Format of the Final

Up to **60** minutes: 25-30 Multiple Choice Questions

- Questions will be similar in style to online homework assignments
- Approximately half math/formula type questions; half conceptual questions
- No curve, but three or four extra credit questions. Extra credit questions may be on things listed under "What won't be on the Final."

Final Rules

- **Final will be on Canvas, during class, in room 0B07.**
- **Final will be shorter than midterm, both in time and questions. I will open room 15 minutes early, you should not click on the exam in Canvas prior to entering the classroom.**
- **Only allowed to have following things open: Canvas Final, Excel, Calculator**
- Can bring a calculator, something to write with, and piece of scratch paper
- Can't use phone as a calculator; no talking allowed during exam
- Raise your hand if you have a question, although I can't provide additional clarification on problems or say if you're doing it right
- Can't leave room until after you finish final
- No makeup for the final. If you have a necessary and excused absence the final will absorb the midterm's weight. If you do not have a legitimate absence, you will receive a zero
- Cheating will result in a grade of zero and being reported for academic misconduct

What You Need to Know

- **Exam is non-cumulative. It covers all material after the midterm**
- Most formulas will be given to you, and will need to know how to use them.
- Without being given a formula, you need to know how to: compute ratios and percentages, transform numbers to be "per capita", compute confidence intervals if given the estimate and standard error. You should also know the formulas for gross enrollment and net enrollment.
- Need to understand all canvas questions from assignments 4 and 5.
- Key terms and concepts such IV regression, statistical significance, correlation vs causation.

What WON'T be on the Final

- **Nothing prior to the midterm will be on the final.** That means canvas assignments 1-3 are excluded from the final exam.
- Won't have to manipulate formulas using algebra
- Won't have to memorize formulas that aren't mentioned under "What you need to know"
- Memorize very specific statistics or details. E.g. you should know that relatively few people in developing countries attend secondary school, however you do not need to know that the net enrollment rate in Sub-Saharan Africa is around 26 percent.
- Don't need to understand the differences in differences approach to establishing causality
- Nothing about R. Won't need to write Stata code, but should be able to interpret Stata output

What You Should Study

Assignments:

- **Make sure you understand the answers to all canvas questions on Assignments 4-5.**
- Make sure you understand Problem Set 2.1. You won't have to write Stata code, but you should be able to understand Stata output and several of the key concepts (statistical significance, IV regressions) on the problem set.

Worksheets:

- Review solutions to worksheets 4, 5, and 6. Will ask questions that are nearly the same but with different numbers.

Lecture Slides:

- Everything on lectures slides I put together is fair game for exam
- Videos, linked articles, and external slides won't be covered if the material wasn't included on canvas questions or Problem Sets. There may be extra credit questions based on linked content.

Concepts and Key Terms on Final Exam

Properties of Correlation

Correlation vs Causation [identifying causation: IV regression, random assignment, natural experiments]

Regression to the Mean and spurious correlations

Computing correlation, covariance, variance, etc if given formulas

Regression coefficients and how to interpret them

How to make predictions using regression coefficients; how to compute regression errors

How we use and interpret Instrumental Variable (IV) regressions and what confounding variables are

Confidence intervals and statistical significance (won't be given formula)

Inclusive vs Extractive Intuitions; what problems well-functioning institutions solve

Evidence regarding importance of Culture vs Geography vs Intuitions for development (including PS2)

Should understand the cases of North vs South Korea, East vs West Berlin, Haiti vs Dominican Republic

General facts about the agricultural sector in developed vs developing countries

Basics about Foreign Aid (whether people want it, why we have it, what the goals are)

Unintended side effects of foreign aid (including IV approach to food aid and civil conflict incidence)

Basic idea and principles behind less-distortionary aid and less-distortionary development approaches

Education gap and how to measure it (including Net vs Gross Enrollment Rates)

Returns to education, when they are the highest

Difficulties in delivering education in developing countries, and the policies that might address them

Credit markets in rich vs developing countries

Information Asymmetry, Commitment Problems, Moral Hazard, Adverse Selection

Liability, collateral, monitoring, screening

Relationship between interest rates and default risk

Microfinance, including how it works and why it's structured the way it is