores)	Critique a flawed RDD evaluation (manipulated / misused cutoff)	Bryant Kim
3 · Mon	Matching / PSM & Mixed Methods: Selection on observables; using qualitative data for mechanisms	Critique a flawed matching evaluation; misread a null result (needed process data)	Yaeun Han
3 · Wed	Instrumental Variables (IV): Natural experiments and the exclusion restriction	Critique a flawed IV evaluation (invalid instrument)	Yaeun Han
3 · Fri	Choosing the right design + cost-effectiveness & using evidence	Method-selection clinic on students' own programs	Yaeun Han
4 · Mon	Choosing the right design + cost-effectiveness & using evidence	Method-selection clinic on students' own programs	Bryant Kim
4 · Wed	Final IE proposal presentations	Student presentations + peer Q&A	Bryant Kim
4 · Fri	Final Exam: Cumulative evaluation of core foundations and all covered methodologies	Comprehensive final examination	Bryant Kim