Phase 1: Foundational (12-18 months)

1. Foundational Economics

Books:

- Principles of Economics by Gregory Mankiw
- Economics, Global Edition by Daron Acemoglu, David Laibson, and John List
- The Economic Way of Thinking by Paul Heyne

Goals:

- Learn fundamental concepts such as supply and demand, market equilibrium, and the roles of government in the economy.
- Understand the basics of how economies function, with global and local perspectives.

Additional Resources:

• Khan Academy's Microeconomics and Macroeconomics series.

2. Foundational Microeconomics

Books:

• Principles of Economics by Gregory Mankiw (also covers microeconomics)

Goals:

- Understand consumer behavior, market structures, and price determination.
- Focus on how individuals and firms make decisions.

3. Foundational Macroeconomics

Books:

- Principles of Economics by Gregory Mankiw
- Macroeconomics by Charles I. Jones (2020)

Goals:

- Learn about national income, economic growth, inflation, unemployment, and government policy.
- Understand aggregate economic phenomena and macroeconomic policy tools.

4. Mathematics for Economics

Books:

- Basic Mathematics by Serge Lang (Recommended)
- Precalculus by Michael Sullivan (2023)
- Essential Mathematics for Economic Analysis by Knut Sydsæter et al. (2021)

Goals:

- Build foundational math skills needed for economic analysis, starting with algebra and graphing.
- Progress towards calculus to handle optimization problems in economics.

5. Introduction to Statistics & Econometrics

Books:

- Statistics for Business and Economics by Paul Newbold et al. (2022)
- Introduction to Econometrics by James H. Stock & Mark W. Watson (2019)
- Using Python for Introductory Econometrics by Florian Heiss & Daniel Brunner (2023)

Goals:

- Learn basic statistics and introductory econometrics.
- Begin using Python for simple econometric models and data analysis.

6. Introduction to Policy Analysis

Books:

- Practical Guide for Policy Analysis by Eugene Bardach (2015)
- Public Policy Analytics by Ken Steif (2021)

Goals:

• Learn frameworks for analyzing policies and understand how data science can be applied to policy-making.

Phase 2: Intermediate (12-24 months)

1. Intermediate Microeconomics

Books:

- Intermediate Microeconomics by Hal R. Varian (2019)
- Microeconomics: Theory and Applications with Calculus by Jeffrey M. Perloff (2020)

Goals:

- Dive deeper into consumer theory, production theory, market efficiency, and welfare economics.
- Apply calculus to microeconomic optimization problems.

2. Intermediate Macroeconomics

Books:

- Macroeconomics by Olivier Blanchard (8th Edition, 2020)
- Macroeconomics: Policy and Practice by Frederic S. Mishkin (2014)
- Macroeconomics by N. Gregory Mankiw (2022)

Goals:

- Explore monetary and fiscal policy, open-economy macroeconomics, and economic growth models.
- Learn about interactions between inflation, unemployment, and macroeconomic policies.

3. Intermediate Econometrics

Books:

- Mostly Harmless Econometrics by Joshua D. Angrist & Jörn-Steffen Pischke (2009)
- Microeconometrics: Methods and Applications by A. Colin Cameron & Pravin K. Trivedi (2005)
- Learning Microeconometrics with R by Christopher P. Adams (2020)
- Applied Econometrics: A Modern Approach by Jeffrey Wooldridge (Recommended, not in your list)

Goals:

- Master panel data analysis, instrumental variables, and limited dependent variable models.
- Apply econometric methods to analyze policy data.

4. Impact Evaluation & Policy Research

Books:

- Handbook on Impact Evaluation by Shahidur R. Khandker et al. (2010)
- Cost-Benefit Analysis: Concepts and Practice by Anthony E. Boardman (2018)

Goals:

- Learn impact evaluation methods such as RCTs and difference-in-differences.
- Apply econometrics to policy evaluation, particularly in real-world contexts like Bihar.

5. Mathematics for Intermediate Economics

 Master calculus, linear algebra, and optimization techniques using Essential Mathematics for Economic Analysis.

Phase 3: Advanced (18-36 months)

1. Advanced Microeconomics

Books:

- Advanced Microeconomic Theory by Geoffrey A. Jehle & Philip J. Reny (2011)
- Microeconomic Theory: Basic Principles and Extensions by Walter Nicholson & Christopher Snyder (2016)
- Microeconomics: Behavior, Institutions, and Evolution by Samuel Bowles (2009)

Goals:

- Study general equilibrium theory, game theory, contract theory, and market design.
- Explore how microeconomic theory informs policy-making.

2. Advanced Macroeconomics

Books:

- Advanced Macroeconomics by David Romer (2018)
- Recursive Macroeconomic Theory by Lars Ljungqvist & Thomas J. Sargent (2018)
- The Economic Effects of Constitutions by Torsten Persson & Guido Tabellini (2005)

Goals:

- Learn dynamic macroeconomic models, business cycle theory, and new Keynesian models.
- Focus on advanced macroeconomic policies, particularly in emerging economies.

3. Advanced Econometrics & Causal Inference

Books:

- Econometric Analysis by William H. Greene (2019)
- Causal Inference for Statistics, Social, and Biomedical Sciences by Guido Imbens & Donald Rubin (2015)
- Microeconometric Methods and Their Applications by Cameron & Trivedi
- Advanced Econometrics by Takeshi Amemiya (Recommended)

Goals:

- Master advanced econometric techniques like time series, simultaneous equations, and non-parametric methods.
- Apply econometrics in field experiments and policy evaluations.

4. Behavioral Economics & Policy

Books:

- Behavioral Economics: The Basics by Philip Corr & Anke Plagnol (2023)
- Behavioral Economics and Its Applications by Peter Diamond et al. (2012)

Goals:

Incorporate behavioral insights into policy design and evaluation.

Week 1: Study Plan Overview

Goal:

- Familiarize yourself with foundational economic concepts.
- Start writing short, concept-driven pieces for Substack.
- Begin basic data skills for later econometric analysis.

Day 1: Introduction to Economics & Critical Thinking

1.1 Study:

- Read Mankiw: Chapter 1 Ten Principles of Economics (Pages 1-16)
 - Focus on: Opportunity cost, trade-offs, marginal thinking, and incentives.
- Critical Thinking Exercise:

 Reflect on how opportunity cost and trade-offs appear in your daily life or Bihar's rural economy.

1.2 Substack Writing:

Draft 1st Post:

- Topic: "Understanding Trade-offs in Bihar's Economy: An Introduction to Economics"
- 300-500 words explaining the basic concepts of trade-offs and opportunity cost with a real-world Bihar example, like farmers choosing between cash crops and subsistence farming.

1.3 Data Science:

Python Basics:

- Start learning basic Python syntax (variables, conditionals, loops).
- Use a platform like Codecademy or Datacamp for 30 minutes.

Day 2: Thinking Like an Economist

2.1 Study:

- Read Mankiw: Chapter 2 Thinking Like an Economist (Pages 17-44)
 - Focus on: The role of assumptions in economics, economic models (e.g., circular flow model), and positive vs. normative analysis.

2.2 Case Study:

- Research Bihar's Economic Indicators (e.g., GDP, agricultural productivity).
 - Write a 200-word summary of how Bihar's economy operates within the framework of a simple circular flow model.

2.3 Substack Writing:

• Draft 2nd Post:

- Topic: "How Economists Think: A Bihar Perspective"
- Explain how economists use models to understand the economy, and briefly outline the circular flow model with a Bihar context.

2.4 Data Science:

Python for Data Analysis:

o Introduction to using Python with libraries like NumPy and Pandas.

 Practice loading datasets and performing basic operations like adding columns or filtering rows.

Day 3: Interdependence and Trade

3.1 Study:

- Read Mankiw: Chapter 3 Interdependence and Gains from Trade (Pages 45-60)
 - Focus on: Absolute vs. comparative advantage, specialization, and gains from trade.

3.2 Application Exercise:

 Research Bihar's comparative advantage in agriculture. How does it trade with neighboring states? Write 300 words on Bihar's specialization and trade benefits in agriculture.

3.3 Substack Writing:

- Draft 3rd Post:
 - o Topic: "Bihar's Comparative Advantage: Why Specialization Matters"
 - Explain comparative advantage using a simple case of Bihar's agriculture and its trade with other states.

3.4 Data Science:

- Python Data Handling:
 - Work on importing a CSV file of Bihar's economic data (e.g., agricultural production).
 - Practice basic data manipulation like sorting, filtering, and summary statistics.

Day 4: The Market Forces of Supply and Demand (Part 1)

4.1 Study:

- Read Mankiw: Chapter 4 The Market Forces of Supply and Demand (Pages 61-86)
 - Focus on: The law of demand, the law of supply, market equilibrium, and shifts in supply and demand.

4.2 Substack Writing:

Draft 4th Post:

- Topic: "Understanding Supply and Demand in Bihar's Paddy Market"
- Discuss how supply and demand determine the price of paddy in Bihar's local markets.

4.3 Data Science:

Visualizing Data:

 Learn to create simple visualizations in Python (e.g., line graphs or bar charts) showing trends in agricultural production or prices.

Day 5: The Market Forces of Supply and Demand (Part 2)

5.1 Study:

Case Study:

- Explore a real-world case study of supply-demand fluctuations in Bihar's vegetable markets during different seasons.
- Write a 250-word analysis of how shifts in supply affect market prices.

5.2 Substack Writing:

• Draft 5th Post:

- Topic: "How Seasonal Changes Affect Bihar's Vegetable Markets"
- Use the case study to show readers how supply and demand explain seasonal price fluctuations.

5.3 Data Science:

Data Visualization:

 Practice making more complex plots, such as histograms or scatter plots, to show the relationship between supply and prices.

Day 6: Elasticity

6.1 Study:

- Read Mankiw: Chapter 5 Elasticity and Its Application (Pages 87-110)
 - o Focus on: Price elasticity of demand, income elasticity, cross-price elasticity.

6.2 Substack Writing:

Draft 6th Post:

- Topic: "Why Do Prices Fluctuate? Elasticity and the Agricultural Markets of Bihar"
- Explain elasticity with real examples, such as the elasticity of demand for fertilizers in Bihar.

6.3 Data Science:

Python Data Analysis:

 Calculate basic summary statistics for Bihar's economic data, focusing on percentage changes in supply or demand.

Day 7: Review and Write

7.1 Study:

• Review Week 1 Concepts:

 Revisit key concepts like opportunity cost, comparative advantage, supply and demand, and elasticity.

7.2 Substack Writing:

Final Post Drafts:

- Edit and refine all the posts you've drafted over the week.
- Choose one post to finalize and publish on Substack.

7.3 Data Science:

Project Review:

 Review all Python exercises from the week, consolidating your learning into a small project (e.g., a simple report on agricultural prices in Bihar).

Memory updated

Given your need to study critical thinking and mathematics alongside economics and writing, here's an updated **daily schedule** for Week 1. This will balance your study of economics, critical thinking, mathematics for your undergraduate studies, and data science, while incorporating **Deep Work** principles.

Daily Schedule for Week 1 (10 AM - 10 PM)

Day 1: Introduction to Economics, Mathematics, and Critical Thinking

10:00 AM - 12:00 PM - Deep Work Session 1: Economics Concepts (Reading & Notes)

- Task: Read Mankiw: Chapter 1 Ten Principles of Economics
 - Focus on understanding opportunity cost, trade-offs, and marginal thinking.
 - Take detailed notes, reflect on how these concepts apply to Bihar's economy.

12:00 PM - 12:30 PM - Break

Take a short walk or stretch without using digital devices.

12:30 PM – 2:00 PM – Deep Work Session 2: Mathematics (Undergrad Studies)

- **Task:** Study foundational topics relevant to your data science program (e.g., calculus, linear algebra, or statistics).
 - Focus on understanding basic concepts (e.g., functions, limits, or probability).
 - Solve exercises to reinforce understanding.

2:00 PM - 2:30 PM - Break / Lunch

• Step away from your studies completely, have lunch, and recharge.

2:30 PM – 4:00 PM – Deep Work Session 3: Critical Thinking Book

- Task: Read a chapter from your critical thinking book.
 - Focus on understanding key concepts like logical reasoning, argument structure, and cognitive biases.
 - Take notes and reflect on how critical thinking can be applied to policy analysis or your Substack writing.

4:00 PM - 4:30 PM - Break

4:30 PM – 6:00 PM – Deep Work Session 4: Substack Writing (Economics Concepts)

- Task: Draft Substack post: "Understanding Trade-offs in Bihar's Economy."
 - Focus on applying economic concepts (e.g., opportunity cost) to Bihar's agricultural sector.
 - Aim for 300-500 words.

6:00 PM - 7:00 PM - Dinner Break

7:00 PM - 8:30 PM - Deep Work Session 5: Python for Data Science

- Task: Continue learning Python basics, focusing on data handling.
 - Work through exercises on variables, loops, and conditionals.
 - o Practice loading and manipulating small datasets.

8:30 PM - 9:00 PM - Break

9:00 PM - 10:00 PM - Review & Reflect

- Review key concepts from your studies, organize notes, and reflect on any challenges.
- Briefly plan the next day's tasks (outline next Substack post, review math topics, and Python tasks).