You may not enroll in C&RP 881 if you have previously taken C&RP 781 for credit (see below under Credit Hours and Sign-Up for your options here).

**Email list:** I have set up an email list for the course; if you wish to be notified about materials availability, comments/corrections on problem sets you should send email in the next couple of days to viton.1@osu.edu asking to be added to the 881 mailing list.

**Web site:** I have established a small web site for the course: its address is

http://facweb.arch.ohio-state.edu/pviton/courses/crp881/

You may want to check in there every so often to see if anything’s been added. My plan is to place copies of all course materials there, but I’m not sure if that will work out.

**COURSE DESCRIPTION**

This is an advanced add-on to C&RP 781, stressing the mathematical techniques needed to begin reading the technical research literature in spatial and non-spatial microeconomics.

**PREREQUISITES**

Second year calculus, including partial derivatives; and some basic matrix algebra. We will not be using multiple integration.
CREDIT HOURS AND SIGN-UP

This course is intended, as noted above, as an add-on for CRP 781. But I’ve tried to make it as easy as possible for students to sign up for the course. Here are your options.

- **Take 881 instead of 781**: If you are currently enrolled in C&RP 781, you may take C&RP 881 (5 credits) instead: this means that you will have to drop 781 and sign up for 881. *This is the preferred way to take the course*. The Department’s Graduate Studies Committee has agreed that 881 will be treated as 781 for purposes of the required MCRP core.

  **Work and Evaluation**: If you take 881 in this way you must:
  - Attend both the 781 and 881 lectures
  - Do the 881 problem sets
  - Do at least one advanced problem in the 781 nal.

  Your grade in 881 will be based 70% on the 781 final and 30% on the 881 problem sets. Since this seems a pretty bad deal — 1 credit for attending a weekly 2-hour lecture and doing problem sets — you may (but you need not) also enroll in C&RP 781J (Independent Study, sequence no. 04238–9) for 1 credit. If you do all this, you will be getting (and paying for) a total of 6 credits for the 781/881 combination.

- **Take 781, and 881 as an Independent Study**: If you are currently enrolled in C&RP 781 and wish to continue taking it, you may in addition enroll in C&RP 793J (Independent Study, sequence no. 04238–9) for up to 2 credits. (The upshot is that you get up to 6 credits: 4 for 781, 2 for 793J).

  **Work and Evaluation**: 794J is graded S/U and you will receive an S if you make a reasonable attempt to do the problem sets. The Department has agreed that this Independent Study will not count against the Department limitation of 15 hours in the MCRP program; however, it will not count as the required Independent Study for the MCRP, either. You will not have to attend the 781 lectures, do the 781 problem sets, or take the 781 exam.

- **Take 881 as an Independent Study**: If you have already taken 781, or you have tested out of it, or you just don’t wish to take it, then you may enroll in C&RP 793J (Independent Study, sequence no.04238–9) for up to 3 credits. This course is graded S/U and you will receive an S if you make an attempt to do the problem sets. The Department has agreed that this Independent Study will not count against the Department limitation of 15 hours for the MCRP program; however, it will not count as the required Independent Study for the MCRP, either. You will not have to attend the 781 lectures, do the 781 problem sets, or take the 781 exam.

**TEXTS**

There is no official text for the course, but here are some strongly recommended books for your library.
E. Silberberg, *The Structure of Economics*, McGraw-Hill, New York, 1978. This is the best coverage I know of for basic comparative statics derivations, which is what we shall be concentrating on in 881. I believe that this book is out-of-print. I have a version which you can borrow overnight.

H. R. Varian, *Microeconomic Analysis*, W.W. Norton, New York, 1984. This is one of the two standard texts in the field: it has a broader coverage than Silberberg, but less detail too. Either the first or second edition is fine (the second is slightly better).

A. Mas-Colell, M. D. Whinston, and J. R. Green, *Microeconomic Theory*, Oxford University Press, New York, NY, 1995. This is the second standard text. It covers much more material than either of the other two books, and lots more than we shall cover in 881. But it is well worth having on your shelves.

For spatial microeconomics, I strongly recommend


If you are interested in what might be called “public economics” — the economics of the public sector, including optimal pricing and taxation, I recommend


**COURSE OUTLINE**

1. Techniques of Optimization, Envelope Theorem, second-order conditions.
2. Theory of the firm: production and cost functions, competition, monopoly, duopoly.
3. Spatial production theory
4. Non-spatial consumer theory, Marshallian and Hicksian demand.
5. Spatial consumer theory.
6. Introduction to optimal pricing and taxation
7. General equilibrium and Pareto-optimality of competition; externalities and public goods.