**Course Outline**

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| **Name of Experiment** | **Time Frame/Session** | **Specific Outcome** | **Teaching Strategies & Suggested Activities** | **Teaching Aids/Tools/Materials** | **Assessment Technique** | **Alignment with CLOs** |
| 1.  Introduction and Overview of the Course | Week 1 | a) To build rapport among students, b) To introduce each other, c) To identify the course expectations, d) To summarize general information about the course and its completion, e) To understand different components of the course outline. | Discussion, Ice Breaking Tools, | White Board, MMP, Ice Breaking Tools | Quiz game | - |
| 2. Basic Drawing **(**Contents: Course Outline**)** | Week 2 | a) To interpret basic drawing, b) To demonstrate dimensioning, c) To develop drawing conic section and engineering curves, d) To organize drawing of 2D view following standard | Lecture, Demonstration, Group Work | White Board, MMP | Lab report, Lab Performance/Viva, Final Exam | CLO 1 |
| 3. Orthographic Projections **(**Contents: Course Outline) | Week 3 | a) To demonstrate pictorial view, b) To construct multi-view, c) To show first angle and third angle projection, d) To prepare orthographic view from pictorial view | Lecture, Demonstration, Group Work | White Board, MMP | Lab report, Lab Performance/Viva, Final Exam | CLO 1, CLO 2 |
| 4. Orthographic Projections **(**Contents: Course Outline) | Week 4 | a) To represent cutting plane, b) To draw section lines, c) To develop sectional views, d) To describe different types of sectional view | Demonstration, Lecture, Group work | White Board, MMP | Lab report, Lab Performance/Viva, Final Exam | CLO1, CLO 2 |
| 5. Orthographic Projections | Week 5 | a)To develop auxiliary views, b) To interpret full and partial auxiliary views, c) To show primary and secondary auxiliary views, d) To interpret difference between sectional and auxiliary views | Demonstration, Lecture, Group work | White Board, MMP, Video | Lab report, Lab Performance/Viva, Final Exam | CLO1, CLO 2 |
| 6. Isometric Projections | Week 6 | a) To describe principles of isometric projection, b) To construct an isometric scale, c) To recognize principle lines in isometric projection, d) To develop isometric view of planes | Demonstration, Lecture, Group work | White Board, MMP, Video | Lab report, Lab Performance/Viva, Final Exam | CLO 3 |
| 7. Isometric Projections | Week 7 | a) To demonstrate isometric views of right solids, b) To show isometric view of solid containing non-isometric lines, c) To construct isometric view of composite solid | Demonstration, Lecture, Group work | White Board, MMP, Video | Lab report, Lab Performance/Viva, Final Exam | CLO 3 |
| 8.  Isometric Projections | Week 8 | a) To construct isometric view of miscellaneous problems, b) To interpret conversion of orthographic view to isometric view | Demonstration, Lecture, Group work | White Board, MMP, Video | Lab report, Lab Performance/Viva, Final Exam | CLO 3 |
| 9. Oblique Projections | Week 9 | a) To demonstrate direction of projectors, b) To construct dimensioning of oblique drawing, c) To interpret advantage of oblique drawing | Demonstration, Lecture, Group work | White Board, MMP, Video | Lab report, Lab Performance/Viva, Final Exam | CLO 4 |
| 10. Oblique Projections | Week 10 | a) To demonstrate direction of projectors, b) To construct dimensioning of oblique drawing, c) To interpret advantage of oblique drawing | Demonstration, Lecture, Group work | Video | Lab report, Lab Performance/Viva, Final Exam | CLO 4 |
| 11. Oblique Projections | Week 11 | a) To demonstrate direction of projectors, b) To construct dimensioning of oblique drawing, c) To interpret advantage of oblique drawing | Demonstration, Lecture, Group work | Video | Lab report, Lab Performance/Viva, Final Exam | CLO 4 |
| 12.  Perspective Projections | Week 12 | a) To demonstrate applications of perspectives, b) To explain methods of drawing perspective views | Demonstration, Lecture, Group work | White Board, MMP, Video | Lab report, Lab Performance/Viva, Final Exam | CLO 4 |
| 13. Perspective Projections | Week 13 | a) To demonstrate applications of perspectives, b) To explain methods of drawing perspective views | Demonstration, Lecture, Group work | White Board, MMP, Video | Lab report, Lab Performance/Viva, Final Exam | CLO 4 |
| 14. CAD | Week 14 | a) To demonstrate how to use AutoCAD, b) To learn basic drawing skills, c) To draw orthographic view | Demonstration, Lecture, Group work | White Board, MMP, Video | Lab report, Lab Performance/Viva, Final Exam | CLO 1,  CLO 5 |
| 15. CAD | Week 15 | a) To demonstrate how to use AutoCAD, b) To learn basic drawing skills, c) To draw orthographic view, d) To interpret a drawing and develop CAD | Demonstration, Lecture, Group work | White Board, MMP, Video | Lab report, Lab Performance/Viva, Final Exam | CLO 3,4 |
| Review Class | Week 16 | To review the contents of lab final examination | Discussion | White Board, MMP | - | - |
| **Lab Performance/Viva** | Week 17-18 | To evaluate students learning on apparel Machinery maintenance. | - | - | - | - |
| Final Examination | Week 19-20 | To assess the stage of learning | - | - | - | - |