### SESSION PLAN

**COURSE:** ABE Level 4 Project Management

**ELEMENT:** Element 1 - The project life cycle

## **LEARNING OUTCOME 1**

**Discuss the concept of the project life cycle in a variety of business organisations and contexts (Weighting 25%)**

1.1 Explain the sequential stages of the project management life cycle and the activities which are carried out at each stage

1.2 Apply the basic concept of a project business case based on a set of basic cost and revenue inputs, including the application of some simple metrics such as Return on Capital, Payback and net present value (NPV)

1.3 Discuss the concept of a work breakdown structure (WBS)

1.4 Discuss the risks that may emerge on a major project

**NUMBER OF SESSIONS:** Four - approximately 18-22 hours in total, plus homework

**SESSION TOPICS:** Session 1: Introduction to PM, the Project Life Cycle, Human Resource options

Session 2: Developing the Business Case for a project

Session 3: Understand Work Breakdown Structures (WBS) for a project

Session 4: Understanding Project Risk Management

**Note to tutors: This is the recommended session plan for Learning Outcome 1 of Element 1 of the ABE Level 4 Project Management. You should follow the plan, using the resources (referenced as ‘slides’ here) and activities provided. It is important to enhance all sessions with local examples and case studies, involving the learners ACTIVELY wherever possible.**

### SESSION 1: Introduction to PM, the Project Life Cycle, Human Resource options (4-5 hours)

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| **Topic** | **Tutor Activity** | **Slides** | **Learner Activity** | **Formative Assessment** |
| Introduction to session and learning outcomes | Use file: **4UPM Tutor Presentation E1**  1.1: Explain the sequential stages of the project management life cycle and the activities which are carried out at each stage | 1-5 |  |  |
| Introduction to Project Management | Work through the slides explaining each concept  Features of a project  Definitions of project management  What projects have in common | 5-10 | Slide 7: **Class discussion**  *What do the terms ‘project’ and ‘project management’ mean to you?*  *How would you define a project?*  *What do all projects generally have in common?*  *How does a project differ from ‘business as usual’?*  Allow about 10-15 mins for learners to discuss the various meanings before proceeding |  |
| The Iron Triangle concept | Explain the concept and explore how it works in practice. | 11 | Slide 11: Find a project where TIME would be critical – Olympics, World Cup Finals etc |  |
| The Project Life Cycle concept | Work through the slides explaining each concept  IPECC project life cycle  Four-stage project life cycle | 12-15 | Slide 15:  The IPECC exercise (separate document provided with SOLUTION)  Form the learners into small teams.  Give them the IPECC activity and scissors. The students should cut the activities into separate boxes and decide into which of the five IPECC categories they should fit.  Allow about 30 minutes.  Consider providing a small prize for the best team. | E1 LO1 Activity 1: IPECC |
| Human Resource options on projects | Work through the slides explaining each concept  Engaging project staff  Hiring people  Attributes of an effective project manager – Class discussion (allow about 10 minutes before discussing the slide contents). | 16-21 | **Class discussion**: What do you think are the key skills and attributes that are required by a project manager?  As opposed to a regular business manager? |  |
| Homework | Introduce the homework required | 22 | The Barn exercise (separate document with SOLUTION)    Learners should be encouraged by the fact that it is not as difficult as it might appear at first glance | E1 LO1 Activity 2: The Barn |

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### SESSION 2: Developing the Business Case for a project (4-5 hours)

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| **Topic** | **Tutor Activity** | **Slides** | **Learner Activity** | **Formative Assessment** |
| Introduction to session and learning outcomes | Use file: **4UPM Tutor Presentation E1**  1.2: Apply the basic concept of a project business case based on a set of basic cost and revenue inputs, including the application of some simple metrics such as Return on Capital, Payback and net present value (NPV) | 23-24 |  |  |
| Introduction to the concept of a business case | Work through the slides explaining each concept  Reflective exercise – big questions that senior managers need to ask  Quantifying costs and benefits | 25-27 | Allow about 10-15 mins for learners to discuss the various meanings before proceeding |  |
| Defining a table of year by year cash flows for a project | Explain the worked example of creating a table, putting in the various positive and negative cash flows one by one.  Work slowly because this is fundamental. Without an accurate table, what follows will be flawed.  A short break could be taken at this point | 28-31 | Work with the tutor to understand the table concept |  |
| Applying metrics (Return on Capital, Payback, NPV) to the net cash flows in the table | Work through the slides explaining each concept  Financial measures for assessing project business case  Project return on capital  Payback period  NPV analysis | 32-35 |  |  |
| Working through realistic examples – the Credit card business case | Work through each element of the scenario explaining each concept. It is recommended to work through this with the learners **in two stages**  – first let them create the table, and review that together then when an accurate table is agreed with everyone, get them to apply the three sets of metrics. **Suggested solutions are provided**  A short break could be taken at this point | 36 | Work in pairs for the activity | E1 LO1 Activity 3: Credit card |
| Homework – the business case for the handheld computers. | Introduce the homework required |  | The Handhelds exercise (separate document with SOLUTION) | E1 LO1 Activity 4: Handhelds |

### SESSION 3: Understand Work Breakdown Structures (WBS) for a project (5-6 hours)

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| **Topic** | **Tutor Activity** | **Slides** | **Learner Activity** | **Formative Assessment** |
| Introduction to session and learning outcomes | Use file: **4UPM Tutor Presentation E1**  1.3: Discuss the concept of a work breakdown structure (WBS) | 37 |  |  |
| Introduction to the concept of a WBS | Work through the slides explaining each of the concepts connected with a project WBS  Why use WBS for project management?  WBS definition  WBS hierarchy  Work packages  How WBS helps the project manager  WBS – coding the levels in the hierarchy  A short break could be taken at this point | 38-44 | Pay close attention and ask questions whenever clarification is needed |  |
| The Software project WBS slide with hierarchy and man-hours shown | After presenting the WBS hierarchy ask the students to consider:  *How many man-hours will the project require in total?*  *What is the estimated total cost for the entire project based on this information?*  *What is the average cost for a man-hour on Coding?*  Work through the answers together. | 45 | Work with the tutor to understand the WBS concept |  |
| The Sports Centre WBS exercise | Give this exercise to the students to do in pairs or small groups.  A break could be taken after the feedback session. | 47 | Work independently or with friends to discuss the answers. Students should feedback their answers after perhaps 15 minutes | E1 LO1 Activity 5: Sports Centre WBS |
| The Nuclear WBS exercise | Give this exercise to the students to do in pairs or small groups. |  | Students should feedback their answers after perhaps 15 minutes | E1 LO1 Activity 6: Nuclear WBS |
| Homework – the IT Project WBS | Introduce the homework required |  |  | E1 LO1 Activity 7: IT project WBS |

### SESSION 4: Understanding Project Risk Management (5-6 hours)

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| **Topic** | **Tutor Activity** | **Slides** | **Learner Activity** | **Formative Assessment** |
| Introduction to session and learning outcomes | Use file: **4UPM Tutor Presentation E1**  1.4: Discuss the risks that may emerge on a major project | 49 |  |  |
| Introduction to the concept of risks, capturing them in a risk log, assessing the impact and likelihood – and thereby prioritising risk | Work through the slides explaining each concept  Risk managements on projects  Risk identification  Risk log  Risk process  Risk quantification  Risk/impact matrix  This could end with a short break | 50-55 | Pay careful attention to understand the core concepts |  |
| Developing a coherent response to each risk | Explain that every risk must have a response (even if it is only to “tolerate” the risk):   * Tolerate the risk * Treat the risk * Terminate the risk * Transfer the risk * Take the risk   Explain the possible responses and provide localised examples if possible | 56-61 | Pay careful attention to understand the core concepts |  |
| The police radio project | Present each risk being faced by the project (five in total) and before proceeding invite suggestions from the learners as to what the best response would be. Briefly discuss each risk and the best response before proceeding to the next one.  Guidance solutions are provided.  This could end with a short break. | 62 | Think about each risk presented on the slides and suggest how best to respond to it. Work in groups. | E1 LO1 Activity 8: Police radio project |
| The IT Project risks exercise | Depending on the time available, this could either be covered during the class, or assigned as homework.  Guidance solutions are provided. | 63 |  | E1 LO1 Activity 9: IT project risks |