Objectives of the Course:

This course draws on economic reasoning to examine the transformation of European economies from a circumstance in which Malthusian population pressure on resources was the dominant historical force to one in which the growth of population and income per capita has become the norm. This transformation marks one of history’s great changes yet the underlying causes of the process are only dimly understood. This course aims to provide both historical perspective and experience in the application of economic analysis to major issues. The topics of the course divide into three chronological and logical sections. The first examines the question why Europe was the first area to industrialize, paying particular attention to the demographic, technological and institutional changes that supported growth. The second section focuses on the Industrial Revolution in England and France, asking what exactly it was, how can it be measured and who benefitted? The third examines the establishment of modern economic growth in other economies both to extend the range of cases and to provide a perspective on the British and French Industrial Revolution.

The examination of these themes will combine the historical literature with the theoretical constructs of economics. This course differs somewhat from other economics courses in that the issues come first, rather than the economics. It is my intention that this application of economic reasoning to issues that often are raised by non-economists will deepen your appreciation of application of economics to the task of understanding the evolution of societies.

Requirements and Evaluation:

This course will be a combination of lecture material and in-class discussion. Students are expected to have done the specified readings before the class and can be called upon to answer questions or to discuss points raised during the class. You will be informed in advance which material has to be read for the class. At the same time you are responsible for all the material on the reading list for the exams.

The written work for the term will consist of one in-class mid-term examination (20% of the final grade), a take-home final examination (40%) and a paper (40%). For the in-class examination, I will provide a list of questions in advance from which I will choose. The paper will be based on one or more books from a list given below. You are not being asked to write a book review but rather to address the ways in which the book(s) you have chosen addresses specific themes of the course. The book were all written by people who lived in the mid-nineteenth century. This immediately allows you to compare and contrast the views of the author with our current understanding of events.
For your paper, you should choose two or three themes, and explain what the book tells us about these issues. For example, you might examine evidence about the standard of living debate. At the simplest level, you could discuss what characters in the book eat, drink, and wear, and the kinds of housing they have. Is there any indication of changes in the standard of living? Do elderly people claim that they are better or worse off now? Does your book stress changes in the standard of living which cannot be captured simply by examining consumption bundles? You should then relate the evidence in your book to the views of economic historians studied in the course. Does your book present an optimistic view of the standard of living debate? In this regard you might want to think about the reliability of your source. Why has the book been written? Does the author have first hand experience of what he/she has written? Is the evidence given for only one village or town?

There are many other topics which you might wish to examine. There is the whole question of industrial relations and the growth of labor unions, the scale and organization of production, technological change, education, demography, migration, urbanization and trade, especially the retail trade.

The broad question you must address in your essay is not 'what is this book about?' but 'what does this book tell me about nineteenth century economic history and should I believe it?' To write a good paper you must be able to answer both questions, but the emphasis must be on the second question. Whatever themes you choose, it is absolutely vital that in the first paragraph or two you state clearly what you are trying to do. The reader should understand what the arguments are and where the essay is going. Also you must back up your arguments with specific references to the text and refer to the views of some of the economic historians studied in class.

The books from which you can choose are:

Friedrich Engels, *Conditions of the Working Class*.

Elizabeth Gaskell, *Mary Barton*.

Elizabeth Gaskell, *North and South*.

Charlotte Bronte, *Shirley*.

Emile Zola, *The Earth*.

Charles Dickens, *Hard Times*.

These books should be available in the bookstore. Also available in the bookstore are the following three books which will be used often during the course.

E.L. Jones, *The European Miracle*.

Joel Mokyr, ed., *The Economics of the Industrial Revolution*.

The other material will be available in the Library.
Cheating and plagiarism are academic offenses and any student caught cheating or plagiarizing will be sanctioned. If there is any person in the class who is uncertain about what constitutes either cheating or plagiarism, he/she should consult me or p. 13 of the University of Colorado Catalog.

The in-class midterm examination will be held on October 22.

The final examination will be handed out in class on December 5 and is due no later than 3.00pm December 13.

The paper is due no later than 4:00 p.m. November 28.

Both the paper and the final examination must be handed to me in person.

There are NO MAKE-UP EXAMINATIONS FOR MISSED EXAMS AND NO LATE PAPERS WILL BE ACCEPTED.

Pre-excused absences are possible for the in-class examination only; in such cases the final counts for 60% and the paper for 40%.
TOPIC OUTLINE AND READINGS

1. Introduction.

The central theme of this course is the development of the modern economy in Europe during the course of the nineteenth century. A question which must be addressed, therefore, is exactly how this modern economy differs from the traditional agrarian economy which preceded it. What are the variables one would use to distinguish between a modern and a traditional society? This it should be realized is the same question addressed in courses on development economics, although from a different perspective.

2. Why Europe First?

A question often asked is why did the Industrial Revolution first occur in Britain? Yet this question is misdirected in that it extensively narrows the focus of the debate and implies that there was something very special or very different about England. The question makes of England the example which has to be followed. Yet we now know that within a very short space of time during the nineteenth century, industrialization came not only to England but also to most of western Europe. If one focuses not on the nineteenth century alone but on a broader sweep of past history, Europe stands out not as the most developed but as the least developed region. Asia and India were more advanced. The major technological inventions came from the east. But industrialization occurred in Europe. Why? How did Europe differ? A very interesting analysis of this question is provided in:

E. L. Jones, The European Miracle, chs 1 and 2.

3. Demography and Income.

Perhaps the most important issue in a long term study of economic history is man's relationship to the environment. That relationship is probably best summarized by the numbers of humans on the one hand and the standard of living experienced on the other. This model is generally tied to the work of Malthus. Attempts have been made to model this relationship. A clear presentation can be found in


Indeed, as Jones argued a major difference between Europe and Asia lies in the size of family relative to available resources. European marriage and reproduction patterns appear to be significantly different from those that prevailed in most societies. A very great deal of what we know about pre-nineteenth century British demography was the result of the massive research project that resulted in the Wrigley and Schofield volume cited above. Much of this information in chs. 6 and 7 can be scanned rapidly. The material on pp. 207-215, 228-269 is particularly interesting and you should spend time on it. Also of particular interest is:

An interesting commentary on the work of Wrigley and Schofield and an excellent discussion of population control in France is to be found in


Although the Malthusian relationship between population and the standard of living is well documented for traditional societies, a release was possible through either an increase in the resources, i.e. land available, or improvements in the way the existing resources were managed. So any study of economic change must pay attention to changes in the quantity of resources and to changes in the technology. For a general description of technological change to the eighteenth century, see:

E.L. Jones, European Miracle, chs 3 and 4.

Jones' survey shows that change although slow and erratic was cumulative and persistent. Most recent research sees traditional agriculture as progressive. The Low Countries, around the mouth of the Rhine, led the agricultural transformation. The issues are well set out in:

Jan De Vries, The Dutch Rural Economy in the Golden Age, 1500-1700, chs 1 and 7.

An important topic for England has been enclosures. It has often been argued that changes in property rights, in the form of Parliamentary enclosures, were an extremely important episode in Britain's ability to industrialize. On the importance of property right changes, see:

Karl Marx, Capital, ch 27; and


Others deemphasize the importance of enclosure as a source of change or as a source of labour for the industrial sector. In particular, see:

R.C. Allen, "The Growth of Labor Productivity in Early Modern English Agriculture." EEH April 1988; and

But once industrialization occurred, the cities had to be fed. How this was accomplished is discussed in:

Brinley Thomas, "Food Supply in the United Kingdom During the Industrial Revolution", in Mokyr, ed., The Economics of the Industrial Revolution.

In thinking about this topic, you should start to consider a problem that will reoccur as we study economic change. What is the difference between a response to changed economic conditions and a true technological change? How can we distinguish between them? This question will be addressed again later in the course.


Europe differed from Asia and India not just in its demographic characteristics but also in the size and form of government. The growth of the nation state is well documented in:

E. L. Jones, The European Miracle, chs 5, 6, and 7.

Manifestations of the changes that were occurring in Europe are the beginning of the long-distance trades and colonization. The growth of British trade in this period is discussed in:


For a discussion of the relationship between firm structure and the economic environment of these long-distance trades see:


Finance was in part connected to trade but also largely connected to government finance which in turn was connected to war. One of the great successes of the British economy and the British state in the century before the industrial revolution was the dual accomplishment of regularizing government borrowing and the creation of a market for that debt. A good summary is:

Charles Wilson, England's Apprenticeship, 1603 - 1763, chs 10 and 15.

For a transaction cost analysis of these same events:


The beginnings of modern economic growth have been associated with a relatively short period (a generation of two) in the late eighteenth century and the early nineteenth century. Exactly what the writer has in mind has varied over time. A particularly interesting summary of these views on England is given in:

Joel Mokyr "The Industrial Revolution and the New Economic History". In Mokyr, ed. The Economics of the Industrial Revolution, ch 1; and


7. Quantitative Dimensions of British Change:

No serious discussion of the transformation of the British economy can take place without some quantitative estimates of that change. Indeed, we need to think about how we measure change within an economic system. The numbers which have been accepted for more than a generation are to be found in the classic work of:


However, much of Deane and Cole's work was based on pre-Wrigley and Schofield population estimates, with changes in those numbers, economists were forced to reevaluate all the other statistics in the system. The best current estimates come from the work of N.C.R. Crafts. A summary of the results of this work can be found in:


Another piece of revisionist quantitative work done on the industrial indices is that by:


Measuring change and understanding the processes by which change occur are very different. Conventional wisdom indicates that technological change was an important source of growth. Our problem is that we do not know as much as we would like about technological change. One approach to the problem is suggested in:

A.P. Usher History of Mechanical Invention, ch 4.
A useful comment on Usher and the work of Joseph Schumpeter who has also been influential is in:


A summary of technological change during the Industrial Revolution can be found in:


Ultimately economists have to ask how the development process has affected the standards of living of those involved. An examination of British Industrialization produces no clear picture. Both contemporaries and current historians alike are divided into optimistic and pessimistic camps. For a taste of these views refer back to the Mokyr survey and also see:


However, both of these pieces use male wages as the index for changes in the standard of living and more importantly, use those changes as the basis for changes in the standard of living for the family. We know that women worked as part of the family unit during the late eighteenth and early nineteenth centuries. What was happening to female income over the course of the industrial revolution? Work on this subject has been done by:


Britain, as the first industrialized nation, has often been seen as representative of the process. When studying European industrialization that view is probably more misleading than helpful. Two different treatments of the view that England should not be seen as the primary industrializer are given in:
N.C.R. Crafts "Industrial Revolution in England and France: Some Thoughts on the Question 'Why England First?'". In Joel Mokyr, ed. The Economics of the Industrial Revolution; and

Sydney Pollard, "Industrialization and the European Economy." In Mokyr, ed. The Economics of the Industrial Revolution.

A survey of the way in which European countries industrialized can be found in:

Rondo Cameron, A Concise Economic History of the World, chs 8, 9, and 10, pp 198-209 and 221-272; or


A summary of the statistical evidence is given in:


While the late eighteenth and nineteenth centuries saw the industrialization of individual countries, there was also an unprecedented growth in the international economy, whether we measure this in terms of goods traded or in terms of the movement of factors of production. In this section we focus on the integration of the European nations during the nineteenth century. The basis reason countries trade is because it is beneficial. For a theoretical explanation of the gains from trade, see:


Estimates of the volume of goods and factors which moved during the nineteenth century can be found in:

A.G. Kenwood and A.L.L. Lougheed, The Growth of the International Economy, chs 1, 2, 3, 4, and 5;

and also in:


Other topics may be added if time permits.