

Course Structure and Standard Syllabus

Course Topic: General Macroeconomic Analysis

Course Title: Financial Programming and Policies (FPP)

Learning Objectives

This course aims to teach participants how to both diagnose macroeconomic imbalances and correct them through a coordinated set of adjustment policies. It covers the principal features of the four main macroeconomic sectors (real, fiscal, external, and monetary/financial) and the interrelations among them, highlighting both accounting and behavioral relationships, using data from a country case study.

Upon completion of this course, participants will be able to:

- Analyze economic and financial developments of a country in the region using historical data and a hands-on, Excel-based framework.
- Create consistent one-year projections of the real, external, fiscal, and monetary sectors under the assumption of unchanged policies.
- Identify economic vulnerabilities and risks under a baseline scenario and policy measures to address them.
- Prepare a consistent adjustment scenario which reflects these policy measures and their macro impacts.
- Identify further policy goals and measures beyond the one-year horizon that will be incorporated into a medium-term framework.

Topics (Core Units)

1. Introduction to Financial Programming
2. Interrelations Among Macroeconomic Accounts
3. Overview of Quantitative Analysis and Forecasting Methods
4. Output, Expenditure, and Prices: Analysis and Forecasting
5. Balance of Payments: Analysis and Forecasting
6. Fiscal Sector: Analysis and Forecasting
7. Fiscal Policy
8. Monetary Sector: Analysis and Forecasting
9. Monetary and Exchange Rate Policies

10. Macro-Financial Linkages

11. Sources of Growth

12. Growth and Macroeconomic Sustainability: A Medium-Term Perspective

13. Macroeconomic Adjustment and Program Experience

Target Audience

Officials from ministries of finance, economy, and planning, or central banks, who advise on or help implement macroeconomic and financial policies.

Prerequisites

Participants are expected to have a degree in economics or equivalent experience, along with proficiency in the use of spreadsheets. It is **highly recommended** that the online courses (FPP.1x and FPP.2x) be completed before attending the face-to-face course.¹

Performance Evaluation

A multiple-choice test will be given at the beginning and end of the course to assess participants' knowledge and impact of learning.

¹ Please see annex 1 for a list of topics covered in the online FPP offerings.

Program Outline

Unit 0: Introductory Lecture – Course Overview

Lecture 0 (0.5 hours)

- Objectives of course
 - Modalities
 - Syllabus
 - Role of participants and counselors
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Unit 1: Introduction to Financial Programming

Lecture 1 (1.5 hours)

- Introduction: What is financial programming?
- What is Macroeconomic Stabilization?
- Economic imbalances and vulnerabilities
- Policies to Achieve Joint Balance (Internal and External)
- Issues in Designing Adjustment Programs
- Roadmap for Stabilization

References

1. IMF Institute, 2013, “The Baseline Scenario” Chapter 7 in *Vol. I, Financial Programming and Policies*, pp 189-196.
2. IMF Institute, 2013, “Designing an Adjustment Program” Chapter 15 in *Vol. I, Financial Programming and Policies*, pp 289-294.
3. IMF Institute, 2013, “Macroeconomic Stabilization, IMF-Supported Programs, and Conditionality” Chapter 16 in *Vol. I, Financial Programming and Policies*, pp 295-312.
4. Mussa, Michael and Miguel Savastano, “The IMF Approach to Economic Stabilization”, NBER Macroeconomics Annual 1999, Volume 14, pp. 79-128.

Unit 2: Interrelations Among Macroeconomic Accounts

Lecture 2 (1.5 hours)

- Overview of the four macroeconomic accounts
- Accounting interrelationships among the accounts
 - The income-absorption gap
 - The saving-investment gap: public vs. private sector
 - Corresponding financing identities for all gaps: internal and external
 - Macro-financial linkages: potential financial vulnerabilities and their likely real sector outcomes
- Behavioral interrelationships among the accounts
- Crises and financing gaps

References

1. IMF Institute, “Interrelations Among Macroeconomic Accounts: The Flow of Funds,” Chapter 5 in Richard Barth, William Hemphill, and others, 2000, *Financial Programming and Policies: The Case of Turkey*,” see link at:
<https://www.imf.org/external/pubs/nft/2000/Turkey/index.htm>

Unit 3: Overview of Quantitative Analysis and Forecasting Methods

Lecture 3 (1.5 hours)

- Data: description, trends, price deflators, growth rates
- Simple forecasting methods
- Application: obtaining an initial projection for GDP growth

References

1. IMF Institute, 2013, “Basic Empirical Methods” Chapter 1 in *Vol. I, Financial Programming and Policies*, pp 11-41.

Unit 4: Output, Expenditure, and Prices: Analysis and Forecasting

Lecture 4 (1.5 hours)

- Gross Domestic Product from the expenditure side, element-by-element
- Current versus constant price expenditures and output
- Using price and exchange rate assumptions to obtain expenditure deflators
- Reconciling expenditure- and supply- side GDP forecasts
- Role of commodity prices in economic activity

Workshop 1 (4.5 hours)

Topic: Analysis and forecasting of GDP and prices

Activity: The workshop aims to: (1) introduce the case study and discuss structure of course workshops; (2) summarize recent growth and inflation trends for the case study; (3) introduce key assumptions on external environment and exchange rate; (4) develop and analyze a full set of expenditures and deflators for the baseline.

References

1. IMF Institute, 2013, “Output and Aggregate Demand” Chapter 2 in *Vol. I, Financial Programming and Policies*, pp 42-65.
2. IMF Institute, 2013, “The Price Level, Inflation and Exchange Rates” Chapter 3 in *Vol. I, Financial Programming and Policies*, pp 66-98.
3. IMF Institute, FPP Regional Case Study (*varies by division*), “W-1: Workshop on Real Sector Accounts, Analysis and Projections.”

Unit 5: Balance of Payments: Analysis and Forecasting

Lecture 5 (1.5 hours)

- Balance of Payments accounting: trade, current, capital, and financial accounts
- Linking exports and imports of goods and services to real sector
- Financing flows: direct investment vs. portfolio, debt vs. non-debt, public vs. private
- The overall balance and reserve flows
- Current account norm and exchange rate misalignment
- Reserve adequacy metrics and external sustainability

- Forecasting balance of payments: elasticities, exchange rates, global assumptions
- Role of commodity prices for importers and exporters
- Policies to address external vulnerabilities

Workshop 2 (4.5 hours)

Topic: Analysis and forecasting of the balance of payments

Activity: The workshop aims to: (1) analyze relevant elasticities and global economic assumptions; (2) forecast components of current and financial and capital account; (3) analyze different ways of financing the overall balance; (4) analyze external vulnerabilities.

References

1. IMF Institute, 2013, “The External Sector” Chapter 4 in *Vol. I, Financial Programming and Policies*, pp 99-132.
2. IMF Institute, FPP Regional Case Study (*varies by division*), “W-2: Workshop on External Sector Accounts, Analysis, and Projections.”

Unit 6: Fiscal Sector: Analysis and Forecasting

Lecture 6 (1.5 hours)

- Fiscal accounts
- Measures of fiscal balance
- Financing the fiscal deficit
- Forecasting fiscal accounts: revenues, spending, financing and debt

Workshop 3 (3 hours)

Topic: Analysis and forecasting of fiscal accounts

Activity: The workshop aims to: (1) analyze the relationship among the tax base, the tax rate, and tax revenue; (2) identify the main factors that determine trends in the tax base, effective tax rates, and recent trends in expenditures, by principal category; (3) project principal elements of revenues and expenditures using results and assumptions for current period; (4) derive corresponding financing scenario and paths of foreign and domestic debt; (5) estimate effects of fiscal policy actions on other macroeconomic variables.

References

1. IMF Institute, 2013, “The Public Sector” Chapter 5 in *Vol. I, Financial Programming and Policies*, pp 133-157.
2. IMF Institute, FPP Regional Case Study (*varies by division*), “W-3: Workshop on the Analysis and Forecasting of the Fiscal Sector.”

Unit 7: Fiscal Policy

Lecture 7 (1.5 hours)

- Fiscal Policy: Definition and Objectives
- The Impact of Fiscal Policy on the Economy
- Impact of macroeconomic shocks on Fiscal Deficit
- How to Conduct Fiscal Policy
- Fiscal Policy and Crises

References

1. IMF Institute, 2013, “An Analytical Framework for Macroeconomic Stabilization,” Chapter 11 in *Vol. I, Financial Programming and Policies*, pp 245-249.
2. IMF Institute, 2013, “Fiscal Policy,” Chapter 13 in *Vol. I, Financial Programming and Policies*, pp 272-282.
3. James Daniel et al, 2006, *Fiscal Adjustment for Stability and Growth*, pp 1-76.

Unit 8: Monetary Sector: Analysis and Forecasting

Lecture 8 (1.5 hours)

- Overview of monetary aggregates and depository institution balance sheets
- Monetary liabilities and money demand functions
- Basics of monetary instruments and policy
- Credit aggregates – linkages with other sectors
- Other asset-side items, including international reserves, valuation effects, and central bank liquidity operations

Workshop 4 (3 hours)

Topic: Analysis and forecasting of monetary accounts

Activity: The workshop aim to: (1) project key monetary aggregates with simple money demand functions; (2) build asset side projections based on assumptions from other sectors (i.e. fiscal financing, exchange rates); (3) reconcile monetary projections with results from other sectors.

References

1. IMF Institute, 2013, “The Monetary and Financial Sector” Chapter 6 in *Vol. I, Financial Programming and Policies*, pp 158-187.

2. Institute, FPP Regional Case Study (*varies by division*), “W-4: Workshop on Analysis and Forecasting of Monetary Aggregates.”
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Unit 9: Monetary and Exchange Rate Policies

Lecture 9 (1.5 hours)

- Objectives of monetary and exchange rate policies
- Inflation targeting vs. monetary targeting
- Instruments of monetary policy
- Impact of monetary policy instruments and exchange rate on the economy
- Alternative exchange rate regimes
- Impact of economic conditions on the exchange rate – real and nominal
- Policy coordination
- Central bank communication

References

1. Koshy Mathai, 2012, “Monetary Policy: Stabilizing Prices and Output,” *Back to Basics, Finance and Development*, IMF.
 2. IMF Institute, 2013, “An Analytical Framework for Macroeconomic Stabilization,” Chapter 11 in *Vol. I, Financial Programming and Policies*, pp 249-251.
 3. IMF Institute, 2013, “Monetary and Exchange Rate Policy” Chapter 12 in *Vol. I, Financial Programming and Policies*, pp 254-271.
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Unit 10: Macro-Financial Linkages

Lecture 10 (1.5 hours)

- Understanding Macro-Financial Linkages
- Analytics of Macro-Financial Linkages
- Identifying Financial Weaknesses: Financial Soundness Indicators
- Identifying Systemic Risks: The Balance Sheet Approach (BSA)
- Preserving Financial Stability using Macroprudential Policy

References

1. IMF, 2015, “Balance Sheet Analysis in Fund Surveillance—Reference Note,” International Monetary Fund, Washington, D.C.

2. Navajas, Matias Costa and A. Thegeya (2013) “Financial Soundness Indicators and Banking Crises,” IMF Working Paper WP/13/263.
3. Bernanke, Gertler, and Gilchrist, 1999, “The Financial Accelerator in a Quantitative Business Cycle Framework,” in *Handbook of Macroeconomics*, <http://www.econ.nyu.edu/user/gertlerm/papers.html>.

Workshop 5 (3 hours)

Topic: Interrelations between macro accounts and finalization of baseline

Activity: The workshop aim to: (1) analyze interrelations between macro accounts and flow of funds table; (2) discuss macro-financial linkages; (3) finalize baseline scenario.

Unit 11: Sources of Growth

Lecture 11 (1.5 hours)

- Quantifying the sources of growth: a production function approach
- The Solow Growth model and the concept of a steady state
- Total factor productivity: technological and policy determinants
- The importance of structural reforms: theory and evidence
- Impediments to growth
- Role of infrastructure

References

1. Aghion, Philippe, and Steven Durlauf, 2007, “[From Growth Theory to Policy Design](#)” (Washington: World Bank).
 2. “Economic Growth, Institutions, and Economic Policy: A Long-Run Perspective,” Chapter 5 in Evan Tanner (2014), *Macroeconomics: Applied Assessments and Policy Options*, available online at <http://testmodel2014.yolasite.com/>
 3. Dabla, Era, and others, 2013, “Anchoring Growth: The Importance of Productivity-Enhancing Reforms in Emerging Market and Developing Economies,” IMF Staff Discussion Note 13/08; available online at: <https://www.imf.org/external/pubs/ft/sdn/2013/sdn1308.pdf>
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Unit 12: Growth and Macroeconomic Sustainability: A Medium-Term Perspective

Lecture 12 (1.5 hours)

- A medium-term perspective: where should the country be heading?

- Medium-term assumptions for the external environment, economic growth, and other key variables
- Dynamics and sustainability for public and external debt: a primer
- Designing a simple medium-term framework

References

1. “Medium-Term Forecasting,” Chapter 10 in Richard Barth, William Hemphill, and others, 2000, *Financial Programming and Policies: The Case of Turkey*,” see link at: <https://www.imf.org/external/pubs/nft/2000/Turkey/index.htm>
2. Tanner, Evan, 2013, “Fiscal Sustainability: A 21st Century Guide for the Perplexed,” IMF
3. Working Paper 13/89 <http://www.imf.org/external/pubs/cat/longres.aspx?sk=40482>

Unit 13: Macroeconomic Adjustment and Program Experience

Lecture 13 (1.5 hours)

- Diagnosing macroeconomic imbalances and vulnerabilities in the baseline
- No policy change scenario, shocks and fiscal and external financing gaps
- Program design – stabilization policies and structural reforms for growth and sustainability
- Performance/Assessment criteria and indicative targets
- Role of external financing
- Country experience with IMF-supported programs
- Challenges in post-crisis adjustment

Workshop 6 (15.0 hours)

Topic: Financial Programming

Activity: The workshop aims to: (1) analyze vulnerabilities in baseline scenario; (2) identify policies that will address vulnerabilities; (3) quantify impact of policies on key macroeconomic variables; (4) compute macroeconomic projections for the program scenario; (5) specify a *simple* medium-term framework; (6) decide on potential role of Fund financing.

References

1. IMF Institute, 2013, “The Policy Scenario” Part III in *Vol. I, Financial Programming and Policies*, pp 245-318.
2. IMF Independent Evaluation Office, 2013, “Fiscal Adjustment in IMF-supported programs: Revisiting the 2003 IEO Evaluation” <http://www.imo-imf.org/ieo/files/updates/FA%20Glossy.pdf>

3. IMF Ex-Post Assessments (*countries will vary by division*)
4. IMF Institute, FPP Regional Case Study (*varies by division*), “W-5: Financial Programming.”

Annex 1. Description of online version of FPP

Financial Programming and Policies Part 1: Macroeconomic Accounts & Analysis (FPP.1x)

The course, presented by the IMF's Institute for Capacity Development, provides an introduction to Financial Programming and Policies. The course presents the principal features of the accounts of the four main sectors that comprise the macroeconomy (real, fiscal, external, and monetary) and the interrelations between them. For each sector the course presents the accounting framework the interpretations of variables and indicators from these accounts and basic analysis of the accounts. The online course may be taken as a stand-alone introduction to the macroeconomic accounts and will also serve as a prerequisite for selected two-week face-to-face FPP courses. Please note that the FPP.1x replaces the previously-offered FPPx course.

The course features short video lectures interspersed with interactive quizzes and hands-on exercises and includes a discussion forum to allow participants to network and discuss the course content. Weekly assignments are computer-graded and subject to strict deadlines. The expected workload is 8-10 hours a week. Participants who successfully complete the FPP.1x course will receive a certificate of completion. Participants who do not successfully complete the course the first time may re-apply. Please check the e-catalog often as new online course offerings are added regularly.

Financial Programming and Policies Part 2: Macroeconomic Accounts & Analysis (FPP.2x)

Module 1: What is FPP2x?

The aim of this unit is to open the course with a brief recap on what was done in FPP1x (“Previously on FPP1x...”); (ii) Define IMF financial programming (FPP2x), as a practical, hands-on approach to understand macroeconomic policy analysis over the business cycle and simulate macroeconomic scenarios in a consistent way across main economic sectors. (iii) Show some examples from real world; Explain the FPP2x courseware in 3 main steps: (i) forecasting macroeconomic sectors one by one; (ii) construct a draft baseline scenario (and check its dual consistency (accounting and economic) across sectors); (iii) construct an adjustment scenario to redress imbalances and which may involve a financial program with the IMF or other IFIs.

Sources: (i) FPP face to face lecture slides; (ii) FPP-DL lecture slides and modules; (iii) Macronia spreadsheet;

Module 2: Introducing Macronia. This module shows some stylized facts on Macronia and provides an introduction to the following modules on sectoral forecasts by using Macronia country case and spreadsheet.

Module 3: Forecasting the Real sector and Inflation.

The aim of this unit is to construct baseline projections of the real sector assuming unchanged policies. Moreover, the unit will provide a first look at the links between the real sector and other macroeconomic sectors. After completing this unit, the participants will be able to: (i) forecast potential output and the output gap from the “supply side” perspective; (ii) what is a Phillips curve and why is useful? (iii) what are the main determinants of the Phillips curve in forecasting inflation: role of output gap and exchange rate pass-through; (iii) forecast components of GDP from the expenditure side; (iv) obtain an initial forecast of the GDP deflator.

Module 4: Forecasting the Exchange rate and the External sector

The aim of this unit is to construct baseline projections of the external sector assuming unchanged policies. Moreover, the unit will address the links between the external sector and other macroeconomic sectors and present an introductory discussion of the choice of the ER regime. After completing this unit, the participants will be able to: (i) Understanding the RER as a key relative price in the economy and from the theoretical perspective (role of law of one price, inflation differentials, relative prices of NT and Tradable goods; role of UIP in determining the exchange rate in open financial markets; (ii) Assessing and estimating an underlying trend in RER which is consistent with economic fundamentals (sustainable CA, S-I) and why is this a useful indicator; (iii) forecast the nominal exchange rate given the underlying trend RER and inflation differentials , (iii) forecast the current account of the balance of payments and its sub-components; (iv) forecast the financial account of the balance of payments and its sub-components; (v) forecast the stock of external debt and a simplified net international investment position; (vi) identify emerging imbalances. (vii) understand the basic policy trade-offs among different exchange rate regimes.

Module 5: Forecasting the Government sector

The aim of this unit is to learn how to forecast a government budget (revenues, expenditures and financing) and derive its fiscal stance. Show interrelations with the other sectors and assess the impact of fiscal policy as a demand “shifter” (other important roles on the long run effects of FP are beyond the scope of this course). Main factors that determine the government fiscal stance and how it relates to the business cycle (if it helps expanding or reducing aggregate demand it, or in economist jargon, if it is pro-cyclical or counter-cyclical). Other learning points after completing this unit: explain the relationships among the tax base, the tax rate, and tax revenue; list the main factors that determine trends in the tax base; main assumptions made in forecasting revenue; factors that determine the levels of different types of government expenditure; prepare a forecast for government operations on the basis of assumptions and data provided.

Sources: (i) FPP face to face lecture slides; (ii) FPP-DL lecture slides and modules; (iii) Macronia spreadsheet;

Module 6: Forecasting the Monetary and Banking sector

The aim of this section is to learn how monetary authorities forecast the policy interest rate and consistent trends of monetary aggregates summarized in the survey of depository corporations

(SDC). This includes the accounts of the central bank and other depository corporations. After completing this section participants will be able to:

(i) understand the useful role of a monetary policy reaction function (Taylor rule), (ii) forecast the level of policy interest rate that is consistent with output, inflation and other macroeconomic factors (e.g. real exchange rate); (iii) describe the link between interest rate and money and understand the factors that affect money demand; (iv) forecast the money demand (and therefore money supply) consistent with output, and interest rate (v) use the concept of money multiplier to forecast central bank reserve money and all the main monetary aggregates (NFA, NDA, etc) (vi) show an alternative method to forecast broad money by using the concept of velocity; (vii) ensure consistency in the monetary sector forecast.

Module 7: Making a Consistent Baseline scenario

In this unit, you will ensure that your sectoral forecasts done in modules 3-6 are mutually consistent. Participants will need to review their work and ensure that that have a consistent baseline scenario (from accounting and behavioral perspective) After working through this unit, including the assignment, they will be able to: (i) explain what a baseline scenario is and contrast it with the sectoral forecasts; (ii) explain the purpose of making a baseline scenario; (iii) explain what is needed to ensure accounting consistency of a forecast; (iv) explain what is needed for behavioral consistency of a forecast; and make the necessary changes to your own forecasts to develop a consistent scenario for Macronia.

Module 8: Interpreting the Baseline Scenario and the role of economic policy. Introducing a simple model to understand economic policy; transmission mechanisms of Monetary Policy (stabilization role), macroeconomic impact of Fiscal Policy (stabilization role); effects of exogenous shocks onto our baseline; link between UIP and Monetary Policy. Examples of Policy Coordination and how policies need to be communicated;

Module 9: Assessing the Risks in a Baseline Scenario. What are the vulnerabilities inherent for any emerging market (EME) economy? What factors/policies affect the extent of that vulnerability? Why are some countries more “fragile” than others? How might shocks affect the economy – a model-based approach. Beyond the model – where are the “dark corners” of the economy?

Module 10: The Adjustment scenario.

Participants will learn how to construct an adjustment scenario (based on our baseline) by: (i) decide on the goals conducive to attainment of both internal and external stabilization (how to get from current to the new equilibrium; (ii) using Macronia spreadsheet and setting some macro-objectives (the FPP program objectives); (iii) learn elements of FPP program design (objectives, conditionality; issues).

Annex 2. Regional Case Studies

Summary of Regional Case Studies			
Region and ICD Division	Case Study	Statistical Manuals	
		Fiscal	BOP
Asia (AN)	Indonesia (2013)	GFSM2001	BPM6
Africa (AC)	Ghana (2014)	GFSM2001	BPM5
Europe (EM)	Iceland (2007)	GFSM2001	BPM5
Europe (EM)	Georgia (2014)	GFSM2001	BPM6
Middle East (EM)	Tunisia (2014)	GFSM2001	BPM6
Latin America (WH)	Costa Rica (2014)	GFSM2001	BPM6
Online FPP (FPP.1x and FPP.2x)	Macronia (2012)	GFSM2001	BPM6

ANNEX 3. INSTRUCTIONAL TIME

Summary of Instructional Time

Day	Activity	Time
Day 1	Unit 0: Course Introduction	
	Administrative Briefing	0.5
	Opening session	0.5
	Initial Test	0.5
	Lecture 0: Course Overview	0.5
	Unit 1: Introduction to Financial Programming	
	Lecture 1: Introduction to Financial Programming	1.5
Day 1	Unit 2: Interrelations Among Macroeconomic Accounts	
	Lecture 2: Interrelations Among Macroeconomic Accounts	1.5
Day 2	Unit 3: Overview of Quantitative Analysis and Forecasting Methods	
	Lecture 3: Overview of Quantitative Analysis and Forecasting Methods	1.5
	Unit 4: Output, Expenditure, and Prices: Analysis and Forecasting	
Day 2	Lecture 4: Output, Expenditure, and Prices: Analysis and Forecasting	1.5
	Workshop 1: Real Sector Forecasts	3
Day 3	Unit 5: Balance of Payments: Analysis and Forecasting	
	Lecture 5: Balance of Payments: Analysis and Forecasting	1.5
Day 3	Workshop 2: External Sector Forecasts	4.5
	Day 4	Unit 6: Government Finance Statistics: Analysis and Forecasting
Lecture 6: Government Finance Statistics: Analysis and Forecasting		1.5
Workshop 3: Fiscal Sector Forecasts		3
Day 4	Unit 7: Fiscal Policy	
	Lecture 7: Fiscal Policy	1.5
Day 5	Unit 8: Monetary Accounts: Analysis and Forecasting	
	Lecture 8: Monetary Accounts: Analysis and Forecasting	1.5
	Workshop 4: Monetary Sector Forecasts	3
Day 5	Unit 9: Monetary Policy and Exchange Rate Regimes	
	Lecture 9: Monetary Policy and Exchange Rate Regimes	1.5
Day 6	Unit 10: Macro-Financial Linkages	
	Lecture 10: Macro-Financial Linkages	1.5
	Workshop 5: Financial Sector Indicators	3
Day 6	Unit 11: Sources of Growth	
	Lecture 11: Sources of Growth	1.5
Day 7	Unit 12: Growth and Macroeconomic Stability: A Medium-Term Perspective	
	Lecture 12: Growth and Macroeconomic Stability: A Medium-Term Perspective	1.5
	Unit 13: Macroeconomic Adjustment and Program Experience	
Day 7	Lecture 13: Macroeconomic Adjustment and Program Experience	1.5
	Workshop 6: Financial Programming (Finalize baseline scenario)	3
Day 8	Workshop 6: Financial Programming (Program scenario)	6
Day 9	Workshop 6: Financial Programming (Prepare group presentations)	6
Day 10	Course Closing	
	Course Evaluation	0.5
	Final Test	0.5
	Group Presentations	2
	Closing session and distribution of certificates	0.5
	Total (lectures, workshops, other)	56.5