

ΔΙΑΤΜΗΜΑΤΙΚΟ ΠΡΟΓΡΑΜΜΑ ΜΕΤΑΠΤΥΧΙΑΚΩΝ ΣΠΟΥΔΩΝ ΣΤΗ ΔΙΕΘΝΗ ΝΑΥΤΙΛΙΑ, ΧΡΗΜΑΤΟΟΙΚΟΝΟΜΙΚΗ & ΔΙΟΙΚΗΣΗ

MASTER OF SCIENCE (MSc) IN INTERNATIONAL SHIPPING, FINANCE & MANAGEMENT

Financial and Management Accounting Part A: Financial Accounting Nikos Karampinis, Assistant Professor

Exercise 1

Using your accounting judgment, decide the implications of the following events:

- 1. The owner of the ABC firm purchased a car for his son. Shall ABC present the car in its financial statements?
- 2. The owner of the ABC firm decides to terminate its operations next year. Are there any accounting implications of this decision?
- 3. The ABC firm constructs a building. The construction cost is €100,000. However, the particular building can be sold for €120,000. Which value shall ABC present in its financial statements?
- 4. In 2022, the ABC firm sells merchandise for €10,000 and collects cash immediately. How much revenue will ABC recognize?
- 5. In 2022, the ABC firm sells merchandise for €10,000. However, it will receive cash next year. How much revenue will ABC recognize in 2022?
- 6. In 2022, the ABC firm receives €5.000 in advance from a customer. ABC will sell merchandise to the customer for €15,000 in 2023. What much revenue will ABC recognize in 2022 and 2023, respectively?
- 7. In 2022, the ABC firm purchases in cash merchandise for €8,000. ABC sells it in the same year. How much expense (Cost of Goods Sold) will ABC recognize in 2022?
- 8. In 2022, the ABC firm purchases in cash merchandise for €8,000. However, ABC holds it (no sale in 2022). How much expense (Cost of Goods Sold) will ABC recognize in 2022?
- 9. In 2022, the ABC firm purchases on account merchandise for €8,000. ABC sells it in the same year. The vendor will be paid in 2023. How much expense (Cost of Goods Sold) will ABC recognize in 2022?
- 10. In 2022, the shipping firm XYZ receives €20,000 in cash for transporting goods. However, XYZ will provide the service in 2023. How much is the revenue recognized in 2022?
- 11. In 2022, the shipping firm XYZ transported goods for customer A for a price of €10,000. However, XYZ has not received yet the cash. How much is the revenue that XYZ records in 2022?
- 12. In 2022, the chartering firm XYZ transported goods for a customer with a general cargo ship. The chartering cost was €14,000. However, XYZ has not paid the owner of the ship yet. How much is the chartering expense that XYZ should record in 2022?
- 13. On December 31, 2022, ABC earned revenues €10,000. Shall ABC recognize these revenues in 2023?
- 14. ABC owns land costing €100,000. ABC intends to sell this land. However, the market value of the land drops to €70.000. ABC still owns the land. Shall ABC recognize this event?

On December 31, 2021, ABC ltd (maritime firm) has the following accounts with their corresponding balances:

			Assets		Equity & Liabilities	
N.	Account	Balance in €	Non-Current Assets	Current Assets	Equity	Liab.
1	Licenses	50				
2	Notes Payable	200				
3	Interest Payable	150				
4	Vessels	700				
5	Cash	3,000				
6	Mortgage loans	3,000				
7	Notes Receivable	170				
8	Insurance paid-in-advance	300				
9	Retained Earnings	5,410				
10	Salaries Payable	1,500				
11	Buildings	600				
12	Lubricants and victuals	300				
13	Checks Payable	200				
14	Furniture	400				
15	Charter revenues received in advance	250				
16	Investments in Subsidiaries	1,500				
17	General Expenses Payable	600				
18	Software	700				
19	Computers	500				
20	Share Capital	6,000				
21	Accounts Receivable	2,920				
22	Accounts Payable	800				
23	Bank Deposits	900				
24	Land	6,000				
25	Marketable Securities	70				
	Total	36,220				

Classify the above accounts as assets (non-current or current), equity, or liabilities. Afterwards, prepare a classified balance-sheet.

ABC is a merchandise firm. On December 31st, 2021, ABC presents the following accounts with their respective balances:

	ABC Ltd	
N.	Account	Balance (in 000's)
1	General expenses	60
2	Salaries expense	150
3	Expense of received services	120
4	Loss of merchandise due to fire	40
5	Tax fines	400
6	Sales revenue (merchandise)	6,000
7	Revenues from rents	500
8	Cost of goods sold	4,000
9	Interest expense	150
10	Interest revenue	200
11	Depreciation	300
12	Tax expense	80

Prepare an income statement with operating expenses presented one-by-one.

Exercise 4

XYZ is a shipping firm. Its main activity is to ship goods with its own vessels and hiring out vessels to charter firms. On December 31st, 2021, it presents the following information:

	<i>in 000s of</i> €
Revenues and gains	
Transportation revenues	220,000
Charter revenues	100,000
Interest revenues	3,000
Expenses and losses	
Vessel repair expense	13,000
Vessel depreciation	48,000
Vessel fuel expense	18,000
Crew salaries	39,000
Insurance expense	8,000
Salaries of administrative staff	16,000
Salaries of selling staff	12,000
Loss from sale of vessels	6,000
Management fees	3,000
Electricity expense	2,000
Telecommunication expense	1,000
Interest expense	28,000
Tax expense	5,000

Additional information

Expenses that are direct to vessels are charged to the production activity exclusively. Salaries of administrative and selling staff are exclusively charged to the administration and selling activity, respectively. Management fees are exclusively charged to administration activity. Rest operating expenses are allocated to the three activities according to the following rates: Production: 50%, Administration: 30%, Selling: 20%.

Prepare an income statement with operating expenses classified in activities.

ABC ltd is established on December 31^{st} , 2020, with capital $\notin 100,000$ in cash. Its fiscal year ends immediately.

During the next year, on December 31st, 2021, ABC purchases goods of €40,000 in cash. Afterwards, its fiscal year ends.

During the next year, on December 31st, 2022, ABC sells all goods for €50,000 on account. Afterwards, its fiscal year ends.

Prepare the income statement and the balance sheet (in simplified form) for the above fiscal years.

Exercise	6		
Record th	ne journal entries for the following transactions that occur in 2022.		
1/12/	The firm ABC ltd is established with capital €1,000,000 in cash. ABC hires 5 employees with a		
	monthly salary of €1,000 each. The primary activity of the firm is to sell computers and provide		
	repair services.		
2/12/	ABC purchases land worth of €20,000 and a building worth of €10,000 in cash.		
3/12/	ABC receives a long-term bank loan of €50,000. Money is deposited on ABC's bank account.		
4/12/	ABC purchases machinery worth of €2,000 and furniture worth of €1,000. The total amount is		
	paid through ABC's bank account.		
5/12/	ABC purchases merchandise of €6,000. €3,000 is outlaid in cash while the rest amount is on		
	account.		
6/12/	Merchandise purchased on 5/12, are sold for €8,000 on account.		
8/12/	ABC purchases merchandise of €5,000. ABC writes a check.		
9/12/	Merchandise purchased on 8/12 is sold for €6,000. The customer issues notes.		
10/12/	ABC purchases land of €20,000. ABC pays through its bank account.		
12/12/	Land purchased on 10/12 is sold for €25,000. Money is deposited on ABC's bank account.		
13/12/	Furniture purchased on 4/12 is destroyed in fire.		
14/12/	ABC agrees with a vendor to purchase merchandise €10,000 in the next month.		
15/12/	ABC pays in advance for insurance coverage. The cost is equal to €12,000 and covers the nex		
	year.		
	ABC leases the ground floor of the building that was purchased on 2/12 to XYZ firm for a		
	monthly rent of €500. XYZ paid in advance rents of 2 months.		
	ABC pays in advance €6,000 to a vendor for the purchase of goods of €8,000.		
16/12/	ABC receives the merchandise of the agreement on 15/12. The rest amount (\notin 2,000) is settled		
	with a check.		
17/12/	Merchandise purchased on 16/12 is sold for €12,000. The customer writes a check.		
18/12/	Merchandise of €20,000 are purchased on account.		
19/12/	A customer pays in advance €15,000 for goods. The sale will occur in the future.		
20/12/	Merchandise purchased on 18/12 is sold for €25,000 on the customer who had paid in advance		
	on 19/12. Rest amount is settled on account.		
21/12/	ABC pays in cash €200 to a TV company for a commercial. The commercial was broadcasted on		
	the same day. The total cost is €500. The rest amount was settled on account.		
22/12/	ABC agrees with a customer to repair her computer.		
23/12/	ABC purchased supplies of €70 in cash to repair the computer.		
24/12/	ABC repaired the computer for €120 on account. All supplies purchased on 23/12 were used.		
31/12/	ABC recognizes salaries expense. However, an employee was ill on that day, and he did not		
	receive his salary.		

Exercise 7				
On 31/1/2021	On 31/1/2021 the Trial Balance of the shipping firm XYZ ltd was as following:			
	Trial Balance, January 31st, 2020			
Account id	Account	Debit Balance	Credit Balance	
1	Licenses	50,000		
2	Land	6,000,000		
3	Buildings	600,000		
4	Vessels	7,000,000		
5	Lubricants and victuals	300,000		
6	Accounts Receivable	2,100,000		
7	Insurance paid-in-advance	300,000		
8	Cash	900,000		
9	Salaries Expense	30,000		
10	Interest Expense	150,000		
11	Bank Deposits	3,000,000		
12	Share Capital		6,500,000	
13	Retained Earnings		5,560,000	
14	Long-term loans		7,000,000	
15	Notes Payable		200,000	
16	Interest Payable		150,000	
17	Charter revenues received in advance		250,000	
18	Accounts Payable		640,000	
19	Salaries Payable		30,000	
20	Service Revenue		100,000	
	Total	20,430,000	20,430,000	

During February 2021, the following events took place:

5/2 XYZ agreed the transportation of goods for 10,000.

6/2 XYZ transported the goods. The invoice issued to the customer is on account.

8/2 Notes equal 100,000 were settled with cash.

15/2 XYZ recognized salaries expense for its crew equal 25,000. The payment will take place at the beginning of the next month.

18/2 The value of a vessel was estimated to 100,000. The accounting value of the vessel is 120,000.

20/2 XYZ received 20,000 from a chartering company to hire out a vessel for the period 1/2/2020-31/7/2020

22/2 Accounts receivable equal 50,000 were received in cash.

28/2 XYZ paid in advance an insurance company 12,000 for the next 12 months.

28/2 A bank statement indicates that interest expense for February is 150,000. Interest is payable at the end of June.

Required: Record the above transactions to the journal, post the entries to the ledger, and prepare the trial balance for February.

Make the appropriate adjusting journal entries on 31/12/2020 that correspond to the following accounting events.

- 1. On 31/12/2020 ABC finds out that the following error had occurred during the fiscal year: Recognition and payment of rent €60,000 was erroneously recorded as payment of "Rent Payable".
- 2. On 31/12/2020 ABC finds out that the following error had occurred during the fiscal year: payment of General Expenses Payable €100.000 was erroneously recorded with the amount €150,000.
- 3. On 1/1/2020, ABC hires out a vessel to XYZ. On 31/12/2020 the accrued revenues are €2,000,000. However, rents will be received in 2021. Until 31/12/2020, ABC has not recognized any revenues.
- 4. On 30/6/2020, ABC leases to KLM a building. The annual rent is €12,000. Cash will be received at the end of the lease period.
- 5. On 1/1/2020, ABC granted a loan to another company equal to €20,000. Annual interest is equal to 10%, but it will be received in 2021.
- 6. On 30/6/2020, ABC paid in advance insurance €2,400 for the next 24 months.
- 7. On 1/12/2020, XYZ receives charter revenues in advance equal to €120,000 for the next 12 months.
- 8. On 31/12/2020, ABC concludes that general expenses of €1,000 have been accrued but not yet paid.
- 9. On 31/12/2020, ABC concludes that ending merchandise inventory is equal to €5,000. The beginning inventory was equal to 10.000 and purchases of the year are equal to €8,000
- 10. On 1/1/2020, ABC purchased vessel fuel equal to €400,000. The beginning inventory was €200,000. ABC concludes that the ending inventory is €100,000.
- 11. ABC owns land €100,000 and a building €80,000. ABC supposes zero salvage value and uses depreciation rate 10% for all depreciable assets.
- 12. On 1/12/2020, XYZ acquired a vessel for 6,500,000. The useful life is estimated to 5 years and the salvage value is estimate to 500,000.

You are provided with an **adjusted** trial balance for the maritime firm ABC Ltd. ABC transport goods with its own vessels and hires out vessels to charter firms. Prepare the closing entries considering that the firm declares dividends 30 thousand euros. Afterwards prepare an Income Statement and a Balance Sheet. The Income Statement should be presented with operating costs classified into activities. Salaries Expense for Crew and Salaries Expense for Administration Executives are allocated to 100% to the Production and the Administration Activity, respectively. Rest operating costs are allocated 70% to the Production activity, 20% to the Administration Activity, and 10% to the Selling Activity.

	Maritime Firm Ltd Adjusted Trial Balance 31/12/2021				
number	Account	Balance	Balance (in 000s)		
		DEBIT	CREDIT		
1	Licenses	20			
2	General Expenses	40			
3	Buildings	900			
4	Fuel inventory	20			
5	Land	1,000			
6	Salaries Expense for Crew	50			
7	Furniture	300			
8	Vessels	500			
9	Salaries Expense for Administration Executives	30			
10	Accounts Receivable	710			
11	Loss of damage of vessels	20			
12	Marketable Securities	30			
13	Bank Deposits	160			
14	Insurance Expense	10			
15	Computers	200			
16	Cash	1,285			
17	Insurance paid in advance	10			
18	Notes Receivable	70			
19	Share Capital		1,50		
20	Retained Earnings		1,17		
21	Mortgage Loan		1,50		
22	Checks Payable		6		
23	Accounts Payable		14		
24	Gain on vessel disposal		4		
25	Transportation Revenues		60		
26	Notes Payable		9		
27	Charter Revenues		2		
28	Salaries Payable		(
<u>29</u> 30	Taxes Payable		6		
31	Charter revenues received in advance	10	Z		
31	Rent Expense Interest Expense	<u> </u>			
33	Interest Expense	15	1		
33	Depreciation	200	1		
35	Depreciated Buildings	200	20		
36	Depreciated Buildings		10		
37	Depreciated Vessels		6		
38	Depreciated Computers		4		
39	Interest Revenue		1		
40	Tax Expense	60			
-10	Total	5,640	5,64		

ABC acquired a vessel on 31/10/2020 for $\leq 13,000,000$ in cash. The useful life was estimated to 5 years and the salvage value to $\leq 1,000,000$. The vessel started operation immediately. On 30/4/2022 the vessel ceased operations and was sold for $\leq 10,000,000$ in cash.

Required:

Record all the necessary journal entries.

Exercise 11

You are provided with the following data concerning the merchandise of the ABC firm:

1/1 Beginning inventory is 200 units at a price of 20€/unit

1/2 Purchase of 400 units at a price of 30€/unit

1/4 Purchase of 600 units at a price of 40€/unit

1/6 Purchase of 700 units at a price of 30€/unit

1/8 Purchase of 250 units at a price of 60€/unit

31/12 ABC makes an inventory count and concludes that the ending inventory is 350 units.

Also, you are informed that the selling price is constant at €80/unit and ABC uses periodic inventory system. Required:

Calculate the value of ending inventory in case of a) FIFO, b) LIFO, c) Weighted Average Cost. Also, calculate the gross profit.