

Name of the Course	Logic & Critical Thinking
Course Code	LOC-111
Credit Hours	3
Objectives	<ol style="list-style-type: none"> 1. To develop students' understanding of basic concepts and vocabulary of logic. 2. To define and identify arguments and distinguish deductive from inductive arguments. 3. To understand the relation of the concepts of truth, validity and soundness. 4. To understand the relationship between language and reasoning, and to define and clarify the expressions. 5. To understand the concept of logical form and be able to use specific logical forms such as conditionals to test arguments for validity. 6. To identify fallacious reasoning: psychological, material and formal in everyday conversation and popular media forms. 7. To develop ability to seek out and evaluate evidence, reliable sources and other information relevant to the support of conclusions of reasoning.
Contents	<p>Unit-I Introduction</p> <ol style="list-style-type: none"> 1.1 Introduction to the fundamentals of logic and critical thinking 1.2 Why critical thinking matters? 1.3 Critical thinking and the process of analysis <ol style="list-style-type: none"> 1.3.1 Teaching students to think theoretically 1.3.2 Teaching students to think empirically <p>Unit-II Strategies and techniques to develop critical thinking</p> <ol style="list-style-type: none"> 2.1 Brain storming 2.2 Concept mapping 2.3 Generalization and testing the limits 2.4 Venn diagram 2.5 Logical reasoning <p>Unit-III Critical thinking and art of questioning</p> <ol style="list-style-type: none"> 3.1 Critical thinking and Socratic questioning 3.2 Teaching students to ask good questions & follow up the implications of thought 3.3 Teaching students to narrate, analyze, and evaluate their own 'Points' 3.4 Open and close ended questions <p>Unit-IV Proposition and argument</p> <ol style="list-style-type: none"> 4.1 Categorical propositions and categorical syllogism 4.2 Propositional logic 4.3 Making sense of arguments 4.4 Fallacies and rules of effective critical thinking

Teaching & Learning Strategies	A combination of lecturing, class presentations, and discussions will be used to conduct the course. Students will be expected to read extensively ahead of each class session and actively participate in discussions
Assignments	Written assignment (10 marks), presentation (5 marks) and quiz (10 marks)
Recommended Reading Material	<p>Cleave, M. V. (2016). <i>Introduction to logic and critical thinking</i>. USA: BC Campus, BC Open Textbook Project.</p> <p>Hurley, P. J., & Watson, L. (2018). <i>A concise introduction to logic</i> (13th ed.). Boston: Wadsworth, Cengage Learning.</p> <p>Kelley, D. (2013). <i>The art of reasoning: An introduction to logic and critical thinking</i> (4th ed.). New York: W. W. Norton & Company.</p> <p>Merrilee H., & Salmon, M. H. (2012). <i>Introduction to logic and critical thinking</i> (6th ed.). Boston: Wadsworth, Cengage Learning.</p> <p>Vaughn, L. (2018). <i>The power of critical thinking: Effective reasoning about ordinary and extraordinary claims</i> (6th ed.). New York: Oxford University Press.</p>

Assessment and Examinations:

Sr.#	Elements	Weightage	Details
1	Midterm Assessment	35%	Written test (at the mid-point of the semester)
2	Formative Assessment	25%	Assignment, presentation and quiz
3	Final Assessment	40%	Written test (at the end of the semester)