



A . P . U
ASIA PACIFIC UNIVERSITY
OF TECHNOLOGY & INNOVATION

Data Management

CT051-3-M

Topic 1 - Introduction and Overview

Lecturer Information

- Lecturer– Dr. Murugananthan Velayutham

- Email -

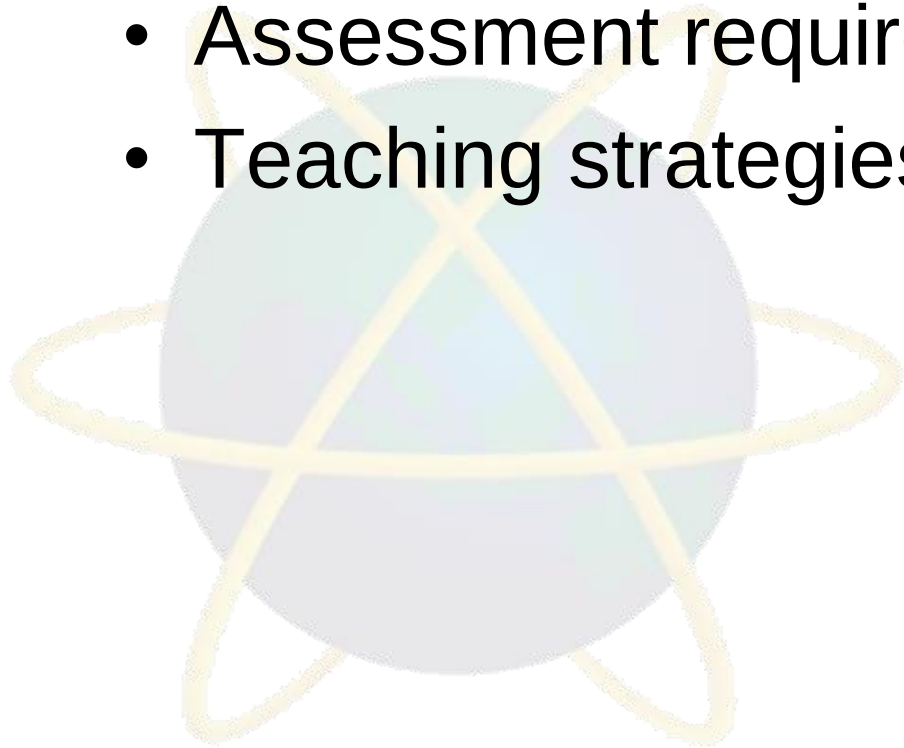
murugananthan@staffemail@apu.edu.my



Topic & Structure of Lesson

In this lecture we will look at:

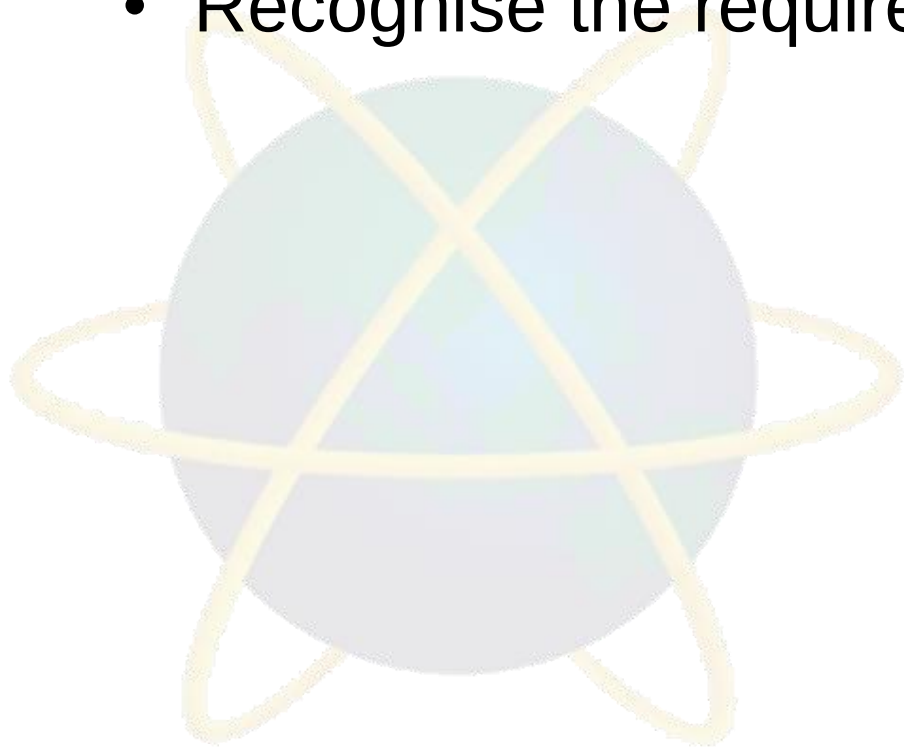
- Module overview
- Assessment requirements
- Teaching strategies



Learning Outcomes

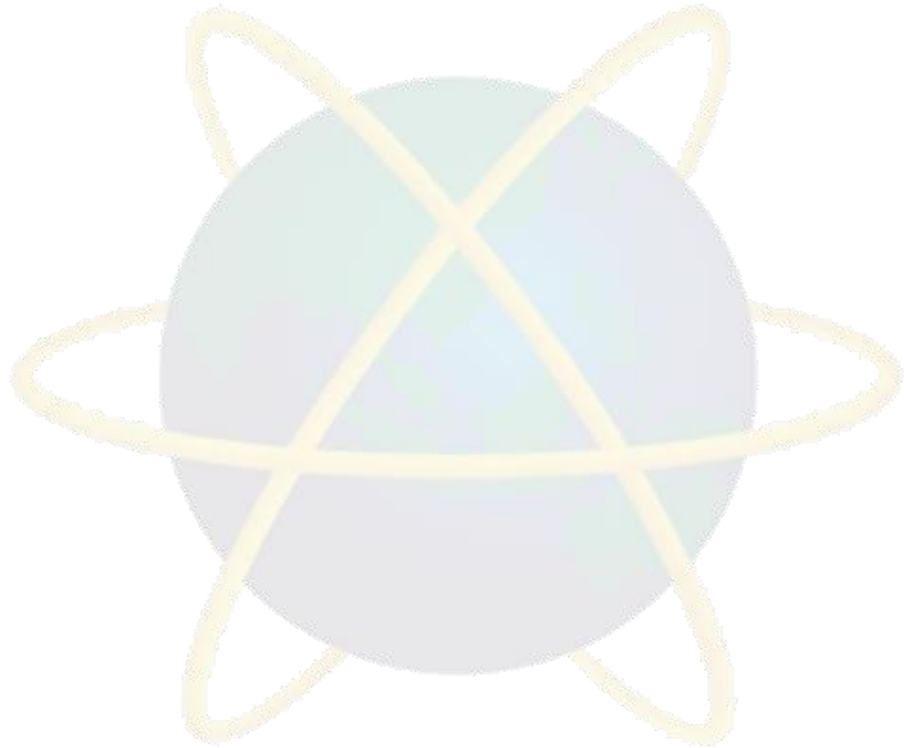
By the end of this lesson you should be able to:

- Recognise the requirements of the module



Pre-requisites for this module

- Nil



Topics we will cover

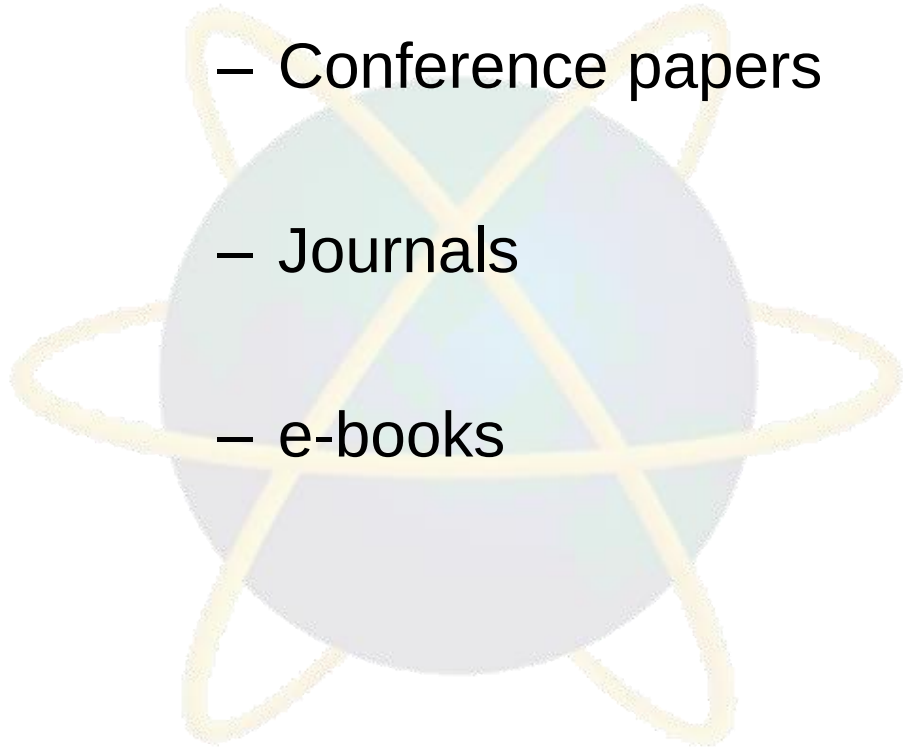
- Organizational Data Preparation (Databases, Data Marts, Data Warehouse)
- Data Type & Behavior (Quantitative Data, Qualitative Data)
- Data Preprocessing (Data Cleaning, Data Integration & Transformation, Data Reduction)
- Exploratory Data Analytics (Exploring structured)
- Data Warehouse and Hadoop (Data Warehouse-Architecture & Implementation & Multidimensional Data Models)
- Unstructured Data Into Hadoop (USE CASE)
- Query Data using Hadoop (HiveQL – DDL, DML)
- Data Security and Governance (Security policies & Procedures)

What support is available for you

- Capriolo, E., Wampler, D. and Rutherglen, J., (2012). ***Programming Hive: Data warehouse and query language for Hadoop***. O'Reilly Media, Inc.
- Jiawei Han, Micheline Kamber, Jian Pei (2011). ***Data Mining: Concepts and Techniques***, (The Morgan Kaufmann Series in Data Management Systems). 3rd ed. San Francisco: Morgan Kaufmann
- Gerhard Svolba (2006). ***Data Preparation for Analytics Using SAS®***. SAS Institute

What support is available for you

- Reference material:
 - Websites
 - Conference papers
 - Journals
 - e-books



How you will be assessed

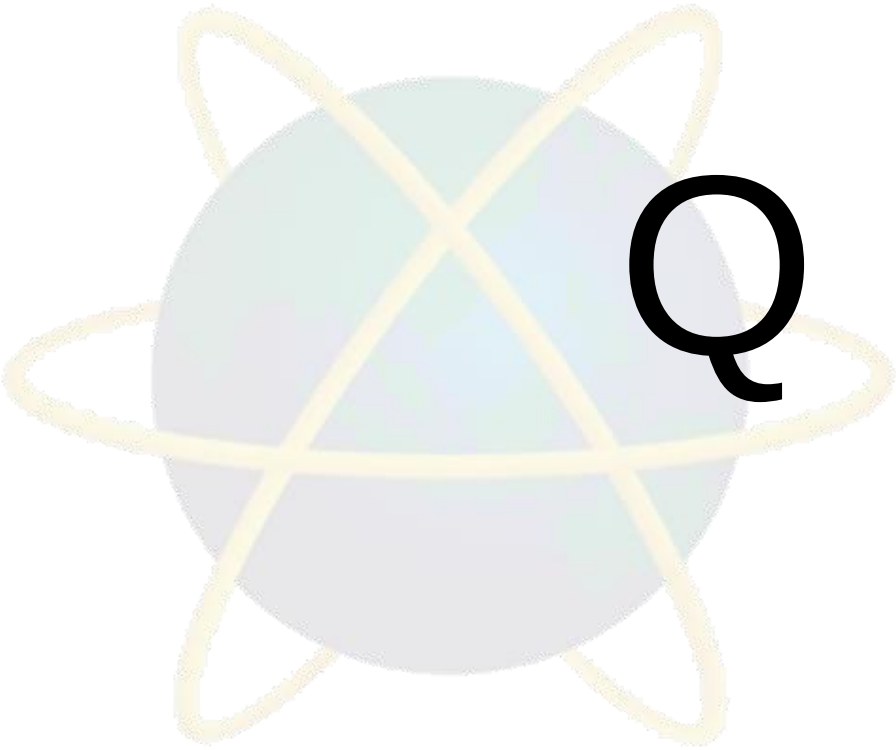
- Individual Assignment – 80%
 - Assignment Pt 1 : 20% - FE – creating/transformation
 - **Pt 2 : 60% (do this first)**
 - **Data cleaning – data preprocessing**
 - **Handling outliers**
 - **Visualization**
- Test : 20%

Achievement requirements

Postgraduate:

Marks	Alphabetical Grade	Grading Point	Classification
80-100	A+	4.0	Distinction
75-79	A	3.8	
70-74	B+	3.6	Merit
65-69	B	3.5	
60-64	C+	3.3	Pass
55-59	C	3.2	
50-54	C-	3.0	
40-49	D	2.5	Fail (marginal)
30-39	F+	2.0	Fail
20-29	F	1.5	Fail
10-19	F-	1.0	Fail
0-9	U	0	Unclassified

Question & Answer Session



Q & A