

**Economics 742**  
Public Finance and Fiscal Policy  
Chris Taber and Jim Walker

Note that this is really not a public finance course it is really an applied econometrics course, though we will try to use examples from public.

Evaluation will be on the basis of problem sets and a presentation. We are flexible about the presentation: it can be your own work or discussion of existing literature. In either case it needs to be pre-approved by one of us.

**Jan. 23- Feb 29: Taber's part:**

A broad outline:

1. Evaluation of a Program
  - (a) Instrumental Variables
    - i. OLS/IV as GMM
    - ii. Simultaneous Equations
    - iii. Measurement Error
  - (b) Difference in Differences
  - (c) Regression Discontinuity
  - (d) Using Selection on Observables to think about Selection on Unobservables
2. Heterogenous Treatment Effects
  - (a) Propensity Score Matching
  - (b) Generalized Roy Model
    - i. Heckman 2 step
    - ii. Semiparametric Identification
  - (c) IV with Heterogenous Treatment Effects
  - (d) Local IV

## **March 12-April 25: Walker's Part**

3. Statistical and Modeling Preliminaries
  - (a) Testing and Standard Errors
  - (b) Modeling Strategy: Top-down or bottom-up?
4. Dynamic Panels and IV
5. Initial Conditions and Sampling Plans
6. Event History Analysis (Duration analysis)
7. Structural Estimation
  - (a) Defining Counterfactual Experiments
  - (b) Model Formulation and estimation
  - (c) Computation
  - (d) Applications to problems in public economics

## **April 30-End of semester: Student Presentations**