Course Description Form of thermofluids 1

1. Course Name:
Thermofluid 1
2. Course Code:
3. Semester / Year:
semester 1 2023 -2024
4. Description Preparation Date:
2023− 11 20
5. Available Attendance Forms:
presence in the classroom
6. Number of Credit Hours (Total) / Number of Units (Total)
30 Hours / 3Units
7. Course administrator's name (mention all, if more than one name)
Prof. Dr. Ghanim Kadhim Abdulsada Email: Ghanim.sada@uowa.edu.iq
8. Course Objectives

Course Objectives	This subject aims to provide students with knowledge of basic concepts in thermofluids and systems used in thermal science, including thermodynamic laws, processes and cycles, work and heat

9. Teaching and Learning Strategies	
Strategy	• Using the smart board • Use illustrative pictures whenever possible

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	3	Basic Fluid and Thermodynamics Properties State and unit ;	Thermofliid fundamental	Lectures presented i PDF forma	Daily exams + homework assignments + monthly exams

3	3	Fluid static	Thermofluid fundamental	Lectures presented in PDF format	Daily exams homework assignments monthly exam
4 -5	3	Pressure head measurment ;	Thermofluid fundamental	Lectures presented in PDF format	Daily exams homework assignments monthly exam
6-7	3	Fluid flow and flow pattern ;	Thermofluid fundamental	Lectures presented in PDF format	Daily exams homework assignments monthly exam
8	3	Newton law of viscosity	Thermofluid fundamental	Lectures presented in PDF format	Daily exams homework assignments monthly
9 -10	3	Continuity Equation And energy relationships ;	Thermofluid fundamental	Lectures presented in PDF format	Daily exams homework assignments monthly
11 -12	3	Bernoulli equation Pressure drop in pipe	Thermofluid fundamental	Lectures presented in PDF format	Daily exams homework assignments monthly
13	3	Reynold number And friction factor	thermofluid	Lectures presented in PDF format	Daily exams homework assignments monthly
14 -15	3	Flow measurement and boundary layer	Thermofluid fundamental	Lectures presented in PDF format	Daily exams homework assignments monthly

11. Course Evaluation

 Daily exams scientific questions.
 Establishing grades for environmental duties and the reports assigned to them
 Semester exams for the curriculum, in addition to the mid-year exam and final exam
Lab exam

12. Learning and Teaching Resources

Fundamental of Thermal fluid Science By Cengel Y. A. , Turner R.H. and cimbala J .