#### Difference

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Designs

John Poe, Hessian LLC

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#### A Two-Week Online Course

- Four hours of lectures per day
- Both synchronous and asynchronous options available
- Access to complete bank of code tutorials in both R & Stata
- Beta access to all course notes before they are made public
- A ~15-minute pre-course meeting to discuss research
- A ~30-minute mid-course meeting to discuss research
- A customized reading list
- A customized analysis plan

#### Rotating Topics Include

- Parallel Trends
- Statistical Inference
- Staggered Timing Problems
- Treatment Reversals
- Categorical & Continuous Treatments
- Heterogeneous Treatment
  Structures & Treatment Effects
- Interference, Spillover, and Noncompliance
- Synthetic Control for Case Studies & Full Panel Settings
- Conditioning on Confounders
- Latent Variable Methods
- Quantile-Based Methods
- Bayesian DiD

#### Pricing Options

Standard Tickets: \$2000

Lottery Winners: FREE

E-mail to inquire about custom classes or group rates

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Anyone interested in entering the course lottery please <u>see my website</u>

#### 2021 Schedule

April 12–23 University

of Milan

May 24–June 4 Hessian LLC

June 28-July 9

ICPSR Summer Program

September 13-24 Hessian LLC

Register HERE

### Before Class

- Fill out background survey
- Schedule 15-minute consult with instructor
- Schedule 30-minute consult with instructor
- Download & Install Software
  - Slack
  - R
  - RStudio
  - Stata 17
- Run pre-course scripts to install packages in R & Stata
- Run pre-course testing scripts to make sure everything works
- Fill out the *"something's broken"* survey to confirm everything above worked fine
  - If not, we will schedule a consult to fix it prior to class



Session 1 10:00–11:15 Intro to the Workshop 30 Minute Break

Session 2 11:45-1:00 Intro to DiD Designs 30 Minute Break

Session 3 1:30-3:00 Intro to Stata for DiD Intro to R for DiD

### Tuesday

Session 1 10:00–11:15 Thinking Through Assignment Structures

30 Minute Break

Session 2 11:45-1:00 Thinking Through Treatment Structures

30 Minute Break

Session 3 1:30-3:00 Thinking Through Effect Structures



Session 1

10:00-11:15

#### Parallel Trends

30 Minute Break

Session 2

11:45-1:00

Conditioning on Things 30 Minute Break

Session 3 1:30-3:00 Latent Variable Methods

### \* Thursday

Lab 1

10:00-11:15

Major Packages for DiD in Stata 30 Minute Break

Lab 2 11:45-1:00 Major Packages for DiD in R 30 Minute Break

Lab 3 1:30-3:00 Special Topics Packages in R & Stata

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One on one  $\sim 30$ -minute research meetings to discuss student work.

They will include

- A customized reading list
- A personal research design plan

Meetings are scheduled by the start of the course via a course survey

## Tuesday

Session 1 10:00–11:15 Theory of Staggered Timing 30 Minute Break

Session 2 11:45-1:00 The DiD package 30 Minute Break

Session 3 1:30-3:00 Other Timing Problems



Session 1 10:00-11:15 Multicategory Treatments 30 Minute Break

Session 2 11:45-1:00 Continuous Treatments 30 Minute Break

Session 3 1:30-3:00 Other Weird Treatment Structures

## Thursday

Session 1 10:00–11:15 Interference, Spillover, and Noncompliance 30 Minute Break

Session 2 Generalized Counterfactual Estimation 30 Minute Break

Session 3

1:30-3:00

Special Topics by Request

### <sup>®</sup> Friday

#### Session 1 10:00–11:00 Thinking About Modern DiD 60 Minute Break

Session 2

12:00-1:00

Q&A