

Growth, Technological Change and Inequality

JSGP Cross Elective – Spring 2026

Course Information

Course Duration: July to October 2026

Credit Hours:4.5

Meetings: TBD

Location: TBD

Prerequisites: Students are expected to have completed basic courses in Microeconomics and Macroeconomics.

In addition, this course requires a basic understanding of and familiarity with mathematical methods in economics. Students are expected to be familiar with the following:

- i. **Basic calculus and differentiation of a production function.**
- ii. **Basic integration.**
- iii. **Logarithmic and exponential functions.**

While this course does involve the extensive use of mathematics, the mathematics itself is not of a highly complex nature, involving only elementary calculus and the simple manipulation of logarithmic and exponential functions. However, students with no background in mathematics or a discomfort with mathematical methods of analysis ARE NOT ADVISED TO TAKE THIS COURSE.

Instructor Information

Instructor: Rahul Menon

Biography: Rahul has completed his PhD from JNU, New Delhi. His areas of interests lie in Economic Inequality and Labour Economics

Email: rahul.menon@jgu.edu.in

Phone: 9930637726

Office: 05 North, 9th Floor, New Faculty Office Building

1. Course Description

By the beginning of the second decade of the 21st century, the topic of inequality had been thrust firmly in the spotlight. Rising divergence in incomes has led to momentous political and social changes across countries, posing significant threats to the prospect of shared global well-being. Anxieties about rising inequalities have become heightened in the face of rapid technological progress and the development of the forces of automation and Artificial Intelligence.

In the wake of the publication of Piketty's (2014) work, an extensive and enlightening debate broke out regarding the central themes of capitalist growth and inequality. While Piketty believed that inequality would tend to rise with growth if not combated with interventionist policy, several economists criticized him for being too pessimistic. The emergence of rising inequality has led to questions about the nature of the growth process itself: Is equality compatible with modern economic growth? Who gains and who loses from technological innovation? What factors determine the distribution of income and wealth, and what accounts for these changes in distribution over time? How will modern forces of automation and AI affect income distribution?

This course aims to present the student with an overview of the current state of scholarship regarding the links between economic growth, technological change, and inequality. In order to provide a holistic understanding of modern inequality, this course will also focus on alternative frameworks beyond standard neoclassical paradigms. While mainstream explanations of production functions and skill-biased technological change will be stressed upon, this course will also expose students to the thinking of classical economics as well as Post-Keynesian theories regarding the impact of unequal structural power on inequality in modern capitalist economies, to see what relevance heterodox frameworks have for the understanding of inequality today. The aim of this course will be to provide students with the basic tools required to engage with, intervene in and critically analyse the debates surrounding inequality and technological change today.

A caveat: since much of the theoretical work regarding inequality has been undertaken in the context of developed economies, this course will not address the specificities of questions of growth and inequality facing developing economies today. It is hoped that by providing students the tools to understand the current discourse regarding inequality, they would be better-prepared to apply these frameworks in the future to examine questions of inequality in developing economies as well.

2. Course Intended Learning Objectives(Aim)

Course Intended Learning Outcomes	Teaching and Learning Activities	Assessments/ Activities
Familiarity with the latest research and theories of factors driving economic inequality, and developing the ability to logically analyse and outline models that examine inequality in different contexts.	Class lectures, group discussions, analysis of readings	<ul style="list-style-type: none"> • Written exam where students will have to demonstrate familiarity with essential features of each theory, testing students' competence with the mathematical fundamentals of each theory of inequality, as well as understanding how to place differing explanations of inequality in its unique historical and political context. • Policy presentations to test students' ability to effectively communicate technical frameworks in an
Developing the skills necessary to understand different drivers of inequality, and think through policy responses to mitigate the impact of technological change on inequality.		
Distinguish between different frameworks of economic thought, and between mainstream and heterodox explanations of inequality.		

3. Scheme of Evaluation and Grading

This course is based on continuous assessment and will have no final exam. The evaluation for this course will test students' conceptual understanding of the technical frameworks of each economic model, as well as their ability to visualise, conceptualise and synthesise complex economic data in a manner accessible to non technical audiences. **The use of AI is allowed for one of these components.** The evaluation will consist of two parts:

1. **Written test (70%):** This component will test students' understanding of the core models and insights of the different theories taught in class. This component will consist of three tests, each of 35 marks. The best of two will be considered. These tests will be in-class and written, and will cover the foundational frameworks of each of the theoretical models taught in class. Students will be tested on their mathematical and

logical understanding, and their ability to apply principles of each theoretical framework to understanding real world instances of inequality. **AI and other forms of generative technologies are not allowed.**

2. Policy Presentation (30%): Students will be divided into groups of two or three. Using one framework studied in class, students will be expected to devise a policy brief using publicly available sources of data and defend their policy prescription to a panel of judges. This assignment will be conducted in two parts:

1. The policy brief (15%): Students will have to choose a particular framework of inequality studied in class and apply it to explain inequality occurring in a country or a group of countries that they have chosen. They will be expected to produce a policy brief - not more than 5-10 pages - outlining the rise in inequality over time for their chosen countries, and possible solutions. Students can use AI tools to devise their policy brief, but the exercise will happen **in class**. Assignments will be judged on originality, data visualisation, coherence of policy proposal, and how well they have used AI prompts in order to arrive at their basic research and policy question.

2. The presentation (15%): Students will have to then present and defend their proposals to a panel **which may or may not consist of economists**. This presentation will judge them on their ability to simplify technical concepts into a coherent presentation, to effectively communicate technical aspects in a non-technical manner to the public, and their ability to defend their proposals and analysis when quizzed by the panel.

If students are unable to attend any component of the test and are unable to receive clearance from the JS GP Executive, they will not receive a re-test or a make-up exam. Failure to attend on the dates of the evaluation - the dates for which will be announced in the first working week - will result in a forfeit of marks for that component.

Grading scheme:

Grade	Percentage	Grade points	Interpretation
O	80 and above	8	Outstanding
A+	75-79	7.5	Excellent
A	70-74	7	Very Good
A-	65-69	6	Good
B+	60-64	5	Fair
B	55-59	4	Acceptable
B-	50-54	3	Marginal
P1	45-49	2	Pass 1

P2	40-44	1	Pass 2
F	Below 40	0	Fail

4. Academic Integrity

Academic Honesty, Cheating, and Plagiarism: As per University policy.

Participation/Attendance Policy: You are required to have a minimum of 75% of attendance to be permitted to write the final exam. Attendance will only be given if you attend the entire class.

Use of phone/ texting/ laptop: Laptops and phones are not allowed. Taking notes can be done on tablets, but the use of laptops is prohibited. Students will not be permitted to keep laptop screens open, as it does not aid in the understanding of the material to be discussed in class. Phones are not allowed in any way in the classroom.

5. Keyword Syllabus

Inequality, Income inequality, Wealth inequality, Factor augmenting change, Job Polarisation, Thomas Piketty

6. Course Material:

An essential book to be read is *Capital in the Twenty-First Century* by Thomas Piketty.

7. Topics Covered

Session	General Topic	Readings
1	The Evolution of Economic Inequality	<p>Required:</p> <ol style="list-style-type: none">1. Thomas Piketty (2014): <i>Capital in the Twenty-First Century</i>, Harvard University Press. Chapters 1, 5 and 6.2. Lucas Chancel and Thomas Piketty (2019): “Indian Income Inequality 1922-2015: From British Raj to Billionaire Raj?”, <i>The Review of Income and Wealth</i>, Vol 65, Issue S1. <p>Suggested:</p> <ol style="list-style-type: none">1. Facundo Alverado, Anthony B Atkinson, Thomas Piketty and Emmanuel Saez (2013): “The Top 1 Percent in International and Historical Perspective”, <i>Journal of Economic Perspectives</i>, Vol 27, No 3.2. Michael Elsby, Bart Hobijn and Aysegul Sahin (2013): “The Decline of the US Labor Share”, <i>Brookings Papers on Economic Activity</i>, Fall 2013 (Sections 1 and 2).
2	Neoclassical theory of growth, technological change and distribution	<p>Required:</p> <ol style="list-style-type: none">1. Daron Acemoglu (2009): <i>Introduction to Modern Economic Growth</i>, Princeton University Press. (Chapter 2)2. Class notes <p>Suggested:</p> <ol style="list-style-type: none">1. Joan Robinson (1955): “The Production Function”, <i>The Economic Journal</i>, Vol 65, No 257, pp 67-71.

3	The Great Piketty Debate	<ol style="list-style-type: none"> 1. Lawrence Summers (2014): “The Inequality Puzzle”, <i>Democracy: A Journal of Ideas</i>, Issue 32, Spring 2014. 2. Debraj Ray (2015): “Nit-Piketty: A Comment on Thomas Piketty’s <i>Capital in the Twenty-First Century</i>”. 3. Devesh Raval (2019): “What’s Wrong with <i>Capital in the Twenty-First Century</i>’s model?” 4. Matthew Rognlie (2015): “Deciphering the Fall and Rise in the Net Capital Share: Accumulation or Scarcity?”, <i>Brookings Papers on Economic Activity</i>, Spring 2015. (Only till section III-A.) 5. Charles Jones (2015): “Pareto and Piketty: The Macroeconomics of Top Income and Wealth Inequality”, <i>Journal of Economic Perspectives</i>, Vol 29, No 1, pp 29-46. 6. Branko Milanovic (2014): “The Return of ‘Patrimonial Capitalism’: A Review of Thomas Piketty’s <i>Capital in the Twenty-First Century</i>”, <i>Journal of Economic Literature</i>, Vol 52, No 2, pp 519-534. 7. Thomas Piketty (2015): “Putting Distribution Back at the Centre of Economics: Reflections on <i>Capital in the Twenty-First Century</i>”, <i>Journal of Economic Perspectives</i>, Vol 29, No 1 (pp 67-72)
4	Skills, Education and Job Polarisation	<p>Required:</p> <ol style="list-style-type: none"> 1. Claudia Goldin and Lawrence Katz (2008): <i>The Race Between Education and Technology</i>, Belknap Press (Chapters 2 and 3) 2. Daron Acemoglu and David Autor (2012): “What Does Human Capital Do?”, <i>Journal of Economic Literature</i>, Vol 50, No 2 (sections 1 to 3 only).
5	Automation, AI and Inequality	<ol style="list-style-type: none"> 1. Daron Acemoglu and Pascual Restrepo (2019): “Automation and New Tasks: How Technology Displaces and Reinstates Labor”, <i>Journal of Economic Perspectives</i>, Vol 33, No 2. 2. Daron Acemoglu and Pascual Restrepo (2018): “Modeling Automation”, <i>AEA Papers and Proceedings</i>, Vol 108, pg 48-53. 3. Daron Acemoglu and Pascual Restrepo (2018): “Artificial Intelligence, Automation and Work”, <i>NBER Working Paper No 24196</i>
6	Heterodox Theories - 1: Growth and Income Distribution in Marx and Ricardo	<ol style="list-style-type: none"> 1. Krishna Bharadwaj (1963): “Value Through Exogenous Distribution”, <i>The Economic Weekly</i>, Aug 24, 1963 2. Robert A Blecker and Mark Setterfield (2019): <i>Heterodox Macroeconomics: Models of Demand, Distribution and Growth</i>, Edward Elgar Publishing. Chapter 2. 3. Michal Kalecki (1971): “Class Struggle and Distribution of National Income”, in <i>Selected Essays in the Dynamics of the Capitalist Economy</i>, Cambridge University Press. Chapter 14

7	Heterodox Theories - 2: The Post-Keynesian Tradition	<ol style="list-style-type: none">1. Jan Kregel (1978): "Post-Keynesian Theory: Income Distribution", <i>Challenge</i>, Vol 21, No 4, pp 37-43.2. Robert A Blecker and Mark Setterfield (2019): <i>Macroeconomics: Models of Demand, Distribution and Growth</i>, Edward Elgar Publishing. Chapters 3 and 4.3. Michal Kalecki (1971): "Political Aspects of Full Employment", in <i>Selected Essays in the Dynamics of the Capitalist Economy</i>, Cambridge University Press. Chapter 14
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