This course treats contemporary economic theorizing and not the history of economic thought. It places processes of development or emergence in the analytical foreground, and puts equilibrium states or conditions in the background. It stresses opportunities for contemporary scholarship of a process-oriented character over any particular line of historical antecedent for such scholarship.

This orientation toward now and not then accounts for what might otherwise seem to be peculiar textual selections. Three books were requested for the course. Two of them are the classic books by Carl Menger that set in motion a distinctive Austrian orientation toward economic theorizing. These are *Principles of Economics*, published originally in 1871, and *Investigations into the Method of the Social Sciences*, published originally in 1883. The third book, published in 2000, is *The New Evolutionary Economics: Complexity, Competence, and Adaptive Behavior*, by Jason Potts. This book argues that such heterodox descriptions as Austrian economics, evolutionary economics, Institutional economics, and post-Keynesian economics have much in common, and that a good deal of that commonality can be covered by modeling approaches that make use of such things as combinatorics, graph theory, and agent-based computation.

Where the book by Potts is of contemporary theoretical interest, the books by Menger are now largely of historical interest. The intervening period has been dominated by equilibrium theorizing, and this domination infused itself even into the thoughts of many Austrian economists. Consider just three among many possible illustrations. Böhm-Bawerk’s approach to capital is generally regarded as the canonical Austrian statement, and yet Carl Menger criticized it strongly because of its static equilibrium character. In *Human Action*, Ludwig von Mises posited an evenly rotating economy which was just an alternative form of equilibrium construction. Yet again, Austrian cycle theory is just a different kind of exercise in comparative statics, where an initial equilibrium is disturbed and then restored. In contrast, Carl Menger avoided all notions of generalized equilibrium. He set in motion an orientation toward economic theorizing that contrasted dramatically with the alternative orientation that was set in motion by Leon Walras.

The infectious quality of equilibrium theorizing was recognized by John Maynard Keynes in the closing paragraph of his *General Theory*, where he lamented: “The composition of this book has been for the author a long struggle of escape, and so must the reading of it be for most readers if the author’s assault upon them is to be successful,—a struggle of escape from habitual modes of thought and expression. The ideas which are here expressed so laboriously are extremely simple and should be obvious. The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds (my emphasis).”
My choice of course texts is an experiment in trying to escape from the reductionism and equilibrium theorizing that is still so prevalent in contemporary theorizing. Menger was not infected by such formulations, and it was his work that set in motion the truly distinctive features of the Austrian orientation. Five-quarters of a century later, Jason Potts is seeking to pursue economic theorizing without taking recourse to equilibrium theorizing. My experiment with respect to texts is a variation on Washington Irving’s tale of Rip van Winkle. Suppose you reached a state that Keynes thought he had reached—of having flushed Walrasian-style theorizing out of his mind. Having accomplished that, you develop your analytical inspiration from Carl Menger. The analytical challenge is then to bridge the gap between Menger and us, so as to contribute to economic theorizing today. If Menger supplies one end of the bridge’s anchorage, I am using Potts to supply the other.

I. Course Organization and Format

The objective of this course is to help you develop your ability to articulate and publish process-oriented scholarship in the professional literature. This course is divided into three sections: Preliminaries, Exploration, and Exploitation. The semester entails 14 class sessions. The division of class time among these three parts is 3.5, 6, and 4.5 sessions respectively.

1. Preliminaries Regarding Scope and Method (3.5 sessions)

This section will present a quick overview of some matters of scope and method that pertain to the contrast between Mengerian and Walrasian orientations toward economic theorizing, particularly as this contrast pertains to contemporary theorizing. This section will include some remarks and discussion pertaining to the books by Menger and Potts, though there will be no direct presentation of those texts. (If you look at my statement of teaching philosophy on my webpage, you will see why there will be no direct presentation.)

This second will conclude with a consideration of Oscar Morgenstern’s “Thirteen Critical Points in Contemporary Economic Theory,” *Journal of Economic Literature* 10 (1972): 1163-89, a fascinating and fecund piece that reflects brilliantly Morgenstern’s Austrian heritage (and yet most self-designated Austrians do not consider Morgenstern to be an Austrian). Your first short writing assignment (3-5 pages) will be to pen something along the lines of one of Morgenstern’s commentaries, i.e., a critical commentary on something that bothers you about the economic theory you have mastered to date, and penned with an eye toward possible theoretical reformulation. You might find it helpful to think of your essays collectively as forming a classroom anthology of your views and reflections on critical points in economic theory, as these views and reflections are based on your knowledge of economic theory to this point in your studies.

2. Exploration of Austrienesque Themes (6 sessions)
Scholarly work entails both exploration and exploitation; we explore a much wider range of territory than we are able to exploit, but exploration is necessary to prepare the way for successful exploitation. Each of these sessions will have two parts. In the first part I will map out my take on some general subject area, and in the second part you will articulate some line of thought that fits in some fashion within that general rubric. I will start by presenting an overview of a topic that both resonates with traditional Austrian concern and entails opportunities for professional publication. You will follow by making a Brown Bag type of presentation of inchoate ideas with which you are wrestling in the hope eventually of shaping them into something publishable.

The first part of these sessions will take part the bottom half of a class period, and will be preceded by my submission of some pages on the topic. The second part will take place the top half of the following class period. Each of you will make presentations on a bi-weekly basis, and will submit your papers at the end of that class period. These papers should run in the 3-5 page range, and each of you will prepare three of them during this part of the course. These essays will ask you to think creatively and critically about the topic under discussion during that class period, and to sketch briefly some line of thought that you think might be worth further development. This schedule means that one-half of you will be writing and presenting each week; to accomplish this logistically, the class will be divided into Green and Gold teams.

3. Exploitation and Scholarly Publication (4.5 sessions)

This section will entail your preparation and presentation of a research paper that should aim at scholarly publication. These papers should generally run in the 20 page vicinity. If you think you need more pages, take them. If you think you can do with fewer, do so. You should think of me as the editor of a professional journal that focuses on processes-oriented research. The objective we are aiming at in any case is journal publication, and there is variety in lengths of papers. These papers must be submitted no later than 1630 on 13 December, in hard copy formatted in standard manuscript style. Late work is not acceptable.

Judging from my experience with this class format, most of you will base your exploitation essay on one of your four earlier essays. This result maps well into the distinction between exploration and exploitation, with decisions about where or what to exploit being based on information generated through earlier exploration. You should certainly approach your essays in exploration from this investment-like orientation. It sometimes happens, though only rarely in my experience, that the earlier explorations turn up only what seem to be dry holes. I hope this will not be your fate, but if it is you will have to overcome it anyway.

The presentations will start on 8 November and conclude on 6 December. The procrastinators among you will surely think it is better to go later rather than earlier. With respect to the production of successful academic research, however, I think earlier is generally better than later. In any case, I will follow a semi-arbitrary
method of assigning these slots, and will announce it sometime during the preliminary part of the course.

II. Your Work and My Appraisal of It (Grading)

The four short essays collectively will count for 40 percent of your course grade. The research paper will likewise count for 40 percent. The remaining 20 percent will be based on my evaluation of your classroom contributions.

I grade the short essays on the basis of what I judge to be their potential down the road. An A signifies that I think you have sketched a line of thought that seems clearly to point toward a publishable conclusion, should you choose to make the effort. A B indicates that while you have not convinced me that you are headed in a publishable direction, you have nonetheless displayed a good grasp and understanding of the subject that you are treating. A C means that your formulation leaves out something important to or necessary for your argument to go forward, or commits some type of blunder. An F is also a possible graduate grade, as are various pluses and minuses for the above grades, but I won’t say anything about that grade here.

My evaluation of your research papers follows the same outlook, in that the focus is always on publishability. The only difference is a shift in the standard of calibration. Where my evaluation of the short essays is calibrated to what I regard as their potential, the research paper is calibrated against how fully you have realized that potential, suitably discounted, of course, for the limited amount of time you have had to work on that paper.

An outline of the exploration sessions follows, which in turn is followed by a few references. I do not pass out lengthy bibliographies, even though I could easily do so, as I imagine the references cited in my various publications would easily exceed 100 pages. For one thing, I reject the mental transfer model of higher education, where my task is to transfer some of the contents of my mind onto yours. I embrace instead a joint inquiry model, where each of us is trying to expand our knowledge about a subject of common interest. If you limit your reading to what I assign, I am less likely to hear something unexpected than if you read things I would not have thought to assign. Moreover, each of you needs to learn to formulate your own mental maps, and part of this task entails the formation of bibliographies that advance your scholarly activities and interests. You will need to read much more widely than the materials I give to you or recommend to you. In doing this, you will gain insight into the construction of your own mental maps and associated bibliographies that you would not otherwise gain.

Outline for Sessions on Exploration

1. Choice and Economizing Action: Crusoian Fables and Parables. Economics is a social science whose phenomena are generated through interaction among people. There are, however, a good number of mental experiments useful for
economic theorizing that can be and have been explored using Robinson Crusoe as the vehicle for exploration. Such formulations provide an alphabet or perhaps a grammar to propel the subsequent analytical tales, so long as these tales are put together without the prior presumption of generalized equilibrium.

2. Exchange, Property, and Institutional Emergence. Crusoe makes choices but confronts no such institutions as property or money. Institutions arise in a social setting. Crusoe makes economizing choices, but property, money, and other such institutions emerge only when multiple economizers inhabit the same territory. This unit explores property-governed relationships and the generation of catallaxy out of economizing action, and in a setting where there is always tension between cooperation and conflict. Put differently, equilibrium tales are told mostly in the passive voice; I think our tales should be told largely in the active voice.

3. Entrepreneurship, Economic Calculation, and the Organization of Production. This unit explores various elements of the creation and organization of team production processes and relationships. All production processes require time, which means in turn that entrepreneurs form projections of the future in making their commercial judgments. Money becomes much more than a veil that might obscure some underlying real economy, and becomes instead a primary tool of commercial calculation and communication.

4. Competition and the Generation of Market Formations. Economic theory has been much more concerned with exchange than with markets. This unit will treat exchange as the basis upon which market formations are generated, and will focus on markets rather than exchange per se. For instance, people used phones and watched television in 1985 just as they do in 2005. The commercial framework within which they do these things, however, has changed dramatically and is continuing to change, as a reflection of competition as a rivalrous process through which market formations are generated. For instance, the very distinction among phones, televisions, and computers is in the process of vanishing through competition, something that is totally outside the purview of notions of competition derived from equilibrium theorizing.

5. Mind and Society: Bridging the Micro-Macro Gap. While a good number of macro folks seek to provide micro foundations for macro theorizing, they do so by reducing society to Crusoe. This leads to an illusory theoretical enterprise that seeks to relate aggregate variables to one another, in an effort to add weight to what are just empirical observations without genuine theoretical foundation. This unit will explore some non-reductionist approaches to macro phenomena as the emergent properties of the ecology of plans that form within a society.

6. Political Economy, Tectonic Landscapes, and the Problematic of Policy. Welfare economics almost universally works with a disjunctive landscape where markets and governments operate within distinctive regions. This unit explores an alternative topology where the two spheres are braided. This alternative formulation leads in a number of directions. One is that the peaceful quiet of twice-differentiability gives way to the turbulence of clashing tectonics. Another is to approach differently law and legislation as vehicles for conflict resolution. Yet a third
direction concerns what happens to the domain of welfare economics when the comparative statics of equilibrium states gives way to analysis predicated upon continual motion.

Some References

Several of you have read widely within the Austrian oeuvre already, and some of you have perhaps even attended Austrian programs sponsored by such organizations as the Mises Institute or FEE. Others of you have but modest prior knowledge. These differences in background are insignificant for this course, due to its focus on ideas and not people. Two types of references are listed below. First are some Austrian works. Second are some references to computational modeling which, in conjunction with history, I regard as options for empirical work that are consistent with a focus on processes of development, and which contrast to empirical work that reflects a concern with comparative statics.

Expressly Austrian books

First of all, the web site of the Ludwig von Mises Institute has numerous references to Austrian materials. I use this site quite a bit, even though my take on the material is a bit different from what you will find expressed there. Anyone with an interest in Austrian theorizing should read Mises' *Human Action* and Rothbard’s *Man, Economy, and State*. Both of these are available from the Mises Institute in new editions that are much fancier than the ones that I bought long ago. You should also do some reading in Kirzner and Lachmann. There are, of course, many other works that have been written in recent years from an expressly Austrian orientation, but rather than impose my ordering of them on you, I will let you construct your own ordering.

Böhm-Bawerk. E. *Positive Theory of Capital* [Vol. 2 of Capital and Interest].
Weiser, F. *Social Economics*.
Mises, L. *Human Action*.
Mises, L. *Theory of Money and Credit*.
Schumpeter, J. *Theory of Economic Development*.
Hayek, F. *Prices and Production*.
Hayek, F. *Individualism and Economic Order*.
Kirzner, I. *An Essay on Capital*.
Kirzner, I. *The Meaning of Market Process*.
Kirzner, I. *Competition and Entrepreneurship*.
Lachmann, L. *Capital and its Structure*.
Lachmann, L. *Capital, Expectations, and the Market Process*.
Rothbard, M. *Man, Economy, and State*.

Boettke, P. *The Elgar Companion to Austrian Economics*.
Caldwell, B. J. and Böhm, S. *Austrian Economics: Tensions and New Directions*.
Endres, A. M. *Neoclassical Microeconomic Theory: The Founding Austrian Version*.
Agent-based computational modeling

While many people seem to think that agent-based modeling and object-oriented programming offer potentially better approaches for policy planning, I think these techniques potentially allow for a deeper probing into the operation of coordinative processes in the presence of ubiquitous heterogeneity and in a world where there is nothing even remotely resembling tâtonnement. The setting I have in mind is characterized by fluidity and turbulence and not by steady state equilibria. Indeed, one of my aspirations is to use agent-based modeling to illuminate more sharply the destructive features of policy measures that are based on steady-state or equilibrium thinking.

I have experimented with four platforms, all freely available. These are StarLogo from MIT, NetLogo from Northwestern, RePast from Chicago, and MASON from GMU. For NetLogo and RePast, a good deal of valuable and comparative information is available at http://complexityworkshop.com/. C++ is also widely used; for instance, it was used in the Clower and Howitt paper on the emergence of money that I assigned when I taught 715.

The primary inspiration for pretty much all such efforts is Thomas Schelling’s Micromotives and Macrobehavior, which I also assigned in 715. Mitchel Resnick’s Turtles, Termites, and Traffic Jams is by the developer of StarLogo and is a nice introduction to some of the analytical possibilities of using agent-based modeling to understand decentralized, polycentric systems. Joshua Epstein and Robert Axtell’s Growing Artificial Societies is a well received effort that points toward large scale simulation (it’s written in yet another language, Ascape, though they all have the same general look and feel). Michael Wooldridge’s An Introduction to MultiAgent Systems is a solid general introduction. Nigel Gilbert and Klaus Troitzsch’s Simulation for the Social Scientist is a compendium of tools for simulation. I would also mention Small Worlds, by Duncan Watts, though I don’t know if it is available in paperback. Individual Strategy and Social Structure, by Peyton Young, is available in paperback, and is an effort to bring concepts and formulations from game theory to bear on institutional evolution. I think there are some interesting analytical opportunities in seeking to connect some of these concerns with some ideas from agent-based modeling.