2025 COURSES IN THE DEPARTMENT OF EPIDEMIOLOGY

CAUSAL INFERENCE
LEARN FROM THE EXPERTS

CAUSALab
A Center to Learn What Works

HARVARD
T.H. CHAN
SCHOOL OF PUBLIC HEALTH

Advanced Confounding Adjustment
June 16-20, 2025

Instructors: Joy Shi, Barbra Dickerman, Miguel Hernán
Curriculum Fellows: Sophia Rein

	Monday	Tuesday	Wednesday	Thursday	Friday
9:30 am - 11:00 am	**Lecture**: The bias of conventional methods for time-varying treatments	**Lecture**: IP weighting for dynamic treatment strategies	**Hands-on**: Estimating the effect of static treatment strategies via the parametric g-formula	**No class (Juneteenth)**	**Lecture**: Parametric g-formula: iterative conditional expectation (ICE) representation
11:10 am - 12:30 pm	**Hands-on**: The bias of conventional methods in the presence of treatment-confounder feedback	**Hands-on session**: Estimating the effect of static treatment strategies via IP weighting	**Lecture**: Parametric g-formula for dynamic treatment strategies		**Hands-on**: Estimating the effect of treatment strategies via the ICE g-formula
12:30 pm -1:30 pm	Break				
1:30 pm - 3:00 pm	**Lecture**: IP weighting for time-varying treatments	**Hands-on:** Estimating the effect of dynamic treatment strategies via IP weighting	**Hands-on:** Estimating the effect of dynamic treatment strategies via the g-formula (part 1)	**No class (Juneteenth)**	**Lecture**: IP weighting combined with the ICE g-formula: multiply robust estimation
3:10 pm - 4:30 pm	**Hands-on**: Estimating IP weights for static treatment strategies	**Lecture**: Parametric g-formula for time-varying treatments	**Hands-on:** Estimating the effect of dynamic treatment strategies via the g-formula (part 2)		**Hands-on**: Estimating the effect of treatment strategies via multiply robust methods