**PIA Lesson Plan Template**

**Unit Name:** *Insert unit name here*

**Unit Code:** *Insert unit code here*

**Topic Number:** *Example: 1*

Each lesson will consist of:

* 1 hour pre-recorded video content in the form of vignettes
* 2 hour workshop outlining scaffolded activities towards assessments with application of the content covered in the session.
* Total Duration 3 hours of contact per week excluding pre and post session activities.
* **Please Note:** Make the video content generalised without focus on specific case studies to allow for changes or updates between terms for currency of content and academic integrity.

**Please delete and edit the italic font in blue to suit your unit and topic lesson plan.**

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| **Weekly Topic Title:** *Data and Analysis in the Real World* |
| **Session Objectives:*** *Definition of data and information*
* *Comparison of Data and Information*
* *Thinking about Analytical Problems*
* *Data management by Source Systems*
 |
| **Lesson Overview:** *In this session we'll focus on Data and Analysis in the Real World. We'll start this session by understanding two fundamental elements of database which are data and information. Different examples of these elements are provided. Next, this session will continue by focusing on Thinking about Analytical Problems. Learning how to think about analytical problems is a key success in business analytics. It will be explained that the best analysts are people who really love understanding how things work and who can create clarity out of chaos. Then, thinking backwards will be introduced as starting point for decision making in database design. The information systems analysis, the process of collecting and interpreting facts, identifying problems, and documenting the components of a system in order to define what a new information system should do will be discussed. Finally, Different elements and considerations that are involved in information systems analysis are presented. By the end of this module, you should have a good understanding of* *- Data and information**-Thinking backward about analytical problems**- Information systems components, benefits, and requirements* |
| **Activity** | **Time Duration** (mins) | **Synchronous in person (face to face)** |
| ***Short Content Vignette******Introduction to the course*** | *15* mins | *Introduction to the unit will be provided. The learning objectives and outcomes will be described. An overview of the assessments and what is required throughout the term.* |
| ***Ice******breaking*** | *30* mins | *Students will be asked to introduce themselves and tell why they chose this specialisation, any previous experience they have in database modelling and design and their expectations of the course outcomes.* *They will be posting on the Moodle* [*padlet*](https://pia.padlet.org/dashboard/recents) *and the lecturer will ask probing questions to get a better understanding of the students’ experiences and interests.* *This is also a good opportunity for students to get to know each other and think about upcoming group assessment and who they may wish to work with.* *Also an opportunity for students to get to know their lecturers and their experiences and backgrounds.*  |
| ***Instructor******Opening*** | *5* mins | *Students will be greeted. The aims and scope of this session will be described in the video.* |
| ***Short Content Vignette***  | Approx. *5-12 mins* | *Students watch video in classroom or on Moodle. Lecturer to give an opportunity to ask questions and expand on answers.*  |
| ***Instructor prompt/ Activity*** | *30* mins | Students will be asked to work on Activity 1.1 on the Consultancy Company example. Ask students to work in small groups and post their answers to the Discussion Forum for 15 mins. Then, there will be free discussion and sharing knowledge between students for around 15 mins and lecturer to provide feedback and link back to assessments.  |
| ***Instructor transition*** | *5* mins | Lecturer to wrap up the activity and link to next area of theory. |
| ***Short Content Vignette***  | Approx. *5-12* mins | *Students watch video in classroom or on Moodle. Lecturer to give an opportunity to ask questions and expand on answers.* |
| ***Instructor prompt Example*** |  *30* mins | *Pre-recorded video will be played and students will be asked to take note of the main points about analytical thinking.* *Then, Students will be asked to discuss about the topic. Finally, instructor will conclude the discussion.* *Use the* [*mentimeter*](https://www.mentimeter.com/) *poll to gauge understanding and recap any key takeaway points.* |
| ***Short Content Vignette*** | Approx. 5-12 mins | *Students watch pre-recorded video in classroom or on Moodle on the H5P tool and asked to complete short multiple choice questions relating to the content. This is a good opportunity for them to practice before their assessed quizzes.* |
| ***Instructor prompt/ Activity*** | *30* mins | *Students will be asked to work on Activity 1.2 for 15 mins on investigate modelling tools such as use cases and data flow diagram tools.* *Then, there will be free discussion and sharing knowledge between students for around 15 mins. Finally, instructor will conclude the discussion.*   |
| ***Instructor closing*** | *10* mins | *Conclude the session and re-emphasise key takeaway points. Link forward to the next topic and direct to the next pre-class activity.*   |

*Additional Point: If lecturer deems the class require an energiser activity in the class, they may make use of* [*Drawasaurus*](https://www.drawasaurus.org/) *as a tool to add some gamification to the class.*