

# Economics Ph.D. Program Specialization Coursework

Students are required to complete a minimum of 28 *unique* units of advanced coursework in their second year of the Ph.D. program, not counting new seminars. The courses taken must fulfill the requirements for at least two fields they wish to specialize in. A course may count for more than one field, but 28 unique units from the UCSB Economics department are required. Core and Elective courses offered for each specialization are listed in the table below. **All classes are 2 units (i.e., half a quarter of instruction) unless specified otherwise, and classes with an asterisk will be offered in the 2023/4 academic year.** A repository of class syllabi is available at <https://tinyurl.com/3y4mu29y>.

## Fulfilling Requirements for a Specialization

- If a specialization offers elective classes, students must complete 16 units in total. At least 8 of these units must come from core courses.
- If a specialization does not offer elective classes, students must complete 12 units in total. All 12 units must come from core courses.
- A passing grade of B or better is required for a course to count towards a field of specialization or elective.

Field	Core Courses	Elective Courses
<b>Macroeconomics</b>  <b>16 total units. At least 8 Core units required.</b>	214A Economic Development* (4 units) 228 Aggregate Economics* (4 units) 253A Job Search Theory 253B Topics in Search and Marketing 227 Computational Methods for Macroeconomics* (4 units)	260E Natural Resource: Continuous-Time Methods* 260G Environmental Externalities and Regulation 260I Time, Uncertainty, and Environmental Policy* 230A Public Economics I* 230B Public Economics II* 245N Causal Machine Learning* (4 units)
<b>Experimental and Behavioral Economics</b>  <b>16 total units. At least 8 Core units required.</b>	278A Experimental Methods* 278B Games in the Laboratory* 278C Individual Decision Making in the Laboratory* 278H Attention and Perception* 214C Behavioral Development Economics*	245J Field Experiments* 260I Time, Uncertainty, and Environmental Policy* 230A Public Economics I*
<b>Econometrics</b>  <b>12 Core units required</b>	245B Time Series Econometrics 245E Introduction to Bayesian Econometrics 245F Generalized Method of Moments and Instrumental Variables 245G Panel Data and Difference-in-Differences* 245H Clustering, Bootstrapping, and Multiple Comparisons* 245I Regression Discontinuity Designs 245J Field Experiments* 245L Nonparametric Econometrics* 245M Data Wrangling* 245N Causal Machine Learning* (4 units)	<b>No Electives for this field</b>

<b>Environmental and Natural Resource Economics</b>  <b>16 total units. At least 8 Core units required.</b>	260D Natural Resource: Dynamic Programming Methods* 260E Natural Resource: Continuous-Time Methods* 260G Environmental Externalities and Regulation 260I Time, Uncertainty, and Environmental Policy* 260K Environmental and Development Economics 230A Public Economics I*	214C Behavioral Development Economics* 230B Public Economics II* 230C Individual Taxation* 230D Capital Taxation* 245G Panel Data and Difference-in-Differences* 245H Clustering, Bootstrapping, and Multiple Comparisons* 245I Regression Discontinuity Designs 245J Field Experiments* 245L Nonparametric Econometrics* 245M Data Wrangling* 245N Causal Machine Learning* (4 units) 227 Computational Methods for Macroeconomics* (4 units)
<b>Labor Economics</b>  <b>16 total units. At least 8 Core units required.</b>	250D Population Economics* (4 units) 250E Labor Supply* 250F Labor Demand and Wage Differentials 250G Economics of Education* 250H Human Capital* 250I Personnel Economics* 250J Empirical Search and Recruiting 230I Health Economics* 230J Health Economics II* 250K Personnel Economics II* 214C Behavioral Development Economics*	245F Generalized Method of Moments & Instrumental Variables 245G Panel Data and Difference-in-Differences* 245H Clustering, Bootstrapping, and Multiple Comparisons* 245I Regression Discontinuity Designs 245J Field Experiments* 245L Nonparametric Econometrics* 245M Data Wrangling* 245N Causal Machine Learning* (4 units)
<b>Public Economics</b>  <b>16 total units. At least 8 Core units required.</b>	230A Public Economics I* 230B Public Economics II* 230C Individual Taxation* 230D Capital Taxation* 230F Behavioral Public Finance 230G Tax Incidence	214C Behavioral Development Economics* 245F Generalized Method of Moments and Instrumental Variables 245G Panel Data and Difference-in-Differences* 245H Clustering, Bootstrapping, and Multiple Comparisons* 245I Regression Discontinuity Designs 245J Field Experiments* 245L Nonparametric Econometrics* 245M Data Wrangling* 230I Health Economics* 230J Health Economics II* 260I Time, Uncertainty, and Environmental Policy* 260G Environmental Externalities and Regulation 250D Population Economics* (4 units)
<b>Notes</b>	245M Data Wrangling – Counts towards Econometrics Field in 2023-4 only.	