

Firm Analysis using GAMS Class

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Firm Analysis Class

Course Schedule

Monday

8:30-9:00	Introduction A. Participant Introduction B. Class Introduction and resources	classmat
9:00-9:15	Basic Firm Analysis	intro
9:15-10:30	GAMS and the IDE	gamintro
10:30-11:30	Break and Hands on 1	
11:30-12:15	More basic GAMS	gamintro
12:15-1:30	Lunch	
1:30-2:30	Intro of GAMSCHK	gamintro
2:30-3:30	Hands on 2	
3:30-4:30	Power of GAMS	power
4:30	Recess for day	

Firm Impact Analysis Class

Course Schedule

Tuesday

8:30-9:15	Hands on 3	
9:15-10:15	Firm Modeling	firmimp
10:15-11:15	Break and Hands on 4	
11:15-12:15	Finish Firm Impact	goodmodl
12:15-1:30	Lunch	
1:30-2:15	Good Modeling Practice	firmimp
2:15-3:00	Hands on 5	
3:00-3:45	Firm Comparative Runs	compare
3:45-4:30	Hands on 6	
4:30	Recess for Day	

Firm Impact Analysis Class

Course Schedule

Wednesday

8:30-9:30	Fixing Misbehaving Models	fixagmod
9:30-10:15	Hands on 7	
10:15-11:30	Firm Risk Modeling	firmrisk
11:30-12:15	Hands on 8	
12:15-1:30	Lunch	
1:30-2:30	Recourse Risk Modeling	firmrisk
2:30-3:15	Hands on 9	
3:15-4:00	Multiple Locations - transportation	transport
4:00-4:30	Hands on 10	
4:30	recess for day	

Firm Impact Analysis Class

Course Schedule

Thursday

8:30-9:30	Including Demand price response	price
9:30-10:15	Hands on 11 and break	
10:15-11:30	Integer Programming Basics	Integer
11:30-12:15	Hands on 12 and break	
12:15-1:30	Lunch	
1:30-2:30	Solving Integer Programs and reformulations	IPMOD
2:30-3:30	Hands on 13	
3:30-4:00	Application War stories	Eight
4:00-4:30	Wrap it up	Wrapup
4:30	Workshop adjourns	

Firm Impact Analysis Class
Introduction

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Firm Analysis Class Objectives and Method

A. Learning objectives

1. GAMS and GAMS use
 - a. will start elementary but go fast
 - b. Backup provided by examples and documents
2. Firm Impact Analysis risk neutral and risk averse
3. Investment Analysis

B. Time is short -- Back up Course Materials

1. Reference materials on pdf backing up course
2. Notebook of Overheads
3. CDROM
 - a. All class examples
 - b. Reference Materials
 - c. Real Models

C. Mix of listening and doing hopefully about 60/40

Firm Analysis Class Introduction

Class materials – a guide to their structure

This class is supported by a number of reference documents and class examples.

The fundamental support documents are the **overheads** which are distributed in the notebook. The overall course outline also indicates the name of the overhead set that will be under use during each course segment.

The overheads refer to a number of other course support documents and class examples. These include **class examples**, **reference text materials**, and **class applications**.

Class examples Generally, the class examples appear under the subdirectory **example** and are then contained in the subdirectory that is consistent with the name of the overhead series we are working from. Thus, when working with the introductory material the overheads are called **gamintro** and the class example files are in the **example/gamintro** subdirectory. Generally I try to place filenames in **green** within the overheads.

Firm Analysis Class Introduction

Class materials – a guide to their structure

Reference text materials. Generally the reference text materials appear under the subdirectory **document**. In the class overheads references to these materials are colored in **purple**.

Class applications. During the class there will be references made several real applications. The files implementing these applications are generally kept in subdirectory name associated with the application. Again the filenames will be appearing in the overheads in **green**

Firm Analysis Class

Class materials – a guide to their structure

Overheads and their Function

Overhead Set Name	Class Intro	Basic Gams	Firm Analysis Modeling	Transportation	GAMS for Applied Modeling	Price Endogenous Modeling	Firm Risk Modeling	Indivisible Investment modeling	Putting it all Together
CLASSMAT	X								
INTRO	X		X						
GAMINTRO		X	X	X					
POWER		X	X						
FIRMIMP			X		X				
COMPARE					X				
FIXMOD		X	X		X				
FIRMIRISK							X		
TRANSPORT				X					
PRICE						X			
INTEGER								X	X
STUDIES			X					X	X
SMLLRG		X			X				

Reference Documents and their Function

Reference Item Name	Class Intro	Basic Gams	Firm Analysis Modeling	Transportation	GAMS for Applied Modeling	Price Endogenous Modeling	Firm Risk Modeling	Indivisible Investment	Putting it all Together
Outline	X								
Newbook		X		X	X	X	X	X	
UserGuide		X			X				
Solver Manuals		X			X				
fixmodel		X	X		X				
GAMSCHK		X			X				
GAMSBAS		X			X				
Edward						X	X		
ElNino							X		X
Sequist							X		X
Pesti							X		X
farmpro							X		X
tips		X			X				
usegck					X				
probab								X	

Other documents can be gotten from GAMS web site www.gams.com and www.gams.de

Firm Analysis Class
Class materials – a guide to their structure
CDROM Contents

- Document subdirectory** contains all resource materials
- GAMSSYS subdirectory** contains a working GAMS system and a three-month evaluation license
(you will need to install this following installation instructions)
- Example subdirectory** contains all problem examples and some other types of models.
Generally accessed through IDE library chooser
- HANDSON subdirectory** contains worked examples of all assigned problems. Located under example and generally should be accessed through IDE library chooser
- YOURWORK** a place for you to keep your work
- Adobe subdirectory** contains a copy of the Adobe PDF reader

