

## Course Outline: URP 102:290

Economic Impact Modeling – Spring 2009

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Go to my personal web site to link to the class @

**<http://www.econ.iastate.edu/prosci/swenson/swensonpage.htm>**

This is an applied analysis course that will be heavy on practice and procedure, medium to heavy on the normative foundations for measuring economic and fiscal activity within a public policy context, medium to light on overall economic theory, and light to only occasionally noticeable on those wondrous and elegant mathematical foundations to much of what we do that delights economists to no end, but me not at all (although I'm very grateful for all of their hard work). You will learn how to do economic impact analysis (input-output), why to do them, when to do them, and when not to do them. If you are interested in rigorous mathematical gymnastics and other forms of analytical exotica, mine is not the class to take. I will however require a bit of data heavy lifting – we will build impact models that require a fair amount of skill and precision.

1. Regional economic analysis and modeling: data, resources, & structures
  - a. Basic economic concepts as they apply to regional analysis
  - b. Broad types of economic analysis of industries and communities
  - c. Sources of data – scope, detail, and quality
  - d. Usefulness of different kinds of economic data
  
2. Economic base theory
  - a. In the beginning
  - b. Then there was Keynes
  - c. Total multipliers; sectoral multipliers; multipliers considering marginal change
  - d. Pros and cons of base assumptions
  - e. Economic base simplified
  - f. **Assignment: applying the elements of economic base analysis to your chosen county**
  
3. The structure of regional industrial accounts
  - a. Industries, commodities, and institutions
  - b. Social accounts matrices

- c. Simple I X I transactions
4. The practice of economic impact assessment
    - a. What it is, what it isn't
    - b. The terms, their meanings, and their limits
    - c. Understanding inter-industrial linkages
    - d. Discerning impacts, causality, etc
    - e. Looking at the big picture
    - f. Distinguishing between a good one and a bad one – some cases
  5. Introduce students to an actual, home-built, spreadsheet-based, (and highly-hyphenated), input-output model.
    - a. This is a practical bridge between the matrix math that is usually taught in these courses and interpreting a set of current I x I accounts.
    - b. Learning to use the **Use** and the **Make** tables for actual analysis and community economic assessment.
    - c. Step-by-step impact assessment through the spreadsheet
    - d. Discussion of the results and the limitations of the analysis
    - e. **Assignment:** Students will take a SAM that I provide and replicate the steps.
  6. Building a larger impact model to include job impacts
    - a. Getting started
    - b. Choosing a study area
    - c. Specifying an impact scenario
    - d. Discuss model modification (but we won't do it)
    - e. Demonstrate impact assessments with IMPLAN
    - f. Task: Each student will specify an actual or hypothetical economic change situation that I will critique and approve. Each student will also chose an Iowa county or a combination of Iowa counties for a study area so that I can produce their industrial accounts.
    - g. I will share a few economic impact analyses for students to review and comment on.
  7. Using **YOUR** model – LAB and technical assistance
    - a. Actually using (an in-class review followed by hands-on in the lab)
    - b. Work directly with students in model building, problem solving, and modification of their impact scenario.
    - c. Provide advice and assistance (on-site and long-distance). Scenarios critiqued and approved.
    - d. **Assignment:** Students will prepare an economic assessment of their approved scenario. The report will not be longer than 6 pages, including all supporting tables.
  8. Papers discussed and critiqued

- a. Papers due. Each student will identify his or her study area, the study scenario, and the findings.
9. Wrap-up topics:
- a. Fiscal impact assessment
  - b. Conjoined modeling: Fiscal, labor, and economic impacts – the dynamics of space
  - c. An introduction to benefit – cost considerations and a distinguishing of B/C from economic impact assessment. Economic impacts are not, I repeat not, benefits!
  - d. Other policy considerations: the appropriateness of public spending for private projects

## Final Assignment/Test

### Evaluation and Grading Summary

Assignment 1	Economic base analysis	15%
Assignment 2	I-O / SAM analysis	10%
Assignment 3	County economic impact & paper	40%
Assignment 4	Assignment and paper or take-home essay pertaining to last section	25%
General class participation and attendance		10%

*Resources: I intend to rely heavily on electronic or web-based sources for this class, plus supplemental readings from my own resources. I should be able to hustle up ample public domain resources to under-gird this class and to lighten up your text book load.*

Parts 1-3: Schaffer, William. Regional Impact Models. 1999 Regional Research Institute, WVU (and in the web-book for regional sciences); and Otto & Johnson's, Micro-computer Based Input Output Modeling (selected readings will be distributed in class)

Parts 4 – 8: I will rely on resources, data, and techniques that I provide.

Part 9: I will assign a set of selected articles or basic readings pertinent to the section, again, that I will provide or provide access to.