Learning Objectives

Content

1. To comprehend the power of historical perspectives and economic analyses for understanding the past and present, and for making informed conjectures about the future.
2. To understand the sources of U.S. economic growth from colonial times to the present.
3. To compare and contrast the First, Second, and Third Industrial Revolutions.
4. To examine the transformation of the U.S. economy from an agrarian society to an industrial economy, and to a service economy.
5. To understand peoples’ reactions and responses to the problems of market forces, industrialization, and transformation of the economy and society.
6. To explore the co-evolution of institutions such as Big Business and Big Government and their roles in promoting or decreasing economic growth and increasing or decreasing monopoly power.
7. To explore the relationship between economic growth, the standard of living, shared prosperity, and the concentration of income and wealth among the super rich.
8. To examine the hypotheses of sluggish growth and secular stagnation in the 21st century.
9. Note: An important topic I will briefly cover is the specter of population growth, economic growth, and global warming reducing planet earth’s sustainable future, and related problems of environmental decay, resource scarcity, pollution, congestion, climate change, and the quest to protect endangered species, open space, and view scapes. CSU offers many courses that address these issues.

Skills

1. To develop communication skills.
2. To enhance reading comprehension.
3. To develop analytical and reasoning skills.
4. To encourage learning communities by having common readings, class discussion, distributing study questions before the exams, and by having a common final project.

Contact Hours and Workload

1. Attend lecture: 2.5 hours/week
2. Peruse required readings before lecture: 1.0 hours/ week
3. Review class notes: 0.5 hours/week
4. Read required readings in depth before quizzes, and exams: 2.0 hours/week
5. Study for essay questions on exams: 2.0 hours/week
6. Research and write final project: 1.0 hours/week
TOTAL 9.0 hours/week

Weights for Evaluation of Performance
1. Five multiple choice quizzes: 20 percent
2. Two essay exams, 30 percent each: 60 percent
3. Final Project: Three-page paper that explains the role of “new technology” on productivity and economic growth in the 21st century: 20 percent
4. Extra points for excellent participation in class discussion: 5 percent

Grading
1. An absolute grading scale is used:
   A = 90 to 100; B= 80-89; C = 70 to 79; D = 60 to 69; F = 59 and below.
   Grades on the border will be given a plus or a minus.
2. Absences: Please note this is NOT an on-line course. It is an in-residence course and attendance during every class period is expected. Your final course grade may be reduced up to one full grade for excessive absences—5 or more. If your schedule interferes with attending class, please consider taking an on-line course. If you miss class for legitimate reasons such as illness or University-sanctioned extra curricular/co-curricular activities please provide written documentation (in advance, if known). Make-ups for missed assignments will be given only if written documentation for an excused absence is presented to me.

Academic Integrity
This course will adhere to the Academic Integrity Policy of the Colorado State University General Catalog and the Student Conduct Code. You will be asked to sign an Honor Pledge such as: “I will not give, receive, or use any unauthorized assistance” on course assignments. Please refer to Academic Integrity in the General Catalog: http://catalog.colostate.edu/general-catalog/policies/students-responsibilities/

Disabilities
If you have any diagnosed or suspected physical or learning disability which may require a reasonable accommodation, please make an appointment to see me as soon as possible. Please check with Resources for Disabled Students. http://rds.colostate.edu/accommodation-process for assistance.

Required Readings:
I am not using a text because the price is prohibitive, $300. I am requiring Robert Gordon, The Rise and Fall of American Growth—New York Times best seller. The book costs $32 at the CSU bookstore and you may want to check online prices. The course is organized around required readings from Gordon, and book chapters, journal articles, and my class presentations. The assigned articles and book chapters are on the course outline. Book chapters are on electronic reserve [E-Reserve] at: https://reserve.colostate.edu/ares/ares.dll Log on and click on 379 and your section number. I have provided links to journal and magazine articles, and TED talks.
**Reading Assignments:**
You are expected to peruse the assigned readings and my presentation outlines before lecture and discussions. Please keep a journal and take informal notes that identify the readings’ main ideas and your questions. Thoroughly read the assignments after my presentations and before the quizzes and exams.

**Class Discussion**
All students are expected to engage, at least occasionally, in informal class discussion and this may contribute up to 5 percent toward your final grade.

**Examinations**
There are two essay examinations in the course. The exams are scheduled for Thursday, March 2 and Thursday, April 20. Please note these dates on your calendar and re-arrange your schedule, if necessary, to take the exams on these dates. Study questions for the exam will be distributed at least one week before the exam date and I hope having the questions encourages you to study with other students in the class.

**Final Project**
The final project asks you to focus on the probable impact of “new technology” on productivity growth, and economic growth, and jobs growth. Please look at the last page of the syllabus for a more detailed description of the project.

**My Class Presentations**
Please take notes on my presentations during lectures. The presentations are a road map to organizing the material, a short-cut to identifying the most important material from the readings, and they contain information not found in the required readings. **Helpful Hint:** I will do my best to send my presentation outlines to you before class. I suggest you make paper copies and bring them to class. You may want larger margins and you may not want to print pages back to back so you have space for notes.

**Office Hours**
Office hours are an integral part of the course because they provide opportunities for one-on-one discussion, asking questions, and answering questions. Further, office hours contribute to the distinct advantage of in-residence courses over on-line courses, namely non-electronic face-to-face communication where we can get to know one another better and personalize the educational process. If you cannot attend scheduled office hours, please email for an appointment by giving me days and times you can meet.

**COURSE OUTLINE AND REQUIRED READING ASSIGNMENTS**

**Introduction** [January 17 & 19.]
1. The study of economic history and the use of historical analysis and economic analysis to understand the past, present, and future.
2. Using the past to make informed conjectures about the future. Will potential and actual economic growth in the 21st century be sluggish and stagnant?

3. So what? Why does economic growth matter and what are the shortcomings of GDP?

4. Global warming, climate change, and negative externalities that challenge the sustainability of human life on earth.
- Lecture only.

**Sources of U. S. Economic Growth: The Interplay of Competitive Markets and Government**
[January 24 to February 2]
The sources of U. S. growth include incentives for private property owners, expanding markets, government policies, innovations and technical change, entrepreneurs and workers (including immigrants), and a pool of varied and abundant natural resources. The focus in this section is on competitive markets and government and how an optimal combination of both can promote efficiency, economic growth, and shared values such as security and fairness. It is impossible to have private property and competitive markets without government providing and enforcing the “rules of the game.” The use of my property may result in external benefits to you and society or external costs to you and society. In these cases, the door opens for government intervention to decide, for example, whose property rights shall prevail. As we shall see, the government can do much to promote economic growth whenever there are externalities and it’s also true the government can cause inefficiencies and slower economic growth, and also provide more security.

1. An overview of long run economic growth: The role of human capital, physical capital, natural resources, and technical change and productivity in increasing real GDP.

2. Private property, law, markets, and economic growth.

3. The ideology of laissez-faire competitive markets and a minimalist role for government.

4. A positive role for state and federal governments in promoting U. S. economic growth and development.
- Madrick, Ibid. Pages 31-63. [E-Reserve]

5. The contributions of entrepreneurs.
The First Industrial Revolution (IR 1): Technological Change, Natural Resources, and the Expansion of Markets, 1800 to 1914. [February 7 to February 16]

In the beginning, the U. S. economy was characterized by a small (tiny!) population and an immense pool of potential natural resources such as agricultural land, rivers, forests, and industrial minerals. The scarcest economic input was people (labor) and labor was economized through new production techniques that substituted water power, animal power, and machine power for labor. In the South before the Civil War, slavery was an institution that enabled owners to force more production from slaves. Techniques in the North and the South were natural resource using and so the American system of production can aptly be characterized as ripping through abundant resources (sod, forests, minerals, etc.) and creating environmental decay, pollution, and congestion. Transportation improvements were vital because they brought people to resources and resources to people, and they expanded markets which led to greater specialization and higher productivity.

   - Atack & Passell, “The Transportation Revolution.” Chapter 6, pp. 143-174 [E-Reserve]
2. Early industrialization.
3. Industrialization from the Civil War to World War I.
   - Hughes and Cain, Chapter 17, “Industrialization, Entrepreneurship, and Urban Growth, pp. 338-366. [E-Reserve]
4. The U. S. advantage of large pools of varied, non-renewable mineral resources in industrial production.
   - Gavin Wright, “Where America’s Industrial Monopoly went,” Wall Street Journal, December 20, 1990. [This one-page article will be posted on Canvas]
5. Describing the standard of living in 1870

The Consequences of Growth, Industrialization, and Transformation [February 21 to February 28]

The latter third of the 19th century to World War I was characterized by rapid economic growth and increasing levels of average per capita income. When the substrata of economic growth and the average standard of living are exposed, there are many adverse consequences that accompanied the rise of the U. S. to the world’s leading economic power. There were colossal fortunes for the wealthy, conspicuous consumption, the rise of capitalist power (monopolies), workers and farmers felt oppressed by monopoly capital, corruption was rampant, and democracy was threatened. Biometric data show people were getting shorter and that may reflect declining nutrition. And there is environmental decay, congestion, and pollution in big cities. Mark Twain referred to the period as the “Gilded Age” because the period was glittering on surface like a thin veneer of gold that masked social problems, corruption, tremendous income and wealth disparities, pollution, and congestion. Some say, me included, the U. S. is currently experiencing another Gilded Age.

1. The rise of Big Business.
2. The rise of federal government intervention. U. S. capitalism changed because of the evolution toward Big Business and the evolution of Big Government as a countervailing force to Big Business and its excesses. The result is a “mixed economy” of markets and government intervention.

3. Why farmers and workers are complaining, and Populists then and now. [lecture only]

FIRST EXAM, THURSDAY, MARCH 2


The Second Industrial Revolution (IR 2) begins in the latter stages of IR 1. The extension of mechanization and mass production was accompanied by new technologies that brought water and electricity inside homes and factories, the internal combustion engine, and so forth. It was these new technologies that radically improved the standard of living, and transformed homes, industry, and cities. Robert Gordon argues that these new technologies could only happen once and that they were more transformational than the new technologies of IR 1 and IR 3 (information and communication technologies). He also explains how people lived from 1870 to 1920 as the economy was transformed by industrialization and urbanization.

1. The transformation of the American home.
2. The transformation of transportation, cities, and industry.
3. The age of mass communication.
4. Summary of the impact of IR 2.
   ● Gordon, Chapter 4, pp. 127-8, Chapter 5, pp. 169-171 and Chapter 6, pp. 203-5.

SPRING RECESS, MARCH 11 THROUGH MARCH 19

[Note the last day to “W” from classes is Monday, March 20]

Twentieth Century Economic History: Prosperity, Depression, and the New Deal, 1920-1940 [March 21 to March 28]

This period was sandwiched between World War I and World War II. The 1920s was a period of rapid productivity and economic growth. It was also an era where the distribution of income and wealth was increasingly concentrated among the wealthy. The decade ended with the Great Crash in the stock market which triggered a world-wide financial crisis and the Great Depression. Beginning in 1933, the New Deal greatly expanded the scope and scale of the federal government to promote economic recovery, to reform of institutions to moderate future economic downturns, and to provide more security for those who lacked power.

1. The “Prosperous” Decade of the 1920s.
2. The Great Depression.
   ● Peter Fearon, “Is there an Explanation for 1929-1933?” Chapter 9. [E-Reserve]
3. The New Deal.
The Post-World War II Economy: Rapid Growth and Shared Prosperity, 1947 to 1973 and Sluggish Growth and Rising Inequality from 1974 to 2016 [April 4 to April 13]

This era is composed of a period of rapid economic growth with shared prosperity from 1948 to 1973. Although income is distributed unequally, the growth of income among rich, middle class, poor families increased at almost the same rate.

1. From the Old Economy to the New Economy.
   • Hughes, and Cain, Chapter 29, “Postwar Industry and Agriculture,” pp. 589-619.

2. The miracle of high growth from the 1920s through the 1960s.
   • Barry Bluestone & Bennett Harrison, Chapter 1, “Growth with Equity,” Growing Prosperity, pp. 1-26. [E-Reserve]

3. The slowdown of economic growth in the presence of Industrial Revolution 3.

4. Gilded Age 2. Post 1970s disproportionate increases in income and wealth to the rich and super rich.

SECOND EXAM: THURSDAY, APRIL 20

The Third Industrial Revolution (IR 3): New Information and Communication Technologies [April 18 to May 5]

The optimists say that IR 3 and the new technology of artificial intelligence, smart machines, robotics, software, and algorithms offers a huge potential for increasing productivity and growth just as technology has accomplished in the past. The pessimists fear that the new technology will be accompanied by sluggish productivity growth, technological unemployment, and a “jobless” economy.

1. Overview of the issues.

2. The pessimists story of the impact of “new technology” on productivity and jobs.
   • Gordon, Chapter 18, “Inequality and the other Headwinds: Long-run American economic growth Slows to a Crawl,” pp. 605-639.


3. The optimists story of the impact of “new technology” on productivity and jobs.
• Joel Mokyr, “Is Technological Change a Thing of the Past?”
  www.voxeu.org/article/technological-progress-thing-past
• Bluestone & Harrison, Chapter 3, “America’s New Growth Potential,” pp. 66-80 only. [E-Reserve]
• Robert Gordon, op. cit., Chapter 17, pp. 593-601. [Gordon provides a summary of the optimists forecast of the most important types of new technology]
• David Autor, “Why are there still so many Jobs?” TED talk, September, 2016.
  http://www.ted.com/talks/david_autor_why_are_there_still_so_many_jobs#t-674131

4. The future is uncertain and there are a wide range of forecasts about the remainder of the 21st century. My hope is that you can appreciate that knowledge of history can lead to informed conjectures about the future.
• Gordon, Chapter 18, pp. 634-39.
• Gordon, Postscript: “America’s Growth Achievement and the Path Ahead,” pp. 641-52

**FINAL PROJECT**

The final project asks you to describe and analyze the forecasts of “pessimists” and “optimists” on the impact of “new technology” on productivity, growth, and jobs in the 21st century. The new technology includes areas such as medical and pharmaceutical advances, small robots and 3D printing, big data and artificial intelligence, driverless (autonomous) cars, and so forth. The “pessimists” are concerned that new technology will have a low impact on productivity and growth and/or create a “jobless economy.” In other words, this time the impact of new technology is different from the past. The “optimists” believe that the technology will take time to come to fruition and when it does there will be an acceleration of productivity, growth, and jobs that is similar to what occurred with IR 1 and IR 2.

This final project will enable you to engage in one aspect of historical analysis, namely understanding the past may enable you to make informed conjectures about an uncertain future. Your paper should explain the analysis of “optimists” and “pessimists” and present their supporting evidence.

Your paper should be typed, 1.5 spaces between lines, a maximum of three (3) pages, and “normal” margins and font size. This is a “constrained” research paper where your sources are the required readings on the syllabus such as Bluestone & Harrison, Gordon, Summers, Rotman, Marshall, Mokyr, and Autor. You are welcome to use one additional source although it is not a requirement for the paper. For citations that are from the required readings, please cite ideas and quotations by the author’s last name and page number and please use full citations for your one source (if you have one). The final project is due by Wednesday, May 10 at 1:15 p.m.

PLEASE REFER TO THE FINAL PROJECT GUIDELINES FOR THE COMPLETE ASSIGNMENT.