

## Faculty of Economics and Political Science

### Scientific Thinking

#### Information :

**Course Code :** SCT 101

**Level :** Undergraduate

**Course Hours :** 2.00- Hours

**Department :** University Requirements

#### 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: :

- 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: :

- 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: :

- 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: :

- 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 :**

Topic	No. of hours	Lecture	Tutorial / Practical
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 :**

Methods of assessment	Relative weight %	Week No	Assess What
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