# Lesson Plan (Odd Semester)

**Name of the Faculty** : **Sh. Sahil**

**Discipline** : **Mechanical Engg.(T&D)**

**Semester** : **3rd**

**Subject** : **MECHANICAL ENGINEERING DRAWING-II**

**Duration** : **From Sep, 2024 to Dec, 2024**

**Work load per week (in hours)** : **Practical-06**

| Week | Practical | | | |
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| | **Practical Day** | **Topic (including Sheets/ assignment / test)** | **Sheet No.** | **Sign.** |
| 1st | 1st | **Unit-1:** Interactive session & Lectures | | |
| | 2nd | Limit, fits and tolerance | 1 | |
| 2nd | 3rd | Need of limit, fits and tolerance, Maximum limit of size, minimum limit of size, tolerance, allowance, deviation, upper deviation, lower deviation, fundamental deviation, clearance, maximum clearance, minimum clearance. | | |
| | 4th | Fits – clearance fit, interference fit and transition fit. Hole basis system, shaft basis system, tolerance grades, calculating values of clearance, interference, hole tolerance, shaft tolerance with given basic size for common assemblies like H7/g6, H7/m6, H8/p6. Basic terminology and symbols of geometrical dimensioning and tolerances. | | |
| 3rd | 5th | **Unit-2:** Drawing of the following with complete dimensions, tolerances, bill of material and surface finish representation.<br>Universal coupling and Oldham coupling (Assembly) | 2 | |
| | 6th | Bearings<br>Bushed Bearing (Assembly Drawing) | 3 | |
| 4th | 7th | Ball Bearing and Roller Bearing (Assembled Drawing) | 4 | |
| | 8th | Plummer Block (Detail and Assembly Drawing) | 5 | |
| 5th | 9th | Foot step Bearing (Assembled Drawing) | 6 | |
| | 10th | **Revision** | | |
| 6th | | **Sessional 1st** | | |
| 7th | 11th | Pulleys, Pulleys, Function of pulley, Types and materials of Pulley. Free hand Sketch of Various types of pulleys. Fast and loose pulley (Assembly Drawing) | 7 | |
| | 12th | Pipe Joints, Types of pipe Joints, Symbol and line layout of pipe lines, Expansion pipe joint (Assembly drawing) Flanged pipe and right angled bend joint (Assembly Drawing) | 8 | |
| 8th | 13th | Reading and interpretation of mechanical components and assembly drawings Sketching practice of bearings and bracket | 9 | |
| | 14th | **Unit-3:** Drilling Jig (Assembly Drawing) | 10 | |

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| 9th | 15th | **Unit-4:** Machine vices (Assembly Drawing) | 11 | |
| | 16th | Lathe Tool Holder (Assembly Drawing) | 12 | |
| 10th | 17th | **Unit-5:** I.C. Engine Parts : Piston & Connecting rod (Assembly Drawing) | 13 | |
| | 18th | Crankshaft and flywheel (Assembly Drawing) | 14 | |
| 11th | | **Sessional 2nd** | | |
| 12th | 19th | **Unit-6:** Boiler Parts:<br>Steam Stop Valve (Assembly Drawing) | 15 | |
| | 20th | Blow off cock. (Assembly Drawing) | 16 | |
| 13th | 21st | **Unit-7:** Mechanical Screw Jack (Assembled Drawing) | 17 | |
| | 22nd | **Unit-8:** Gears : Gear, Types of gears, Nomenclature of gears and conventional representation. | | |
| 14th | 23rd | Draw the actual profile of involute teeth of spur gear by different methods | 18 | |
| | 24th | Revision | | |
| 15th | | **Sessional 3rd** | | |