

LESSON PLAN

Name of Teacher :- Meenakshi Saini

Subject: English & Comm. Skills Class: 1st Semester Auto. Engg.

S. No.	Month	Week	Date	Name of Chapter	Contents to be taught	Remarks
1	August	1-7		Unit 1: Fundamentals of Communication Skills	Orientation Programme for the Freshers'	
2		3rd week	11, 14		Concept, Significance and Process of Communication, Levels of Communication	
3		4th Week	18, 21, 22		Types of Communication: Verbal and Non-verbal; Formal and Informal, Barriers to Effective Communication and how to Overcome these, 7C's for Effective Communication	
4		5th Week	25, 29		Listening Skills : Significance and Essentials of Active Listening Skills	
5		1st week	1, 5		Speaking Skills: Significance and Essentials of Effective Spoken Communication	
6	September		8	Unit 2: Reading Skills	Concept and Significance of Soft and Life Skills – Role of Communication Skills in Developing Soft and Life Skills.	
		2nd Week	11		Class Test -I	
7		3rd week	15, 18, 19		Definition, Meaning and Significance of Reading Skills, Techniques of Reading: SQ3R, method of Reading – Survey, Question, Read, Recite, Review, Skimming and Scanning, Extensive and Intensive Reading	
8		4th week	22, 25, 26		Textual Study for honing Reading Skills: <i>(Life Skills)</i> (i) Poetry: Daffodils by William Wordsworth. (ii) Prose: Life Sketch of Dr. A.P.J. Abdul Kalam. (iii) Short Story: With the Photographer by Stephen Leacock.	
9		5th Week	29	Unit 3: Functional Grammar and Vocabulary	Tenses	

Meenakshi Saini

10	October	1st Week	3	Unit 3: Functional Grammar and Vocabulary	Change of Voice	
11		2nd Week	6	Class Test-II		
			9	Unit 3: Functional Grammar and Vocabulary	Change of Narration	
12		3rd week	13,16,17		Article, Part of Speech: Noun, Pronoun, Adjective, Verb, Adverb, Conjunction, Preposition	
13		4th week	23,24		Glossary of Administration terms, Pair of words	
14		5th week	27, 30		Synonyms, Antonyms	
			31	Unit4: Writing Skills	Significance and Essential Components of Writing Skills	
15	November	1st Week	3,6,7	House Test		
16		2nd Week	10,13	Unit4: Writing Skills	Drafting Skills: Significance of Notice, Circular	
17		3rd week	17, 20,21		Official letters and Email etiquette, Writing Paragraphs through Outlines	
18		4th Week	27,28		Resume Writing and Forwarding Letter.	

Signature of HOD

Signature of Teacher

Govt. Polytechnic Talwar

Distt. Kangra H.P. 176096

Lesson Plan

Session: August 2026 -December 2026

Session: August 2026 - December 2026		Designation:-HOD (AS & H)		
Name of Teacher:-Meenakshi Saini		Class/Branch:- 1st sem/Auto Engg.		
Name of Lab/Workshop:- English & Communication Skills(Lab)		Planned Dates		Remarks
Sr. No.	Description of Practical job	Group-I	Group-II	
		Orientation		6/8/26
1	a) Demonstration of Listening Skills with suitable and relevant examples of: Difference between Hearing and Listening; Process and Steps in Listening Effectively; Types of Listening; Barriers in Listening; Tips for Effective Listening. b) Exercises of Listening to Monologues and Dialogues through - audio/video, with Appropriate Feedback for Improvement.	13/8/26, 20/08/26, 27/8/26	12/8/26, 19/8/26, 26/08/26	
2	a) Demonstration and Practice of Basic Phonetics and Sound Recognition: Structure of Language; Phoneme (Word Sound); Phonetics (Production of speech sounds); Consonant Sounds; Vowel Sounds; Monophthongs (Short, Long sounds) and Diphthongs; Phonic Sounds of English Alphabet. b) Practice on Phonetics: Word stress and Intonation in Effective Speech.	27/8/26, 3/9/26, 10/9/26	26/8/26, 2/9/26, 9/9/26	
3	a) Speaking Skills: Recapitulation of Significance and essentials of Effective Spoken Communication. b) Confidently Introduce Yourself and Others, extend Greetings, in Formal and Informal settings.	10/9/26, 17/9/26	9/9/26, 16/9/26	
4	a) Deliver Short Speeches: Welcome Speech, Farewell Speech, Impromptu Speech, using Essentials Elements of a Good Speech. b) Deliver Effective Academic presentations using audio-visual aids (PPTs/Videos).	17/9/26, 24/9/26, 1/10/26	16/9/26, 23/9/26, 30/9/26	

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5	a) Practice Writing Skills using Correct Formats: i. Formal Letter and Encls. ii. Notice and Circular iii. Different Reports iv. Resume and Covering Letter	1/10/26, 8/10/26, 15/10/26	30/9/26, 7/10/26, 14/10/26	
6	a) Demonstration and Practice of appropriate Body Language and other important aspects of Non-Verbal Communication. b) Demonstration and Practice of appropriate Etiquette and Manners for various Formal and Informal Situations.	15/10/26, 22/10/26	14/10/26, 21/10/26	
7	a) Participate effectively in Group Discussion and Meetings, displaying Team Spirit and Collaboration. b) Mock Interviews- Personal and Telephonic Interview.	22/10/26, 12/11/26, 19/11/26	21/10/26, 28/10/26, 18/11/26	
8	a) Role Play Activities: Situational Conversations. b) Do's and Don'ts in Digital Communication and Social Media.	19/11/25, 16/11/25	18/11/25, 25/11/25	

Signature of Teacher

HOD

Govt. Polytechnic Talwar

Lesson Plan

Name of Faculty : Rajni Sharma	Designation: Lecturer Mathematics
Department : Applied Sciences	Semester : 1st
Subject : Applied Mathematics-1	Class : Automobile Engg.
Lesson Plan for the Duration : Aug. - Nov. 2026	

Month	Week	Date	Topic	Contents to be taught	Remarks
Aug.	1st	3,5,6,7	Trigonometry	Orientation	
	2nd	10,12,13,14		Concept of angles, measurement of angles in degrees, grades and radians and their conversions.	
	3rd	17,19,20		Radian measure formula (Arc Length Formula in radians) and simple related problems,	
	4th	21,24,26		Ratios of Allied angles (without proof Sum, difference formulae and their applications (without proof).	
	5th	27,31		Product formulae (Transformation of product to sum,difference and vice versa)	
Sept.	1st	2,3,7	Function and Limits	Graphs of $\sin x$, $\cos x$.	
	2nd	9,10,11		Definition of function, Value of a function, Even and Odd Function, Function of a function.	Class Test 1
	3rd	14,16,17,18		Limit of a function, Standard limits (with proof) lim and related questions	
	4th	21,23,24,25		Problems related to find the limit of an Algebraic function by using factorization method ,substitution method and rationalization method.	
	5th	28,30		Differentiation by first principle (x^n , $\sin x$ & $\cos x$).	
Oct.	1st	1,5,7	Differentiation	Rules of differentiation (sum,and product , quotient)	
	2nd	8,9,12,14		Chain rule (Differentiation of function of a function). Differentiation of trigonometric and inverse trigonometric functions, Logarithmic differentiation	Class Test 2
	3rd	15,16,19,		Complex Numbers: Definition, real and imaginary parts, conjugate of a complex number,algebra of complex numbers (Addition, Subtraction, Multiplication and Division)	

Oct.	4th	21,22,23,	Complex Number and Partial Fraction	Multiplicative inverse, solution of quadratic equation having Discriminant < 0 Geometrical representation of a complex number- Argand Diagram, modulus and amplitude of a complex number, Polar form of a complex number.	
	5th	28,30		Partial fractions: Definition of polynomial fraction (proper, improper fractions) and definition of partial fractions. Problems related to resolve a fraction (proper & improper fractions) into partial fraction with denominator containing non-repeated linear factors	
Nov.	1st	2,4,5,6,9	Permutations, Combinations and Binomial Theorem	Permutations and Combinations: Definition of $n!$, Special case: $0! = 1$, Simplification of factorial expressions,	House Test
	2nd	12,13,16		Permutation: Meaning, formula nPr and simple numerical problems. Combination: Meaning, formula nCr and simple numerical Problems	
	3rd	18,19,20,23		Binomial theorem: Binomial theorem (without proof) for positive integral index (expansion and general form); binomial theorem for any index (expansion without proof)	
	4th	25,26,27		first and second binomial approximation with applications to engineering problems.	



Signature of Teacher



HOD
Applied Sciences

Applied Sciences Department

Subject plan for the Session 2026-2027

Name of the subject : Applied Physics-I

Branch : Automobile Engg.

Sem. : 1st

Sr. No.	Contents to be taught	Date	Remarks
Unit-1 : Physical World, Units and Measurements			
1	Physical quantities Units - fundamental and derived units, systems of units (FPS, CGS, MKS and SI units)	13 Aug.	
2	Dimensions and dimensional formulae of physical quantities	14 Aug.	
3	Principle of homogeneity of dimensions	18-Aug	
4	Dimensional equations and their applications: Checking the correctness of physical equation (three equations of motion).	20 Aug.	
5	Errors, Types of errors - Instrumental, Systematic, Random and Gross error.	21 Aug.	
6	Revision	25 Aug.	
Unit-2 : Force and Motion			
7	Scalar and vector quantities - examples, representation of vector, types of vectors	27 Aug.	
8	Linear momentum, law of conservation of linear momentum with derivation.	28 Aug.	
9	Angular displacement, angular velocity, angular acceleration, relation between linear and angular velocity	01 Sept.	
10	Torque, angular momentum, law of conservation of angular momentum and its applications.	03 Sept.	
11	Moment of inertia and its physical significance.	08 Sept.	
12	Revision	10,11 Sept.	
Unit-3 : Work, Power and Energy			
13	Work and its units, types of work (zero work, positive work and negative work) with examples.	15 Sept.	
14	Energy - definition and SI unit, examples of transformation of energy, Kinetic energy - definition, examples formula and its derivation	17,18 Sept.	
15	Potential energy - definition, examples, formula and its derivation.	22 Sept.	
16	Law of conservation of mechanical energy for freely falling bodies (with derivation)	24 Sept.	
17	Power and its units, calculation of power in numerical problems	25 Sept.	
18	Revision	29 Sept.	
Unit-4 : Properties of Matter			
19	Elasticity and plasticity - definition, Definition of stress and strain, Types of stress and strain	8,9 Oct.	
20	Hooke's law, Modulus of elasticity and its types.	13,15 Oct.	
21	Pressure - definition, atmospheric pressure, gauge pressure, absolute pressure	16 Oct.	
22	Revision	22,23,27 Oct.	
Unit-5 : Heat and Temperature			
23	Definition of heat and temperature (on the basis of kinetic theory), Difference between heat and temperature	29,30 Oct.	
24	Modes of transfer of heat (Conduction, convection and radiation with examples)	03 Nov.	
25	Different scales of temperature and their relationship	5,6 Nov.	
26	Numerical problems based on conversion of temperature into various scales.	17,19 Nov.	
27	Revision	20,26,27 Nov.	

Signature of Teacher (Nemjel Choudhary)

Signature of H.O.D.

Applied Sciences Department

Subject plan for the Session 2026-2027

Name of the subject :- Applied Physics-I Lab

Branch :- Automobile Engg.

Sem. :- 1st

Sr. No.	Description of Practicals	Planned Dates		Remarks
		Group I	Group II	
1	Laboratory Safety and Familiarization	12 Aug.	22 Aug.	
2	To find the diameter of a solid cylinder using a Vernier Caliper.	19 Aug.	29 Aug.	
3	To find the internal diameter and depth of a beaker using a Vernier Caliper and hence finds its volume.	26 Aug.	5 Sept.	
4	To find the diameter of wire & thickness of cardboard by using a screw gauge.	2 Sept.	19 Sept.	
5	Revision & Viva	9 Sept.	19 Sept.	
6	To determine the thickness of the glass strip using a spherometer.	16 Sept.	26 Sept.	
7	To determine the radius of curvature of a given spherical surface by a spherometer.	23 Sept.	3 Oct.	
8	Revision & Viva	30 Sept.	3 Oct.	
9	To determine the force constant of spring using Hooke's law	7 Oct.	17 Oct.	
10	To measure room temperature using a thermometer and convert it into different temperature scales.	14 Oct.	24 Oct.	
11	Revision & Viva	21 Oct.	31 Oct.	
12	To verify the law of conservation of mechanical energy (PE to KE)	4 Nov.	7 Nov.	
13	To find the moment of inertia of a flywheel.	18 Nov.	21,26 Nov.	
14	Revision & Viva	25 Nov.	28 Nov.	

Signature of Teacher(Nirmal Choudhary)

Signature of H.O.D

Govt. Polytechnic Talwar (H.P.)
(Deptt. of _____ Applied Science _____)
Lesson Plan
Session:

Name of the teacher:		Virender Thakur	Designation: Lecturer	
Name of Subject:		Basis of IT System & A.I		Class: 1st Semester Auto. Engg
Sr. No.	Name of the Chapter	Contents to be taught	Date	
1	Unit 1: Introduction to Computers and Information Technology	1.1. Computer Fundamentals: Evolution of computers; characteristics and applications of computers; data and information; hardware and software; block diagram and functional units of a computer system. 1.0.2. Information Technology: Concept and applications of Information Technology (IT); digital transformation; e-Governance, e-Commerce, e-Learning, e-Banking, digital payments; cloud services; impact of IT on society	17/8/26 to 24/08/26	

2	Computer Hardware	2.1. Computer hardware components – Motherboard, CPU, Memory, Storage Devices, Input Devices and Output Devices. 2.2. Central Processing Unit - Functions of CPU, Arithmetic Logic Unit (ALU), Control Unit (CU), Registers (overview), CPU Clock Speed 2.3. Input Devices – Keyboard, mouse, scanner, touch screen, microphone, web camera. 2.4. Output Devices – Monitor, printer, plotter, speaker, multimedia projector. 2.5. Memory and Storage – Units of memory, memory hierarchy, primary memory (RAM, ROM), cache memory (overview only), secondary storage devices – Hard Disk Drive, optical disks (CD/DVD/Blu-ray), flash drives. 2.6. Computer ports and connectivity – USB, HDMI, audio ports, Bluetooth (overview), Wi-Fi (overview)	31/08/2026 to 28/9/26	
3	Computer Software	3.1. Operating System – Functions, Types of Operating Systems, GUI and CLI 3.2. System Software – Device drivers, Language translators, Utility software 3.3. Application Software – General-purpose software, Domain-specific software, Examples of popular application software (Web browsers, Media players, Accounting software, CAD software) 3.4. Office Productivity Tools – Word Processing, Spreadsheet, Presentation, PDF tools, Collaboration tools	5/10/26 to 28/9/26	
4	Cyber Security	1.1. Cyber Security Fundamentals – Cyber threats, Malware, Virus, Worm, Trojan, Ransomware, Spyware, Phishing 1.2. Safe Computing Practices – Strong password, Multi-factor authentication, Safe browsing, Secure email, Data backup 1.3. Cyber Ethics – Digital citizenship, Copyright, Plagiarism, Privacy, Responsible use of social media	08/10/2026 to 16/10/2026	
5	Artificial Intelligence	Introduction – Concept of AI, History, AI vs ML vs Deep Learning (basic distinction) 2. Applications – Education, Healthcare, Agriculture, Manufacturing, Transportation, Finance, Smart Cities 3. Generative AI – Concept, Examples, Benefits, Limitations, Examples of Generative AI (ChatGPT, Gemini, Microsoft Copilot)	28/10/2026 to 6/11/2026	

Virender
Name of Teacher
(VIRENDER MAKUR)

H. K.
MOD

GOVT POLYTECHNIC TALWAR
(Dept. of Applied Sciences)

Lesson Plan
(Labs/Workshop)

Session:

Name of the teacher: Virender thakur		Designation: Lecturer	
Name of Lab: Basics of Information Technology & AI (Lab)		Class: 1st Semester Automobile Engg.	
Sr.No.	Description of Practicals	Date	
		Group-1	Group-2
1	Identify the basic components, peripheral devices, and ports of a computer system, and connect the computer system to power, peripheral devices, and a network	11/8/25, 12/8/25	13/8/2025
2	Perform basic operating system tasks including booting and shutting down the computer, logging in and logging out, and accessing basic system settings	14/8/25	14/8/2025
3	Create and manage files and folders using operating system utilities, and perform basic operations on storage devices	15/8/25, 20/8/25, 22/08/25	19/9/25, 2/9/25
4	Prepare and format a document using word-processing software by applying appropriate styles, alignment, spacing, numbering, headers, footers, and tables.	2/9/25, 3/9/25, 5/9/25	9/10/2025
5	install and configure commonly used application software, including an office productivity suite and a web browser	10/9/25, 12/9/25, 17/9/25	16/10/25, 23/10/25
6	Prepare and format a spreadsheet using spreadsheet software by entering different types of data, applying formulae and basic functions, and using cell ranges, formatting, and borders	19/9/25, 24/9/25, 28/9/25	30/10/22, 7/11/22
7	Prepare a presentation using presentation software by creating slides, inserting text, images, tables, charts, and shapes, and applying themes, transitions, animations, and presentation tools.	1/10/25, 3/10/25, 8/10/25	4/11/25, 6/11/25

(Signature)
Name of teacher
(VIRENDER Thakur)

(Signature)
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GOVT. POLYTECHNIC TALWAR

Distt. Kangra H.P. 176096

LESSON PLAN : ENGINEERING GRAPHICS

Teacher: Gaurav Puwari

Designation: Lecturer

Group: G 1 & G2

Branch: 1st Sem / Automobile

Lab/Workshop: Engg. Graphics

Session: Aug - Dec 2026

SR. NO.	DESCRIPTION OF PRACTICAL JOB	DAY	MONTH	REMARKS
1	Sheet-01, Introduction to lines and free hand sketching	11, 12, 13	AUGUST	
2	Sheet-02, Technical Lettering	18, 19, 20		
3	Sheet-03, Dimensioning Techniques	25, 26, 27		
4	Sheet-04, Plain Scale	1, 2, 3, 8		
5	Sheet-05, Diagonal Scales	9, 10, 15, 16	SEPTEMBER	★ 1ST CLASS TEST
6	Sheet-06, Projection of Points	22, 23, 24, 29, 30		
7	Sheet-07, Orthographic Projections (1st Angle)	6, 7, 8	OCTOBER	★ 2ND CLASS TEST
8	Sheet-08, Orthographic Projections (3rd Angle)	13, 14, 15		
9	Sheet-09, Sectioning of different objects	21, 22		
10	Sheet-10, Projections by sectioning of Objects	27, 28, 29		
11	Sheet-11, Isometric Views	10, 11, 12, 17		
12	Sheet-12, Symbols of Civil, Mechanical and Electrical Engineering	18, 19, 25, 26	NOVEMBER (HOUSE TEST 1ST WEEK)	PTM

Signature of HOD

Signature of Teacher

GOVT POLYTECHNIC TALWAR
(Deptt. of Applied Sciences)
Lesson Plan
(Labs/Workshop)
Session:

Name of Teacher-Vikram Chand		Designation- W.I		Auto. Engg.	
Name of Lab- Engineering Workshop-1 (Electrical)		Date		Remarks	
Sr No	Description of Practicals	Date		Remarks	
		Group-1	Group-2		
1	continuity, open/short and polarity in simple lamp and socket circuits. Read out current, voltage and electrical power at different loads using various measuring devices of different ranges. Job II : Connecting single phase energy meter with	17/8, 28/8 7/9, 5/9	21/8 30/8 7/9, 14/9		
2	Connecting single phase energy meter with supply and load and working out power consumption and cost of energy.	14/9, 19/9 25/9, 28/9	18/9 21/9 26/9 5/10		
3	Measure total voltage and total capacity/current of batteries by connecting two or three batteries in series and parallel. Test the battery with hydrometer and cell tester.	9/10, 12/10 17/10 23/10	30/10/10 16/10, 19/10		
4	Assemble and internally wire a single-phase main DB with main switch/ MCB, bus-bars and at least five outgoing lighting/fan circuits with appropriate protection	26/10, 31/10 2/11, 7/11	24/10 30/10 6/11, 9/11		
5	Carrying out house wiring circuits using fuse, switches, sockets, ceiling rose etc. in batten or P.V.C. casing-capping. Demo of conduit wiring through junctions.	13/11 16/11 21/11 27/11	14/11 20/11 23/11 28/11		
6	Studying internal wiring diagram, dismantle, diagnose fault, servicing and reassembling of common domestic electrical appliances like ceiling fan, auto	28/11	23/11		
7	Connection of single phase and three phase motors by using starter. Reversing direction of rotation of single-phase motors	27/11	28/11		

Name of Teacher

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Govt. Polytechnic Talwar

Branch: Automobile Engg.		Subject: Sports & Yoga		
Semester: First				
Unit No.	Name of Topic	Proposed Date	Actual Date	Remarks
	MODULE 1: PHYSICAL FITNESS			
1	Introduction to Sports and Yoga	01-08-2026		
	Warm up	04-08-2026		
	Stretching	11-08-2026		
	Flexibility	18-08-2026		
	Endurance	22-08-2026		
	Strength Exercise	25-08-2026		
	Cool-down	29-08-2026		
	MODULE 2: YOGA			
2	Loosening Exercises	01-09-2026		
	Surya Namaskar	08-09-2026		
	Introduction of Asanas	15-09-2026		
	Standing	19-09-2026		
	Sitting	22-09-2026		
	Prone	26-09-2026		
	Supine	29-09-2026		
	Pranayama	03-10-2026		
	Meditation	06-10-2026		
	Relaxation techniques	13-10-2026		
	MODULE 3: SPORTS ACTIVITIES			
3	Volleyball	17-10-2026		
	Basketball	20-10-2026		
	Badminton	24-10-2026		
	Table Tennis	27-10-2026		
	Athletics	31-10-2026		
	Kabaddi	10-11-2026		
	Kho-Kho	17-11-2026		


Signature of Teacher


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(AS&H)