# ACC2830 - Financial Project Management

#### Coursework 2

#### Coursework structure

This coursework assessment consists of 5 tasks:

Task	Mark allocation		
Task 1 – business case review	5		
Task 2 – investment appraisal	10		
Task 3 – risk assessment: critical path and PERT	15		
analysis			
Task 4 – budget variance analysis	15		
Task 5 – capital and revenue expenditure	5		
Total marks	50 marks		

All the information required to complete this coursework is in the case study. You need to **download the Excel dataset** from MyUniHub, Assessment and Feedback folder to complete this coursework.

#### Coursework feedback

The feedback process takes place continuously during the weekly computer labs. 45 minutes of the computer labs is allocated for coursework feedback each week.

Coursework feedback also takes place during lecture time in learning week 16 and 17.

Alternatively, you can seek feedback from the module leader during office hours. No appointments are required.

#### Coursework deadline and submission

The deadline for coursework submission is on <u>11.59pm</u>, <u>Sunday</u>, <u>05/04/2020</u>, please submit your Excel work via the submission link on MyUniHub.

# Case study

There are two simulated projects provided in the following pages, you are required to select **ONE** project only for your coursework portfolio.

# Case Study One

# Project A – Construction Project

#### ACC2830 - Financial Project Management

#### **Case Study One**

#### **Background**

Company A is a UK based company operating in the financial investment and consultancy field. The company recently bought a piece of land and wishes to construct a five storey office building block with the view to relocate its staff to occupy two floors, and rent out the remaining three floors to local businesses as office space.

# <u>Task 1 – Project planning</u>

Review the sample business case template used by the project managers, comment on the usefulness of the information required from the business case document in helping management board in selecting appropriate projects.

<u>Task 2 – Project appraisal</u>

	Year 0	Year 1 - 5	Year 6 - 17	Year 18 - 20
Initial investment	£2,500,000			
Estimated cash outflow				
Financial costs				
Other cash outflow		(£850,000)	(£1,200,000)	(£1,560,000)
Estimated cash inflow		£2,000,000	£2,500,000	£2,850,000
Residual value (year 20)				£450,000

Company A plans to take out a 5 year loan of between £1m to £2m to fund the initial investment cost. The remaining will be funded by its retained earnings. Select a loan amount within this range and calculate the loan interest cost using an appropriate interest rate (between 3% and 5%). Assume there is no opportunity cost for using retained earnings to fund the project.

Assume the repayment of the principal loan in five equal instalments at the end of each year, with interest being paid at the end of each year on the reducing balance.

Company A requires a minimum return of 8% on projects and a maximum payback period of 5 years.

Calculate the Net Present Value and Payback Period of the project. Comment on your result.

Task 3 - Risk assessment

			Number of months		nths
Tasks	Task	Predecessor	Pessimistic	Most	Optimistic
	code			likely	
Planning consultancy	A		6	3	2
Produce building plan	В	A	6	3	1
Apply for planning	C	В	5	3	1
permission					
<b>Quantity Survey</b>	D	C	6	3	1
Construction work	E	D	14	9	7
Wiring work	F	D	12	6	4
Purchases new computer	G	F	6	3	2
equipment and furniture					
Software installation	Н	F	6	3	2
Relocation	I	G	7	4	2
<b>Hospitality and Events</b>	J	E, G, H, I	3	1	1

Using the information in the table:

- Identify the Critical Path of the project using Critical Path Analysis method,
- Use PERT to estimate the probability of the project completion within the targeted 25 months.

#### Task 4 – Controlling and monitoring costs

At the beginning of the project, the project management team has estimated the planned costs to be £4,219,492 based on the quotes received during the tendering process. The project budget should include a contingency rate on the total budgeted project cost. The budget is split as follows:

Activities	Budget	Supplier
	<b>(£)</b>	
Project manager salary	208,000	Sarah Siggers and Paul Smith
Mechanical and Electrical	120,000	Wilton Groups Ltd
Engineering Services		
Quantity Survey fees	130,000	Merry & Brown UK Ltd
Planning consultancy fees	12,000	Urban Planning & Design
Building work	3,580,000	Thompson Building Services Ltd
Hardware and software	15,000	ET Plc
Equipment and Furniture	48,000	LG Interiors Group
Relocation	95,000	Thompson Building Services Ltd,
		Commercial Removals Ltd
Hospitality and Events	7,150	Partwells Events Ltd
Total Budget	4,215,150	

The time-phased budget is provided in the Excel dataset. Select an appropriate contingency rate to complete the budget in Excel and justify your selection of the contingency rate.

The executive board wishes to know the actual costs of the project comparing to the budgeted amount. Prepare a summary analysis using Excel that compares the budgeted amount against the actual spending, showing the favourable/adverse variances against each cost line. (The actual spending is provided in the Excel dataset)

# Task 5 - Revenue and capital spending

At the completion of the project, the executive wishes to know: (i) the total amount of project expenses that should be recognised on the Statement of Profit and Loss in the financial year ended 31 March 2018 and 31 March 2019 respectively, and (ii) the total amount of financial costs to be capitalised on the Statement of Financial Position at the project completion.

Provide the above figures to the executive board and explain the cost treatment.

End of the case study one

# Case Study Two

Project B – IT Project

#### **ACC2830 – Financial Project Management**

#### **Case Study Two**

#### **Background**

Company B is a clothing retail company based in the UK. Due to the recent fall in the store sales, the management team decides to improve its existing website to enter the online sales market.

The new website will allow customers to browse all of its products and make purchases online. As part of the new website project, the company will also offer a delivery service to online customers. At the moment, the deliveries are limited to the UK region.

The project manager is required to submit a business case that helps the management team decide and understand the risk, benefits, timescale and costs of the project.

#### Task 1 – Project planning

Review the sample business case template used by the project managers, comment on the usefulness of the information required from the business case document in helping management board in selecting appropriate projects.

<u>Task 2 – Project appraisal</u>

	Year 0	Year 1 - 3	Year 4 - 7	Year 8 - 10
Initial investment	£870,000			
Estimated cash outflow				
Financial costs				
Other cash outflow		(£450,000)	(£820,000)	(£1,250,000)
Estimated cash inflow		£1,250,000	£2,500,000	£2,850,000
Residual value (year 10)				£15,000

Company B plans to take out a 3 year loan of between £500,000 to £700,000 to fund the initial investment cost, the remaining will be funded by its retained earnings. Select a loan amount within this range and calculate the loan interest cost using an appropriate interest rate (between 2.5% and 4.5%). Assume there is no opportunity cost for using retained earnings to fund the project.

Assume the repayment of the principal loan in five equal instalments at the end of each year, with interest being paid at the end of each year on the reducing balance.

Company B requires a minimum return of 6% on projects and a maximum payback period of 4 years.

Calculate the Net Present Value and Payback Period of the project. Comment on your result.

Task 3 - Risk assessment

			Nu	mber of day	ys
Tasks	Task code	Predecessor	Pessimistic	Most likely	Optimistic
Consultancy	A		10	8	5
Market Research	В	A	18	14	7
Project scoping	C	В	10	7	5
Coding	D	С	200	180	150
Release of Test	Е	D	10	5	3
versions					
Receiving feedback	F	Е	30	30	30
Project re-scoping	G	F	90	80	70
Server upgrade	Н	F	40	30	20
System upgrade	I	F	40	35	20
Staff training	J	G, H, I	14	7	5
Website launch	K	J	10	5	3

## Using the information in the table:

- Identify the Critical Path of the project using Critical Path Analysis method,
- Use PERT to estimate the probability of the project completion within the targeted 340 days.

## Task 4 – Controlling and monitoring costs

At the beginning of the project, the project management team has estimated the planned costs to be £2m based on the quotes received during the tendering process. The project budget should include a contingency rate on the total budgeted project cost. The budget is split as follows:

Activities	Budget (£)	Supplier
Project manager's salary	56,000	John Smith
Market Research	35,000	Innovation Ltd
Consultancy	940,800	Richard Lee
Hardware and software	356,000	PC Solution Ltd
Server upgrade	480,000	BE plc
Project team's apportioned	39,600	Majid Ali, David Blake, Stephen Collins
salary costs		
Hospitality	16,000	Khartwells
Staff Training	15,000	Richard Lee
<b>Total Budget</b>	1,938,800	

The time-phased budget is provided in the Excel dataset. Select an appropriate contingency rate to complete the budget in Excel and justify your selection of the contingency rate.

The executive board wishes to know the actual costs of the project comparing to the budgeted amount. Prepare a summary analysis using Excel that compares the budgeted amount against the actual spending, showing the favourable/adverse variances against each cost line. (The actual spending is provided in the Excel dataset)

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## Task 5 - Revenue and capital spending

At the completion of the project, the executive wishes to know (i) the total amount of project expenses that should be recognised on the Statement of Profit and Loss in the financial year 31 December 2018 and 31 December 2019 respectively, and (ii) the total amount of financial costs to be capitalised on the Statement of Financial Position at the project completion.

Provide the above figures to the executive board and explain the treatment.

End of the case study two