

Financial University under the Government of the Russian Federation  
Department of Accounting, Analysis and Audit

*Sidorova M.I., Lyalkova E.E.*

**Strategic Management Accounting and Analysis  
(in English)**

**SYLLABUS**

*Level of Study: Master's Degree*

*Field of Study: Economics*

*Study Program: International Accounting and Auditing*

## Syllabus

### 1. Name of a subject *Strategic Management Accounting and Analysis* (in English)

### 2. Mapping of learning outcomes (list of competences), with the relevant indicators described and subject learning outcomes indicated

The Table 1 contains the following information: graduates' coded competencies are to be developed during the learning process; indicators that show their development (generalized descriptions of specific actions performed by the graduate that clarify and reveal the competence content) and learning outcomes (knowledge, skills) with indicators of competence development:

Table 1

Competence code	Competence	Competence development indicators	Learning outcomes (skills, and knowledge) and indicators that show competence development
PKN-6	The ability to analyze and predict the main socio-economic indicators, suggest strategic directions of economic development at the micro, meso and macro levels	<p>1. Graduate uses the methodological tools of system analysis and modeling of economic processes to justify the implementation of innovations in order to obtain competitive advantages and ensure faster growth of the business in new and emerging markets.</p> <p>2. Graduate</p>	<p><b>1. To know:</b></p> <ul style="list-style-type: none"> <li>- the elements of accounting policies for management accounting,</li> <li>- methods of strategic management accounting and analysis aimed at obtaining the competitive advantages of the company and ensuring rapid growth in new and emerging markets.</li> </ul> <p><b>To own the skill:</b></p> <ul style="list-style-type: none"> <li>- to evaluate the influence of factors on the financial results of the business process,</li> <li>- to apply various decision-making models in strategic management accounting.</li> </ul> <p><b>2. To know:</b></p>

		<p>substantiates the changes in the socio-economic indicators and the strategic ways of economic development at the micro, meso and macro levels.</p>	<p>- principles of the formation of key indicators for evaluating business performance,  - factors of change in basic social and economic indicators in the competitive environment.</p> <p><b>To own the skills:</b></p> <p>- to determine the relationship between individual factors and changes in the value of the company in the long term period,  - to calculate and justify options for possible strategic management decisions at the micro level, taking into account the uncertainty factor.</p>
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### 3. Place of the subject in the curriculum

The course *Strategic Management Accounting and Analysis (in English)* is an elective discipline included in the curriculum of the educational program 38.04.01 *Economics*, Master's program *International Accounting and Auditing*. The course deepens students' knowledge in the field of strategic management accounting, management analysis obtained during training in the Bachelor's educational program in the field of *Economics*, and also allows graduate students to broaden their horizons and master the additional competencies of the Master's program.

The practical application of the knowledge gained during the study of the course *Strategic Management Accounting and Analysis (in English)* is intended to ensure the professional competence of a specialist in the field of economic activity of a commercial organization, in the preparation and use of accounting information for strategic planning, analysis and control.

**4. Workload in credits and academic hours, with class work (lectures and seminars) and self-study indicated**

Table 2

<b>Type of work</b>	<b>Total (in credits and hours)</b>	<b>Module 5 (in hours)</b>
<b>Overall workload</b>	<b>3/108</b>	<b>3/108</b>
<i>Class work</i>	<b>40</b>	<b>40</b>
<i>Lectures</i>	8	8
<i>Seminars, practicals</i>	32	32
<i>Self study</i>	<b>68</b>	<b>68</b>
Formative assessment	Control work	Control work
Summative assessment	Written exam	Written exam

**5. Subject content (with the thematic components indicated)**

**Theme 1. Conceptual framework of strategic management accounting as the highest level of the accounting and analytical system of a commercial organization**

Goals and objectives of strategic management accounting. The role of strategic management accounting in modern business conditions. Problems of information support of the company at various levels of management: operational, tactical, strategic. The company's strategy as the basis for the formation of a system of Key Performance Indicators. The purpose, subject, objects and method of management analysis. Strategic analysis as a type of economic analysis and an integral part of the strategic management accounting system. The relationship of the subsystems of tactical and strategic management accounting. Accounting policies for management accounting: basic elements.

Types of strategies and the basic principles of their formation. Modern models of strategic management. Methods of strategic management analysis. Using the results of strategic investment analysis to justify an organization's development strategy.

**Theme 2. Modern trends and technologies in strategic management accounting and analysis**

Strategic accounting and analysis methods focused on the company's external

market positioning. *Ansoff* matrix. BCG matrix. Five forces of Porter. SWOT analysis. Strategic alignment model. Target costing. Costing the total product life cycle.

Strategic accounting and analysis methods focused on improving internal business processes. Features of production processes in a high-tech environment. Activity based costing (ABC - Costing). Just-in-time philosophy. Value chain analysis. The system of continuous improvement of cost management "kaizen-costing". Transfer price: its types and principles of formation. Problems of establishing transfer prices. Market price as the basis of the transfer price. Cost-based transfer pricing methods. Calculation method of establishing a transfer price.

Automation of management accounting and analysis. Information confidentiality system. ERP class software products - ORACLE, Navision, SAP3. MRP - materials planning systems. Integrated business process management systems ERP (enterprise resource planning).

### **Theme 3. Strategic management analysis as a tool for managing the value of the organization**

The concept of company value, purpose and methods of managing it. The value of the weighted average price of capital. The content, economic value and methodology of calculating indicators of residual profit, economic value added. Economic value added as an indicator of a company's market value.

Strategic accounting and analysis methods focused on development coordination. Establishment of criteria for evaluating the performance of operating segments and analysis of their performance. The influence of the selected criteria on the motivational behavior of the heads of strategic business units and on the nature of their strategic management decisions. Balanced Scorecard (BSC).

Strategic accounting and analysis methods focused on improving human resources. The concept of intellectual capital of the company. Methods of assessment, accounting and analysis of intellectual capital of modern business structures. Knowledge Base: structure, content, stages of creation. Using internal and external knowledge bases as a source of strategic management analysis.

**Theme 4. Application of economic and mathematical methods in strategic management accounting and analysis**

The problems of determining the behavior of costs and the separation of costs into variables and constant components in the short and long term. The construction of the cost function.

Quantitative methods of analysis and their use for making strategic management decisions. Deterministic and stochastic modeling of factor systems of economic activity. Methods for assessing the impact of individual factors on the resulting indicator, factor analysis. Investigation of the problem of non-linearity of costs. Using methods of correlation and regression analysis.

Decision making models in strategic management accounting. Optimization of management decisions by modeling the economic situation. Optimality criteria, their types. Decision making under conditions of certainty, incomplete certainty, uncertainty.

**6. List of teaching and methodological materials needed for the students self-study**

**6.1. List of questions for student self-study and types of out-of-class activities**

Table 3

Itemized subject content	Questions the students should answer within the self-study process	Types of out-of-class activities
Theme 1. Conceptual framework of strategic management accounting as the highest level of the accounting and analytical system of a commercial organization	Types of strategies and the basic principles of their formation. Modern models of strategic management.	Work with educational literature, reference-informational bases and other Internet resources.
Theme 2. Modern trends and technologies in strategic management accounting and analysis	Transfer price: its types and principles of formation. Problems of establishing transfer prices. Market price as the basis of the transfer price. Cost-based transfer pricing methods. Settlement method of establishing a transfer price.	Work with educational literature, reference-informational bases and other Internet resources. Self-study of cases, solving practical problems. Test preparation.

Theme 3. Strategic management analysis as a tool for managing the value of the organization	Strategic accounting and analysis methods focused on improving human resources.	Work with educational literature, reference-informational bases and other Internet resources. Self-study of cases, solving practical problems. Test preparation.
Theme 4. Application of economic and mathematical methods in strategic management accounting and analysis	Investigation of the problem of non-linearity of costs. Using methods of correlation and regression analysis.	Work with educational literature, reference-informational bases and other Internet resources. Self-study of cases, solving practical problems. Test preparation.

## 6.2. List of questions/assignments/topics for students' preparation to formative assessment

### *Templates of questions the students need to answer when preparing for a control work*

#### Task 1

The standard material cost per unit of a product is as follows:

		\$
Material X	2 kg @ \$3 per kg	6
Material Y	1 kg @ \$2 per kg	<u>2</u>
		<u>8</u>

The actual production during the period was 5,000 units and the materials used were:

Material X 9,900 kg costing \$27,000

Material Y 5,300 kg costing \$11,000

*Note. Mix variance - this shows the effect on cost of changing the proportions of the mix of materials input into the process. Yield variance - this shows the difference between the actual and expected output or yield from the process.*

**Calculate:**

- **the total materials cost variance;**
- **the materials price variance;**
- **the materials usage variance;**
- **the mix variance;**
- **the yield variance.**

**Task 2**

S plc produces and sells three products, X, Y and Z. It has contracts to supply products X and Y, which will utilise all of the specific materials that are available to make these two products during the next period. The revenue these contracts will generate and the contribution to sales (c/s) ratios of products X and Y are as follows:

	Product X	Product Y
Revenue	£10 million	£20 million
C/S ratio	15%	10%

Product Z has a c/s ratio of 25%.

The total fixed costs of S plc are £5.5 million during the next period and management have budgeted to earn a profit of £1 million.

**Calculate the revenue that needs to be generated by Product Z for S plc to achieve the budgeted profit.**

**Task 3**

Una manufactures three products: A, B, and C.

Data for the period just ended is as follows:

	<i>A</i>	<i>B</i>	<i>C</i>
Production (units)	20,000	25,000	2,000
Sales price (per unit)	\$20	\$20	\$20
Material cost (per unit)	\$5	\$10	\$10
Labour hours (per unit)	2 hours	1 hour	1 hour

(Labour is paid at the rate of \$5 per hour)

Overheads for the period were as follows:

Set-up costs 90,000

Receiving 30,000

Despatch 15,000

Machining 55,000

\$190,000

Cost driver data:

	<i>A</i>	<i>B</i>	<i>C</i>
Machine hours per unit	2	2	2
Number of set-ups	10	13	2
Number of deliveries received	10	10	2
Number of orders despatched	20	20	20

**Calculate the cost (and hence profit) per unit, absorbing all the overheads on the basis of labour hours.**

**Calculate the cost (and hence profit) per unit absorbing the overheads using an Activity Based Costing approach.**

**Explain the benefits, which can be gained from changing to a more effective costing system?**

*Templates of questions the students need to answer when preparing for a written exam*

*Theoretical questions*

1. Compare a management accounting and a financial accounting.
2. Discuss the characteristics of information on the different decision making levels.
3. Describe the essence of the high-low method.
4. Explain some different classifications of costs.
5. Explain a three steps process of absorption costing.
6. Explain how production overhead of service cost centers may be reapportioned

between the production cost centers.

7. Explain the implications of CVP-analysis on the performance management and decision-making.
8. Explain the implications of standard costing on the performance management.
9. Explain the issues surrounding make vs. buy and outsourcing decisions.
10. Explain the need and the ways of the calculation of the breakeven point and margin of safety.
11. Explain the essence of a limiting factor analysis.
12. Explain the use of equivalent units in a process costing.
13. Describe the process of activity-based accounting and contrast with traditional specific order accounting.
14. Describe the nature of direct material variances and direct labour variances.
15. Presenting management information (modern information technologies).
16. Presenting management information (different types of organizations – service, state, non-profit).

### *Tests*

#### **Test 1**

Which of the following is not a comment to management accounting?

- A) Used in performance management
- B) Used in internal decision making
- C) Links closely with taxation
- D) Forward looking

#### **Test 2**

Z Ltd is currently considering a job that requires 1,000 kg of raw material. The company has 2,000 kg in inventory, bought 2 years ago for \$1.50 per kg, but no longer used for any of the firm's products. The current market price for the material is \$2.00, but the company could sell it for \$0.80 per kg. The relevant cost of material is \_\_\_\_\_

### Test 3

A company invests \$200,000 to buy a machine. It has an expected life of 20 years and a residual value of \$5,000. Cash flows inflows from the machine are expected to be \$27,000 a year. To the nearest half year, how long does it take to payback?

- A) 7yrs
- B) 7,5yrs
- C) 11,5yrs
- D) 12yrs

### Test 4

The selling price is £100, gross profit is 50%. Which one of the following statements is true?

- A) Mark up is 50%
- B) Mark up is 100%
- C) Mark up is 150%
- D) Mark up is impossible to determine without knowing unit cost.

### Test 5

A project costing \$250,000 has the following expected cash flows:

Year	1	2	3	4
Annual CFs	200	120	150	170

(\$000)

The Net Present Value for the project if the relevant rate of interest is 8.5% is \$ \_\_\_\_\_ .

### Test 6

3. Internal Rate of Return should lead to the maximisation of shareholder wealth.

- True
- False

*Practice-oriented cases*

**Task 1**

Clinic DOCTOR PLOMB provides dental services. Patients buy two types of medical procedures: surgical and therapeutic. Overhead production costs are included in the cost of the treatment procedure in proportion to direct costs. In the current period the overheads amounted to 670 rubles and 1,100 rubles for 1 surgical and therapeutic procedure, respectively. The clinic plans to implement AB-costing system. The following information is available on overhead costs and selected cost drivers:

<b>Activity</b>	<b>Cost for 1 month, rubles</b>	<b>Driver</b>	<b>Quantity</b>
Ordering	1,000,000	Hours of work	4,000
Washing of medical gowns	450,000	Number of gowns	4,500
Sterilization of instruments	1,500,000	Number of set of instruments	6,000
Total overhead	2,950,000		

Ordering for a surgical operation requires 2 hours of work by the administrative staff, to perform the service you need 4 clean medical gowns and 2 sterile sets of medical instruments. Placing an order for a therapeutic procedure requires 1 hour of work by the administrative staff, to perform the service you need 2 clean medical gowns and 1 sterile set of medical instruments. Direct costs for the provision of a surgical procedure include: material costs -1,800 rubles and labor costs - 1,200 rubles. Direct costs for providing a therapeutic procedure include: material costs - 1,000 rubles and labor costs - 2 000 rubles.

**Required:**

1) Calculate the total cost of 1 surgical and 1 therapeutic procedure using traditional techniques and the AB-costing method.

Comment on the effect of choosing a cost allocation method on the cost of services provided. Explain the advantages and disadvantages of the AB-costing system.

## **Task 2**

The management accountant of the mining company ALDAN draws up a forecast for the next five years. It has 4 mines, for each of which there is a technical upper limit on the ore which can be extracted for a year. These upper limits are: mine A - 2 million tons, mine B - 2.5 million tons, mine C - 1.3 million tons and mine D - 3 million tons. To maintain the functionality of the mines, it is necessary to extract at least 0.5 million tons per year in each of them. The cost of ore extraction at different mines varies, due to differing depths and geological conditions. These costs are (including post-processing): mine A - \$ 6 / ton, mine B - \$ 5.5 / ton, mine C - \$ 7 / ton and mine D - \$ 5 / ton.

The metallurgical enterprise to which the company supplies ore is ready to process 7 million tons of ore in the first year, in the second and third years - 7.5 million tons of ore, and in the fourth and fifth years - 8.5 million tons of ore.

An increase in the sale price of ore is forecasted: if in the first year ore is bought at \$ 10 per ton, then in the second and third it will cost \$ 10.5 per ton, and in the fourth and fifth - \$ 10.8 per ton.

The owner of the mining company received an offer to sell it. The buyer offers a price exceeding the value of the company's property by \$ 110 million. However, the owner believes that in five years he will earn a large sum.

### **Required:**

- 1) Calculate the profit maximizing production plan for four mines over the next five years using limiting factors analysis.
- 2) Discuss whether it is really worth selling the company? Explain the reasons for your recommendations.

*Note.* When assessing the value of the company, accept a discount rate of 10% per year.

## **7. Mandatory and optional reading list**

### ***Mandatory reading list***

1. Vakhrushina M.A. Strategic management accounting: a textbook for university students training in Economics / M.A. Vakhrushina, M.I. Sidorova, L.I. Borisova. -

Moscow: Knorus, 2018. - 184 p. - Master. - Also. - 2019.- ELS BOOK.ru. - URL: <https://book.ru/book/931890> (accessed date: 10/17/2019). - Text: electronic.

### ***Optional reading list***

2. Vakhrushina M.A. Accounting management accounting: a textbook for students studying in the field of "Economics and Management" / M.A. Vakhrushina; Financial University - Moscow: Knorus, 2019 .-- 392 p. - (Undergraduate). - Text: direct. - Also. - ELS BOOK.ru. - URL: <https://www.book.ru/book/931509> (Date of access: 09/07/2019). - Text: electronic.

3. Kerimov V.E. Cost accounting and budgeting in industries: a textbook for students of universities, training in "Economics" and "Management" / V.E. Kerimov - Moscow: Dashkov and K, 2015 - 384 p. - Also. - 2017. - EBS Znanium.com. - URL: <http://znanium.com/catalog/product/512015>. - Text: electronic.

4. Management accounting and analysis. With examples from Russian and foreign practice: a training manual / V.I. Petrova [et al.]. - Moscow: LLC "Scientific Publishing Center INFRA-M", 2018. - 303 p. - (Higher education: Master). - ISBN 978-5-16-101159-1. - EBS Znanium.com. - URL: <http://znanium.com/catalog/product/914132>. - Text: electronic.

5. Osterwalder A. Building business models. Handbook strategist and innovator: Transl. from English / A. Osterwalder, I. Pigne. - Moscow: Alpina Publisher, 2012, 2016 .- - 288 p. - Text: direct. - Also. - 2016. - EBS Znanium.com. - URL: <http://znanium.com/catalog/product/916078>. - Text: electronic.

### ***E-resources***

1. <http://elib.fa.ru/>
2. <http://www.book.ru>
3. <http://biblioclub.ru/>
4. <http://www.znanium.com>
5. <https://www.biblio-online.ru/>
6. <http://elibrary.ru>

7. <http://grebennikon.ru>
8. <http://нэб.рф/>
9. <https://dvs.rsl.ru/>
10. <http://www.1fd.ru/>

**8. List of IT resources, incl. the list of software, information and reference systems (as appropriate).**

**8. 1. Software:**

1. Windows, Microsoft Office software;
2. ESET Endpoint Security antivirus software; etc.

**8.2. Databases and information and reference systems**

1. Garant information and reference system;
2. Consultant Plus legal information system;
3. <http://ru.wikipedia.org/wiki/Wiki> e-encyclopedia;
4. <http://www.skrin.ru/> database; etc.

**8.3. Certified software/hardware used for information protection**

No such software/hardware is used.