K L University
I/IV B.Tech I Semester
A.Y. 2014-15
(Common to all branches of Engineering)

Course Handout

Course Name   : **Language and Reasoning Skills**

Course Code   : 13-HS-102

Course Coordinator   : S.Lavanya

Course structure   : 2 – 0 – 2

Credits   : 3

Team members   : Dr. M.Latha,   Dr. G. Mohanacharyulu,

                               Dr. C.Naresh, Dr. K.B. Glory

1. Course Context and Overview:

Course belongs to HS Category and it is offered to all undergraduate engineering students at first year level. Course aims to introduce students to Advanced Grammar, Critical Reasoning and awareness of Non-Conventional English. Students learn to convey their knowledge to diverse audiences and apply their knowledge in unique settings and become accomplished technical communicators. This course provides intensive instruction in the practice of professional writing in business and industry. This course is poised to showcase the distinct advantages of having technical communication skills vis-à-vis the basic language skills in Lexis, communicative grammar, and non-conventional composition skills like process descriptions and print media releases. This course introduces students to concepts like team work, Leadership skills, Interpersonal Skills, Intrapersonal Skills and the necessary training required. It makes them understand the roles and responsibilities associated with working in teams, team planning.

Course Objective:

To improve communication skills and them recognize the significance of technical writing in education as well as careers in business, technical, and scientific domains**.**

To develop thinking skills and broader problem solving skills which are essential for life and learning.

Programme Outcomes:

	Program Outcome
1.	Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the conceptualization of engineering models.
	Not selected
2.	**Identify, formulate, research literature and solve *complex* engineering problems reaching substantiated conclusions using first principles of mathematics and engineering sciences.**
Selected as the course trains learners to identify information provided and understand the problem to provide suitable and or acceptable solutions.	
3.	Design solutions for *complex* engineering problems and *design* systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
Not selected	
4.	**Conduct investigations of *complex* problems including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.**
Selected as Language and Reasoning Skills course aims at helping learners to observe, interpret, analyze, infer and evaluate given information or data. Also the course builds awareness among learners to understand the logic behind the data and arrive at valid conclusions.	
5.	Create, select and apply appropriate techniques, resources, and modern engineering tools, including prediction and modeling, to *complex* engineering activities, with an understanding of the limitations.
Not selected	
6.	**Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.**
Selected as Language and Reasoning Skills for engineers and technology is designed to understand team work and plan for effective teams.	
7.	**Communicate effectively on *complex* engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.**
Selected as the course aims at providing practice of professional writing in business and industry and also comprehend information provided and analyze the same to implement or assess complex engineering activities.	
8.	Demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering practice.
Not selected	
9.	Understand and commit to professional ethics, responsibilities and norms of engineering practice.
Not selected	
10.	Understand the impact of engineering solutions in a societal context and demonstrate knowledge of and need for sustainable development.
Not selected	

11.	Demonstrate a knowledge and understanding of management and business practices, such as risk and change management, and understand their limitations.
Not selected	
12.	**Recognize the need for, and have the ability to engage in independent and life-long learning.**
Selected as the concepts in this course involve activity that requires independent and lifelong learning.	

Cognitive levels associated with Language and Reasoning Skills Course:

S.No	Cognitive Level	Selected/ Not-Selected	Explanation for selection and non-selection based on the nature of the course and instructor's preferences
1.	Remember	Selected	Several concepts, principles and procedures need to be remembered
2.	Understand	Selected	Several processes and mechanisms need to be understood.
3	Apply	Selected	Several methods need to be applied to determine, interpret and assess workable solution.
4.	Analyze	Selected	Analysis of given information, or data and analyze the same.
5.	Evaluate	Selected	Statements or arguments or information should be evaluated before arriving at conclusion.
6.	Create	Not Selected	Training is not provided to help learners write scientific documents like records, observation, Proposals.

Categories of knowledge associated with Language and Reasoning Skills Course:

SN	Knowledge Category	Selected / Not-Selected	Explanation for selection and non-selection based on the nature of the course and instructor's preferences
1.	Factual	Selected	Advanced grammar rules, writing skills, difference between summary, précis, abstract and essay. Reasoning and where it is applicable need to be known.
2.	Conceptual	Selected	Concepts like Team Building, Team work, critical thinking, and logical thinking need to be understood and applied.
3	Procedural	Selected	Writing advertisements, tag lines, punch lines, memo writing, press note, interpreting given text or information.
4.	Fundamental Design Concepts	Not selected	The course does not involve design processes.
5.	Criteria and Specifications	Not selected	Criteria and Specifications are involved only in design instruments which are not included in our course.
6.	Practical Constraints	Selected	The course deals with formal writing or writing for media, it requires writing skills.
7.	Design Instrumentalities	Not Selected	Team exercises and large projects are not involved
8.	Metacognitive	Not selected	No special exercises are planned to address this category of knowledge.

Taxonomy Table: Selected Cognitive Level – Knowledge Matrix.

Knowledge Categories	Cognitive Levels					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual	√	√	√	√	x	X
Conceptual	√	√	√	√	√	X
Procedural	√	√	√	√	√	x

Competencies: At the end of the course the student should be able to

	Competency	POs – Levels	Cognitive Level
C 1	Understand the concepts of team work, team building, effective training tools,	1–3	Apply
C 2	Review given information or data and interpret. Understand critical thinking and lateral thinking, argument and counter argument.	2–10	Understand
C 3	Recognize difference between critical thinking and logical thinking. Difference between argument and statement.	5–8	Understand
C 4	Understand specific skills required for media writing, reader behaviour, brand image and positioning .. .	1–2	Understand
C 5	Understand Glossary of Journalism and the fundamental rules intention and tone in writing press notes	1–5	Understand
C 6	Identify and understand the rules, intention and tone of writing memorandums	1–5	Analyze
C 7	Study the information or data or situation given or case studies, interpret the same, understand rules of advanced grammar like parallelism, tautology, ambiguity, dangling modifiers etc.	2-10	Analyse
C 8	Understand and apply the concepts of writing paragraphs	1–3	Apply
C 9	Identify and evaluate the rules of summary writing and apply the same	8-1, 1-3	Analyze
C 10	Understand the need for coherence and analyze the conditions of sequencing .	1–5	Apply

Competencies in Taxonomy Table:

Knowledge Categories	Cognitive Level			
	Remember	Understand	Apply	Analyze
Factual		C6	C3	
Conceptual		C2, C5, C8	C1, C4, C7,C9,	C6
Procedural		C6		

Competency-Programme outcome Matrix:

Competencies	Program outcomes (Washington Accord Attributes)											
	1	**2**	3	**4**	5	**6**	**7**	8	9	10	11	**12**
C1: Understand the concepts of team work, team building, effective training tools						2	2					2
C2: Review given information or data and interpret. Understand critical thinking and lateral thinking, argument and counter argument		2					2					1
C3: Recognize difference between critical thinking and logical thinking. Difference between argument and statement.		2		2		3	2					2
C4: Understand specific skills required for media writing, reader behaviour, brand image and positioning .		2		2		3						
C5: Understand Glossary of Journalism and the fundamental rules intention and tone in writing press notes						3	2					
C6: Identify and understand the rules, intention and tone of writing memorandums .		2				3						2
C7: Study the information or data or situation given or case studies, interpret the same, understand rules of advanced grammar like parallelism, tautology, ambiguity, dangling modifiers etc.				1		2	2					1
C8: Understand and apply the concepts of writing paragraphs.		2		2			2					2
C9: Identify and understand rules of summary writing and apply the same.		2		2		3	2					
C10 Understand the need for coherence and analyze the conditions of sequencing .		1					2					

Competency addresses outcome: 1 = Low   2 = Medium   3 = High

Competency /sub competencies associated levels:

C.No	Competency	PO's levels	
C1	Understand the concepts of team work, team building, effective training tools	**1-3**	
Sub Competencies		**Cognitive level**	**Knowledg e category**
C1.1	Understand team work process,	Understand	Procedural
C1.2	Advantages and disadvantages of team work	Understand	Conceptual
C1.3	Building effective teams and outbound training. Understand areas where outbound training is effective.	Apply	Procedural
C1.4	Understand Leadership development, change management, conflict resolution, interpersonal skills and interpret the case studies given	Analyze	Conceptual

Taxonomy Table:

Knowledge	**Cognitive levels**

Categories	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual						
Conceptual		C1.2		C1.4		
Procedural		C1.1	C1.3			

C.No	Competency	PO's levels	
C2	Review given information or data and interpret. Understand critical thinking and lateral thinking,	**2-10**	
Sub Competencies		**Cognitive level**	**Knowledge category**
C2.1	Understand conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered.	Understand	Conceptual
C2.2	Use of Argument, reasoning, persuasion, evaluation.	Remember	factual
C2.3	Identify indicator words, arguments, conclusions. Evaluate arguments.	Apply	Conceptual

Taxonomy Table:

Knowledge Categories	Cognitive levels					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual	C2.2					
Conceptual		C2.1	C2.3			
Procedural						

C.No	Competency	PO's levels	
C3	Recognize difference between critical thinking and logical thinking. Difference between argument and statement	**2-10**	
Sub Competencies		**Cognitive level**	**Knowledge category**
C3.1	Observation, experience, reflection, reasoning, or communication, as a guide to belief and action	Understand	Conceptual
C3.2	. Deductive validity and inductive validity.	Remember	Factual
C3.3	Identify premise indicators, conclusion indicators. Evaluate arguments.	Apply	Conceptual

Taxonomy Table:

Knowledge Categories	Cognitive levels					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual	C3.2					
Conceptual		C3.1	C3.3			
Procedural						

C.No	Competency	PO's levels	
C4	Understand specific skills required for media writing, reader behaviour, brand image and positioning	1-3	
Sub Competencies		**Cognitive level**	**Knowledge category**

C4.1	Understand captions, cutlines, taglines, reader behaviour	Understand	Conceptual
C4.2	Tips of writing captions	Remember	Factual
C4.3	Understand and determine brand positioning, brand image, punchlines	Apply	Procedural

Taxonomy Table:

Knowledge Categories	Cognitive levels					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual	C4.2					
Conceptual		C4.1				
Procedural			C4.3			

C.No	Competency	PO's levels
C5	Understand Glossary of Journalism and the fundamental rules intention and tone in writing press notes	1-3

Sub Competencies		Cognitive level	Knowledge category
C5.1	Identify glossary of journalism terms	Understand	Factual
C 5.2	Identify and determine the headline of the given news paper article.	Analyze	Conceptual
C5.3	Understand format and content of press note	Understand	Conceptual
C5.4	Develop press note for the given information or situation	Apply	Procedural

Taxonomy Table:

Knowledge Categories	Cognitive levels					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual		C5.1				
Conceptual		C5.3		C5.2		
Procedural			C5.4			

C.No	Competency	PO's levels
C6	Identify and understand the rules, intention and tone of writing memorandums .	1-3

Sub Competencies		Cognitive level	Knowledge category
C6.1	Understand types of business writing like memorandums	Understand	Factual
C6.2	Identify the purpose and context of memo writing	Analyze	Conceptual
C6.3	Identify and understand rules and concepts of memo writing	Understand	Conceptual
C6.4	Write different types of memos in suitable tone .	Apply	Procedural

Taxonomy Table:

Knowledge Categories	Cognitive levels					
	Remember	Understand	Apply	Analyze	Evaluate	Create

Factual		C6.1				
Conceptual		C6.3		C6.2		
Procedural			C.4			

C.No	Competency	PO's levels	
C7	Study the information or data or situation given or case studies, interpret the same, understand rules of advanced grammar like parallelism, tautology, ambiguity, dangling modifiers etc.	**5-8**	
Sub Competencies		**Cognitive level**	**Knowledge category**
C7.1	Understand rules and conditions of Advanced Grammar	Understand	Conceptual
C7.2	Determine the errors and rectify the same	Apply	Conceptual
C7.3	Interpret given sentences of tautology, dangling modifiers ambiguity and rectify errors	Analyze	Procedural

Taxonomy Table:

Knowledge Categories	Cognitive levels					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual						
Conceptual		C4.1	C4.2			
Procedural				C4.3		

C.No	Competency	PO's levels	
C8	Understand and apply the concepts of writing paragraphs	1-5	
Sub Competencies		**Cognitive level**	**Knowledge category**
C8.1	Topic Sentence, main idea, supporting idea and closing sentence.	Understand	Conceptual
C8.2	Six steps of writing paragraphs, essays etc.	Remember	Conceptual
C8.3	Five stages of writing	Apply	Procedural
C8.4	Determine the logical coherence in technical writing	Evaluate	Procedural

Taxonomy Table:

Knowledge Categories	Cognitive levels					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual						
Conceptual	C8.2	C8.1				
Procedural			C8.3		C8.4	

C.No	Competency	PO's levels	
C9	Identify and evaluate the rules of summary writing and apply the same	**2-10**	
Sub Competencies		Cognitive	Knowledg

		level	e category
C9.1	Interpret the given data or information	Understand	Factual
C9.2	Determine the main ideas and rewrite	Evaluate	Procedural

Taxonomy Table:

Knowledge Categories	Cognitive levels					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual		**C9.1**				
Conceptual						
Procedural					**C9.2**	

C.No	Competency	PO's levels	
C10	Understand the need for coherence and analyze the conditions of sequencing	**1-3**	
Sub Competencies		Cognitive level	Knowledge category
C10.1	Understand coherence and cohesiveness	Understand	Conceptual
C10.2	Identify and distinguish main ideas and supporting ideas.	Analyze	Procedural
C10.3	Interpret the given information and apply rules of sequencing	Apply	Procedural

Taxonomy Table:

Knowledge Categories	Cognitive levels					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual						
Conceptual		C10.1				
Procedural			C10.3	C10.2		

SYLLABUS:

This course Language and reasoning Skills is designed to apprise learners in the importance of language in the workplace and initiate their analytical and interpretation skills. Teamwork is important in an organization because it provides employees with an opportunity to bond with one another, which improves relations among them. It fosters better and open communication between the employees and the higher management. Similarly good writing skills are important when the job involves writing, be it as an engineer, a journalist, paralegal or public relations professional. Writing skills are crucial to express and achieve goals. Documentation should be the strength of an engineer. Writing user manuals, product and process manuals are one of the essential necessities of engineering profession. In this context the 7Cs of writing are eminent. Not only these but Critical reasoning and lateral thinking are what make engineers problem solvers. This topic trains learners to analyze and interpret data or information and evaluate the given situation and or provide plausible solutions. Logical reasoning helps learners to understand and apply the concept of validity and also develops a sense of drawing and evaluating conclusions.

TEXT BOOK:
  1. **Language and Reasoning Skills.   KL University 2013-14**

REFERENCE:
  1. Writing Effectively : Beth S. Neman Charles E. Merril Publishing company, Ohio

2. Smarts Handbook of Effective Writing: Harper & Brothers 1963
3. Effective Writing : Christopher Turk and John Kirkman Spon press,London New York
4. Critical Reasoning : A Users Manual   : Chris Swoyer.
5. Essential English for Journalists, Editors & Writers.: Harold Evans. Pimlico 2000.

Session Plan: The course plan is only a guide line. There may be change in the order.

12	Types of thinking:1.Receptive 2.Appreciative 3.Critical	Chalk and talk	Explanation	Listen	Identify indicator words ..
13	Training in --- Independent Judgment,	Chalk and talk	Explanation	Listen	Deductive validity and inductive validity
14	Analysis reasoning tests --- Situation Reaction Tests	Exercises	Facilitate	participate	Analyze, Interpret and Apply
15	Analysis reasoning tests --- Situation Reaction Tests	Exercises	Facilitate	Analyze, Interpret and Apply	Evaluate arguments Ethical Reasoning
16	Arguments, statements, premise conclusions	Chalk and talk	Explanation	Listen	Ethical Reasoning
17	Writing headlines --- Caption writing ---- Cut lines --- Taglines	Chalk and talk	Explanation	Listen	Understand specific skills required for media writing, reader behaviour, captions, cutlines, taglines, reader behavior
18	Understanding Reader behavior, branding and brand positioning.	Exercise	Facilitate	Analyze	Understand and determine brand positioning, brand image, punchlines Tips of writing captions
17	Writing Press Notes	Chalk and talk	Explanation	Analyze and Apply	Identify and determine the headline of the given news paper article and Press notes
18	Writing Notice and Agenda of meetings.	Chalk and talk	Explanation	Listen , apply and Practice	Writing agenda --- writing minutes --- preparing press notes --- briefing and debriefing
19	Briefing and debriefing in corporate offices	Chalk and talk	Explanation	Listen , apply and Practice	
20	Advanced Grammar Skills	Chalk and talk	Explanation	Listen, answer,	understand rules of advanced grammar like parallelism, tautology, ambiguity, dangling modifiers etc
21	Error Identification.	Chalk and talk	Explanation	Listen, answer, apply and practice	Understand rules and conditions of Advanced Grammar
22	Problems of Parallelism, Dangling Modifiers	Chalk and talk	Explanation	Listen, answer, apply and practice	Determine the errors and rectify the same Interpreting the given sentences of, dangling modifiers
23	Problems of mood, voice, tense etc	Chalk and talk	Explanation	Listen and participate	Determine the errors and rectify the same

					Interpreting the given sentences
24	sequencing --- ideas. coordinates and sub coordinates	Chalk and talk and ppt	Explain	Listen, Apply and Practice	Interpret the given data or information Determine the main ideas and rewrite
25	Understand linkers --- transition – kernels	Chalk and Talk	Explain	Listen, and answer	Topic Sentence, main idea, supporting idea and closing sentence
26	Topic sentence . development. Editing & revising	Chalk and Talk	Explain	Listen, Apply and Practice	
27	Writing essays . Connecting and organizing paragraphs	Chalk and Talk	Explain	Listen, Apply and Practice	Six steps of writing paragraphs, essays etc.
28	Writing summaries	Chalk and Talk	Explain	Listen, Apply and Practice	Identify and evaluate the rules of summary writing and apply the same
29	Identifying Themes	Chalk and Talk	Explain	Listen, Apply and Practice	Identify and evaluate the rules of abstract writing and apply the
30	Writing abstracts			Listen, Apply and Practice	

Self Learning Material:

S.No	Name of the topic	Source
1	Stages of Team work	The Winners Manual : Essential Life and Work Skills Dorling Kindersley London New York 2008
2	Logical Reasoning	Critical Reasoning : A Users Manual : Chris Swoyer
3	Best reasoning	Language and Reasoning Skills KLUniversity Text book
4	Basic grammar (parts of speech, verbs, tense, degrees of comparison,)	Effective Writing : Christopher Turk and John Kirkman Spon press,London New York
5	Précis writing	Language and Reasoning Skills KLUniversity Text book

EVALUATION SCHEME:

EC No.	COMPONENT	DURATION (mts)	MARKS	Avg of best 3 tests	Date Sem-I	
THEORY						
1	Test – I	90	30			
2	Test – II	90	30	30		
3	Test – III	90	30			
4	Test – IV	90	30			
5	Quiz/ Home		5	5		
5	Attendance(Theory)	Continuous	5	5		
6	Comprehensive Examination (Theory)	180	60	60		
	Total	-	100			
7	Internal practical examination a. Mid term lab exam	90	20	20		
	b. continuous viva-voce	Continuous	15	15		
8	Attendance(Lab)	Continuous	5	5	------	-------
9	Semester-end lab exam (External)	180	60	60	------	-------
	Total		**-**	100		

Chamber Consulting Hours: To be informed in the class by the respective instructors.

7. **Notices:** All notices/circulars regarding course matters will be displayed in the English department notice boards and also will be placed in the web.

Course coordinator   HoD, English