# **Teaching plan**

# **Cost Accounting II**

Degree: *Management* (EMP) Code: 21863 Course: Third Term: Second Number of ECTS credits: 5 Hours of student dedication: 125 Language: English

Universitat Pompeu Fabra

# 1. Introduction

*Cost Accounting II* is a compulsory subject on the Bachelor's Degree in Business Sciences-Management.

The basic objective of the subject is to deep into the ABC methodology used by companies to calculate the cost of the products and services they offer in order to make the right decisions, to understand the budgeting and deviation analysis processes and to get familiar with the trending topics in cost analysis (quality costs, environmental costs and specific industry's costs)

Cost accounting is of strategic importance in an increasingly competitive environment.

The subject has been adapted to the European credits system, as laid down in the European Higher Education Area. With this in mind, a set of skills students need to acquire in order to pass the subject have been drawn up.

Classroom hours have been reduced to create more time for active learning on the part of the student. This means students are involved on an ongoing basis in the subject as it develops by means of continuous assessment and personal study of the works listed in the bibliography. More importance has been given to team work and communications ability, both oral and written, since these are two key skills in the career development of Business Sciences-Management graduates.

# 2. Subject competences

The knowledge that students must acquire in Cost Accounting II, outlined in terms of general and specific competences, are set out below.

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# 3. Contents

The content of the subject can be found in the basic and recommended bibliography for each topic. The recommended bibliography will allow the student to deepen the knowledge of the area but it is not indispensable to achieve the objectives of each topic.

The subject is divided into nine topics each of them has its own objectives with the aim to achieve the general objectives of the subject.

# Topic 1: Introduction.

# **Objectives:**

After studying this topic, you should be able to

- Know the key concepts in cost accounting
- □ Understand fixed and variable costs (calculate Breakeven point)
- Understand the direct costing method
- Differentiate between partial costing and full costing methods
- Calculate results with different cost systems

# Program:

Costing methods. Direct costing. Other partial costing methods: Evolved direct costing, Variable costing, and Evolved variable costing. Job costing system: Job cost card. Treatment of costs in a job costing system: direct costs, indirect manufacturing costs, assignment of other indirect costs. Calculation of the results (profits or losses) generated by unfinished contracts.

The breakeven point. Sensitivity Analysis. Cost-volume-profit Analysis. Multiproduct companies.

Partial costing and full costing. Process costing. Full costing by departments: Divide the company into departments. Operating and support departments. Allocation of indirect costs to operating and support departments. Assignment of costs allocated to support departments to operating departments. Support departments with reciprocal services, indirect-cost rate and equivalent units, cost per unit of product. Problems of cost calculation: sub-activity costs (underallocated indirect costs), over-activity benefits (overallocated indirect costs), valuation of scrap, waste and by-products. Valuation of work in progress.

# Basic references:

- AMAT AND SOLDEVILA 2002, Chapter 2, 3 and 4.
- HORNGREN ET AL 2003, Chapter 3, 4, 9, 14, 17 and 18.

# Topic 2: Activity Based Costing (ABC)

# **Objectives:**

After studying this topic, you should be able to

- be aware of the changes happening in the business context and the impact of those changes on the cost and management accounting systems.
- □ describe the conceptual framework of activity based costing (ABC).
- □ identify the activities and cost drivers.
- explain the differences, advantages and disadvantages of ABC in relation to traditional costing systems.
- prepare an analytical income statement

# Program:

Changes in the business context and their impact on the accounting systems. Description of the ABC model. Activities: concept, main activities, support activities. Cost drivers. Advantages and disadvantages of ABC.

## Basic references:

- AMAT AND SOLDEVILA 2002, Chapter 5.
- HORNGREN ET AL 2003, Chapter 5.

# Topic 3:Specific costs aspects depending on the industry

# **Objectives:**

After studying this topic, you should be able to

 Identify the different characteristics of the firms cost structure depending on the industry

# Program:

Industrial factories (automobile, textile...). Services (banking, hospitals, insurances, teaching...). Commercial firms. New industries.

# Basic references:

- CONTABILIDAD DE GESTIÓN EN EL SISTEMA PORTUARIO ESPAÑOL, Asociación Española de Contabilidad y Administración de Empresas, 2006.
- CONTABILIDAD DE GESTIÓN EN LAS EMPRESAS FRANQUICIADORAS, Asociación Española de Contabilidad y Administración de Empresas, 2008.
- CONTABILIDAD DE GESTIÓN EN LAS EMPRESAS DE TRANSPORTE AÉREO, Asociación Española de Contabilidad y Administración de Empresas, 2011.

# Topic 4: Budgeting and standard costing

## **Objectives:**

After studying this topic, you should be able to

- describe the objectives of the budgeting process and budgeting control.
- explain the relationship between the budgeting process and business planning.
- describe the contents of different types of budgets.

#### Program:

Business planning, budgeting control and standard costing. Controllable and non-controllable costs. Steps in preparing a budget.

## Basic references:

- AMAT AND SOLDEVILA 2002, Chapter 6.
- HORNGREN ET AL 2003, Chapter 6.

# Topic 5: Criteria to formulate budgets

#### **Objectives:**

After studying this topic, you should be able to

- explain the differences between static and flexible budgets.
- □ list the basic elements of budgets based on activities (ABB).
- explain the differences between incremental and zero-based budgeting.
- □ prepare a budgeted analytical statement.

#### Program:

Criteria to formulate budgets: static and flexible budgets, budgets based on activities (ABB), incremental and zero-based budgeting.

#### Basic references:

- AMAT AND SOLDEVILA 2002, Chapter 6.
- HORNGREN ET AL 2003, Chapter 6.

# Topic 6: Standard Costing and Variance Analysis

#### **Objectives:**

After studying this topic, you should be able to

- understand variance analysis as an important tool for business management.
- calculate the main types of variances.

- □ choose the most appropriate model of variance analysis according to the company's costing method.
- analyze variances with the objective to identify suitable corrective actions.

# Program:

Main types of variances: direct cost variances, indirect cost variances, sales variances. Variance analysis models according to the costing method used. Calculate margins and results including variances. Report on variances.

# Basic references:

- AMAT AND SOLDEVILA 2002, Chapter 7.
- HORNGREN ET AL 2003, Chapter 7 and 8.

# Topic 7: Quality and non quality costs

## **Objectives:**

After studying this topic, you should be able to

- Differentiate the quality costs from the non quality ones
- □ Take into account the external failures
- Understand the importance of intangible costs
- □ Implement a total quality cost system

# Program:

Quality and no quality costs. Internal and external failures. Tangible and intangible costs. Implementation of a total quality costs system.

# Basic references:

COSTES DE CALIDAD, Asociación Española de Contabilidad y Administración de Empresas, 1995

# Topic 8: Environmental costs

#### **Objectives:**

After studying this topic, you should be able to

- **u** Understand the importance of the environmental costs nowadays
- Understand why it's important for the company to invest in environmental issues
- **u** The benefits and costs of taking care about the environment

#### Program:

Environmental costs. Environmental revenues. Environmental investments. Profit and loss environmental account.

#### **Basic references:**

• CONTABILIDAD DE GESTIÓN MEDIOAMBIENTAL, Asociación Española de Contabilidad y Administración de Empresas, 1996.

# Topic 9: Products life cycle costs

# **Objectives:**

After studying this topic, you should be able to

- □ Identify the different stages of a product's life cycle
- □ Understand the importance of assuming R&D costs
- Know what to do regarding cost management in every stage

# Program:

Initial stage. R&D costs. Consolidation and Maturity stage. Declining stage.

## Basic references:

• HORNGREN ET AL 2009, Chapter 12.

# 4. Assessment

The assessment system that has been devised is focused in a way that allows both lecturer and student to have points of reference for how the learning is progressing and for how this process is advancing throughout the term.

# 4.1. General assessment criteria

# Weighting:

- 1. Continuous assessment: 50% of the final mark
  - 1.1. Practical work: 15%
  - 1.2. Midterm exam: 35%
- 2. Final assessment: 50% of the final mark

# 1. Continuous assessment (50%):

Continuous assessment for the subject is carried out by means of:

- **1.1. Practical exercises:** preparation and submission of the practical exercises set (15%).
- **1.2. Midterm exam:** this exam will include theoretical concepts and exercises from topics 1 to 5 (35%).

# 1.1. Practical exercises (15%)

#### Objective

The objective of preparing practical exercises is to contextualise and apply the procedures and concepts taught to numerical case studies.

# Grouping

Practical exercises need to be carried out in groups of four to seven people.

# Number of practical exercises

A total number of 6 sessions of practices are held.

# Submission

The exercises are to be solved at home, submitted during seminars and will be analysed subsequently.

# 1.2. Midterm exam (35%):

## Objective

The objective of the midterm exam is to evaluate the progress achieved during the first half of the course. In this way the student will receive a clear feedback of the areas that need to be improved.

# Assessment

The midterm exam has a weight of 35% over the final mark. The doubts regarding to the contents of the midterm exam will be addressed during seminars.

# 2. Final exam (50%):

## Objective

Application of the procedures and methods learnt during the term to specific case studies by students on an individual basis.

## **Characteristics**

Students will sit a written exam on their own covering both theoretical and practical aspects. A pass is needed in the exam (at least five out of ten) to pass the subject.

## Assessment

If the mark of the final exam is higher than the midterm exam one, the final exam will prevail, if not, average between the two marks will be only if the student has taken a minimum of 5 in the final exam.

# 3. Retaking exam (85%)

The seminars assessment will be taken into account in May, even if the student hasn't passed the final exam.

# Objective

Application of the procedures and methods learnt during the term to specific case studies by students on an individual basis. So, retaking exam's objectives are the same than the final exam.

# **Characteristics**

Students will sit a written exam on their own covering both theoretical and practical aspects. A pass is needed in the exam (at least five out of ten) to pass the subject.

# 4.2 Summary of assessment criteria

	assessment 9%) Midterm exam (35%)	Final examination March (50%)	Top mark
Yes	Yes	The weighting of the continuous assessment with the exam mark is carried out provided the student passes the final assessment (at least five out of ten)	10

# 5. Subject resources

# 5.1. Teaching resources (Aula Global)

- Blocks of exercises.
- Transparencies.
- Notes.

# 5.2. Information resources

# Bibliography:

ACCID (2010): "Noves tendències en control i reducció de costos" .Monografia de la *Revista de Comptabilitat i Direcció*, Barcelona.

Amat, O. i Soldevila, P. (2009): *Comptabilitat i gestió de costos, SCCID-Profit*, Barcelona.

Drury, C.: Costing an introduction. Ed. Chapman and Hall.

Drury, C. (2000): *Management and Cost Accounting*, 5th edition, International Thomson Business Press.

Horngren, C.T.; Foster, G.; Datar, S.M. (2003): *Cost Accounting: A Managerial Emphasis*, 11th edition, Prentice Hall.

Lucey, T. (2007): *Costing*, Thomson Learning, Londres.

Rosanas, J. M. (1994): *Contabilidad de costes para la toma de decisiones*. Desclée de Brouwer, Bilbao.

# 6.Teaching methodology

This subject uses a variety of sessions and work methods so students can acquire the knowledge outlined in the programme. The sessions are divided into two main groups: classroom sessions and consultation and study sessions.

# CLASSROOM SESSIONS

**Plenary sessions:** 90-minute sessions for the whole group. Most of the input in plenary sessions comes from the lecturer, who presents the key concepts in cost accounting and explains the correct procedures to follow in order to solve problems.

**Seminar sessions:** these last 90-minutes. The objective of seminar sessions is to consolidate students' knowledge and to put it into practice by means of their active participation.

- a. During the first 40-45 minutes the group has to work on the exercise or case study set for that week.
- b. The second part of the session is taken up by looking at the practical work assigned for that seminar and to answering any queries arising from the plenary sessions.

# CONSULTATION AND STUDY SESSIONS

**Consultation tutorials:** students need to contact the designated lecturer by email or check the Aula Global for tutorial times.

**Individual work:** this comprises personal study time to assimilate the concepts and procedures covered during lectures. The aim of individual work is to prepare for practical work and to study for the midterm and final exams.

Group work: time spent working in groups to prepare practicals.

# 7. Activities planning

	PLENARY SESSIONS	SEMINARS*	TIME OUTSIDE THE CLASSROM (APPROX.)
Week 1	Topic 1. Introduction.		- Individual work: 2 hours
Week 2	Topic 1. Introduction. Topic 2. Activity Based Costing		- Individual work: 2 hours
Week 3	Topic 2. Activity Based Costing Topic 3. Specific cost aspects depending on the industry		- Individual work: 2 hours
Week 4	Topic 4. Budgeting and standard costing	Activity Based Costing - Correction of the first practical exercises.	<ul> <li>Individual work: 2 hours</li> <li>Preparation for the first practical: 2 hours</li> </ul>
Week 5	Topic 4. Budgeting and standard costing Topic 5. Budgeting criteria	Budgeting process - Correction of the second practical exercises.	<ul> <li>Individual work: 2 hours</li> <li>Preparation for the second practical: 2 hours</li> </ul>
Week 6	Topic 5. Budgeting criteria Topic 6. Standard costing and variance analysis	Budgeting process - Correction of the third practical exercises.	<ul> <li>Individual work: 2 hours</li> <li>Preparation for the third practical: 2 hours</li> <li>Midterm preparation: 4 hours</li> </ul>
Week 7	Midterm exam Topic 6. Standard costing and variance analysis	Standard costing and variance analysis - Correction of the fourth practical exercises.	<ul> <li>Individual work: 2 hours</li> <li>Preparation for the fourth practical: 2 hours</li> </ul>

	PLENARY SESSIONS	SEMINARS*	TIME OUTSIDE THE CLASSROM (APPROX.)
Week 8	Topic 7. Quality and non quality costs	Standard costing and variance analysis - Correction of the fifth practical exercises.	<ul> <li>Individual work: 2 hours</li> <li>Preparation for the fifth practical: 2 hours</li> </ul>
Week 9	Topic 8. Environmental costs	Recap on budgeting exercices	<ul> <li>Individual work: 2 hours</li> <li>Preparation for the sixth practical: 2 hours</li> </ul>
Week 10	Topic 9. Product life's cycle cost		- Individual work: 6-8 hours

\* Seminars start in Week 4.