

## Faculty of Economics and Political Science

### Scientific Thinking

#### Information :

**Course Code :** SCT 101

**Level :** Undergraduate

**Course Hours :** 2.00- Hours

**Department :** University Requirments

#### Area Of Study :

This course provides students with basic understanding of scientific thinking. Students will be given exposure to the concepts, terminology, principles and theories that comprise a course in thinking scientifically. Topics covered are to synthesize the broad range of knowledge about thinking scientifically, to emphasize research methodology, to encourage critical thinking, and to convey a scientific as well as systematic approach to think over a concept.

#### Course Goals:

- Orient the mindset of the students towards a scientific one that uses the appropriate logical and academic methods in conducting research in addition.
- Think in a creative and critical manner.
- Work effectively with diverse populations.
- Promote inclusive and therapeutic environments.

#### Description :

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#### Course outcomes :

##### **a. Knowledge and Understanding: :**

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|-----|--|
| 1 - | Define thinking models drive and structure decision making and problem solving.                  |
| 2 - | Recognize evidence to solve problems of practice and make educational and therapeutic decisions. |

##### **b. Intellectual Skills: :**

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|-----|--|
| 1 - | Develop lesson plan templates which infuse the following skills.   |
| 2 - | Identify lesson plan, assessment, and graphic organizer templates in which you can place content, and infuse creative and critical thinking. |

##### **c. Professional and Practical Skills: :**

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|-----|---|
| 1 - | Use critical and creative thinking skills to accelerate learning.             |
| 2 - | Apply critical and creative thinking to your instruction in any content area. |

##### **d. General and Transferable Skills: :**

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|-----|---|
| 1 - | Uncover Assumptions, Skills at Generating Ideas Creative Thinking Generating Possibilities. |
| 2 - | Evaluate and improve existing ideas to solve problems and make decisions.                   |
| 3 - | Communicate ideas to resolve controversial issues while applying a step-by-step process.    |

4 - Think and argue creatively and critically about various every day subjects.

### **Course Topic And Contents :**

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Tutorial / Practical</b>
Introduction and Syllabus	2	1	
What is Critical Thinking?	2	1	
Basic Logic	2	1	
Establishing a Foundation	2	1	
Broaden your perspective	2	1	
Be a critical reader, listener, and viewer	2	1	
Assumptions and reasoning	2	1	
Midterm Exam		1	
Methodological believing	2	1	
The search for challenge	2	1	
Communicating ideas	2	1	
Arguments	2	1	
Scientific reasoning	2	1	
Stress and critical thinking	2	1	
Final Exam		1	

### **Teaching And Learning Methodologies :**

Data show and computer in lectures

Demonstration videos

Group discussion

Research Paper

### **Course Assessment :**

<b>Methods of assessment</b>	<b>Relative weight %</b>	<b>Week No</b>	<b>Assess What</b>
Course Work (Attendance, Participation, Assignments, Quizzes, Research Paper) D	30.00		To assess understanding and theoretical background of the intellectual and practical skills.
Final Exam	40.00	15	To assess knowledge and intellectual skills
Midterm Exam	30.00	8	To assess professional skills