

Indian Institute of Technology Kanpur

Proposal for a New Course

1. **Course Number:** ECO282
2. **Course Title:** Financial Systems and Crises
3. **Per Week Lectures:** 3 (L), Tutorial: 0 (T), Laboratory: 0 (P), Additional Hours: 0

Credits: $(3*L+T+P+A)$: 9 credits

Duration of Course: Full Semester

4. **Proposing Department:** Economic Sciences
5. **Proposing Instructor:** Bikramaditya Datta
6. **Course Description:**

This course provides a comprehensive understanding of how financial systems are structured, how they function, and why they periodically fail. Students will learn to analyse financial institutions, understand money and payment systems, and apply crisis theory to historical and contemporary episodes.

Part I (Financial Systems) examines the theory and practice of banking, central banking, international finance, money and payment systems, culminating in theories of financial cycles and instability. Part II (Financial Crises) analyses: the mechanisms that cause fragility to build, the triggers and amplifiers that turn fragility into crisis, and the policy responses that determine recovery. The course emphasises both the economics of financial systems (why they are structured as they are, why they fail) and the engineering of financial stability (how systems can be designed, regulated, and made more robust).

A) **Objectives:** Upon completion, students will be able to:

1. Analyse financial institutions using models of intermediation, bank fragility, and central banking;
2. Explain how money and payment systems work;
3. Apply theories of financial cycles to understand boom-bust dynamics;
4. Diagnose financial crises using frameworks for amplification, contagion, and currency collapse;
5. Evaluate regulatory responses and financial system design.

B) Contents:

S. No.	Broad Title	Topics	No. of Lectures*
Part I	Financial Systems		
1.	Banks and Financial Intermediation	Functions of finance, flow of funds, Diamond delegated monitoring model, bank balance sheets, credit creation, maturity transformation	4
2	Bank Fragility and Central Banking	Diamond-Dybvig model, multiple equilibria, deposit insurance, lender of last resort, Bagehot's rule, monetary policy transmission	4
3	International Financial System	Reserve currencies, Triffin dilemma, capital flows, exchange rate regimes, impossible trinity	2
4	Money and Payment Systems	Evolution of money, bank-railed payments, fast payment systems, stablecoins, CBDCs	2
5	Financial Cycles and Instability	Financial Instability Hypothesis, Adaptive Markets, credit cycles	2
Part II	Financial Crises		
6	Bubbles, Credit Booms, and Shadow Banking	Keynesian beauty contest, capital misallocation, securitisation, shadow banking, SVB	3
7	Systematic Risk, Amplification, and Contagion	Liquidity spirals, fire sales, doom loop, sovereign-bank nexus	3
8	Currency Crises and Policy Responses	Currency crises models, sudden stops, unconventional monetary policy, fiscal policy in crises	3
9	Recovery, Regulation, and Lessons	Leverage cycle, balance sheet recessions, macro-prudential policy, Basel framework, twin balance sheet crisis	3

*Duration of each lecture = 75 minutes.

c) Pre-requisites: Probability (HSO201/MSO201/MSO205/CS203).

D) Short summary for including in the Courses of Study Booklet: This course examines how financial systems are structured, how they function, and why they fail. Part I covers financial intermediation (why banks exist and why they are fragile), central banking, international finance, money and payment systems, and theories of financial cycles. Part II analyses financial crises: bubbles and credit booms, amplification mechanisms, currency crises, and policy responses. Cases include the 2008 Global Financial Crisis, SVB 2023, and India's twin balance sheet crisis.

7. Recommended books:

- 1) Financial Markets and Institutions by Frederic Mishkin, Stanley Eakins, Tulsi Jayakumar, and Hemant Manuj. Pearson. 10th edition, 2024.
- 2) The Economy 2.0 (Macroeconomics) by the CORE Econ Team. 2025. Available online at <https://books.core-econ.org/the-economy/index.html>
- 3) A Crash Course on Crises by Markus Brunnermeier and Ricardo Reis. Princeton University Press. 2023.
- 4) Quest for Restoring Financial Stability in India by Viral Acharya. Vintage Books. 2023.
- 5) Understanding Financial Crises by Franklin Allen and Douglas Gale. Oxford University Press. 2009
- 6) Adaptive Markets by Andrew Lo. Princeton University Press. 2019.
- 7) Macroeconomics for Professionals by Leslie Lipschitz and Susan Schadler, Cambridge University Press. 2019.
- 8) Global Financial Systems by Jon Danielsson. Pearson. 2013.

Dated: January 25, 2026. Proposer: Bikramaditya Datta

Dated: _____ DUGC Convener: _____

The course is approved / not approved

Chairman, SUGC

Dated: _____