

## Class – X

### Lesson Plan

**Subject:** Artificial Intelligence

**Topic:** AI Project Cycle

#### **Brief Description of the lesson:**

It is a step-by-step process that a person should follow to develop an AI Project to solve a problem. AI Project Cycle provides us with an appropriate framework which can lead us to achieve our goal.

#### **I - Specific Objectives:**

SP1: **KPI-1** To make students understand about the project cycle of AI. (**Understanding**)

SP2: **KPI-1** To make students understand about the first stage of AI project cycle i.e, problem scoping. (**Understanding**)

SP3: To make students understand the concepts of Data Acquisition. (**Knowledge**)

SP4: **KPI-1** To enable students to understand about data Exploration (**Understanding**)

SP5: **KPI-1** To make students understand about Modelling. (**Understanding**)

SP6: To make students to understand about Evaluation. (**Assessment**)

#### **II - Behavioral Objectives:**

B1: Real life examples to bifurcate any complex problem into easiest way. (**Understanding**)

B2: To make students to understand the need of financial planning for AI projects. (**Understanding**)

B3: To make students to understand how to solve the problem based on multiple condition. (**Understanding**)

B4: To make students to understand establishes the steps to complete a project. (**Analysis**)

B5: To help the students to creates better defined high-level stages of completion. (**Understanding**)

#### **Process / Activities:**

##### **Activity (to introduce the lesson):**

ACT1: Create a PowerPoint for the theme that describes the steps involved in AI project cycle.

ACT2: Group discussion on ‘how AI project cycle provides us with an appropriate framework leading us towards the goal.

##### **Activity (to support learning):**

ACT3: Create the spreadsheet of absence management and create bar graph based on the same using following data. Total days of classes held: 25

- Student Name
- Days Present
- Days absent

##### **Activity / Assignment (to assess learning):**

ACT4: List down the new data visualization techniques in the following format.

- Name of representation
  - One line description
  - How to draw it.
  - Suitable for which type of data
- Make this format in MS-Word for different visualization techniques.

ACT5: Access the performance of class 10 students using train

#### **Expected Learning Outcomes**

##### **Student will:**

1. Be able to understand the use of AI cycle. (**Understanding**)
2. Learn about challenges in the way of problem solving. (**Understanding**)
3. Be able to understand the resource required to solve the problem. (**Understanding**)
4. Be able to experience the problem scoping. (**Assessing**)
5. Be able to understand the training and testing data. (**Knowledge**)

**Behavioral Outcomes:**

**Student will:**

- Be able to understand the milestone of AI cycle in day to day life. (Understanding)
- Be able to understand the problem and to get the solution in better way. (Understanding)
- Be able understand how to define the delivery deadline of the solution. (Knowledge)
- Enable to take decision according to situation. (Understanding)

• **Placement of objective, Instructional Activities and Assessment**

• Topic: AI					
Knowledge	Understanding	Application	Analysis	Synthesis	Evaluation
SP3	SP1	S4 ,S6	ACT3		SP6
	SP2	ACT1,ACT2			
	SP4				
	SP5				
	S7	ACT4			
	B1,B2				
	B3				

**ANNUAL PEDAGOGICAL PLAN ( X , ARTIFICIAL INTELLIGENCE)**

KPI NO .	KPI NAME	KPI DEFINITION	WHERE ARE WE NOW? (scale & description )	KPI GOAL	KPI LIMIT	WHAT WE NEED TO DO ?	HOW WILL IT BE ACHIEVED	KPI MEASUREMENT	REVIEW	KPI REPORTING	KPI ACHIEVEMENT	KPI IMPROVEMENT
1	<b>Improve ment of student understanding of identifying problems</b>	<b>Clarity of identifyin g data type and problems.( T1L1-SP1,2,4,5) (T1L1-B1,2,3,5)</b>	65% - Students could identify the problem and data type.	75 %	± 2 %	Clarify the type of data and problems identification with examples	Lab Activity : Practicals and Projects	Practice sheet relate to the topic	After assessme nt of Practice sheet	After assessment		
2	<b>Improve ment of student understanding use of What and Why</b>	<b>Clarity of identifyin g What and Why.</b>	75% Students could identify problems as to "What" is the problem and "Why does it exist".	75 %	± 3 %	To make students to identify the problem and possible outcomes .	Videos related to the topic will be shown for clarity	Through Lab activities.	After assessme nt of lab activity	After assessment		
3	<b>To create interest of Word,Excel,PowerPoint</b>	<b>Lack of participati on in recalling the previous concepts</b>	70% Students could practice the visualizati on tools.	70 %	± 2 %	To make usage of tools i.e. Ms excel, PowerPo int.	More practice of data visualizati on tools	Assignm ent Questions , Term End Exam	After Assignm ent and Term End Exam	After end of the term.		
4	<b>Understa nding of types of learning</b>	<b>Clarity of concepts of learning based AI</b>	50% Students could write the correct and appropriate answer of supervised and unsupervis ed learning	65 %	± 2 %	To make students identify the differenc es between learning	Videos related to the topic will be shown for clarity	Term End exam case study	Term End exam	Term End		

**ANNUAL PEDAGOGICAL PLAN ( X & Artificial Intelligence)**

S.no.	What are the problems	Compilation of problems	Categorisation of Problems (Subjective & Behavioural)
1	Students were not able to understand the concept of collection and compilation.	Examples discussed based on the collection and compilation of data	Subjective: - Few students are not able to understand the difference between training and testing data.
2	Identification of data as training and testing data.	Clarity of identifying data type and problems.	Subjective: Students get confused between who what why and where in 4W canvas.
3	Identification of problems to be used in 4W canvas.		
4	Lack of interest to perform practical of Word,Excel,PowerPoint.	Lack of participation in recalling the previous concepts	Behavioural:
5	Lack of understanding of supervised and unsupervised learning concepts.	Clarity of concepts of learning based AI	Subjective