

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 :

This course provides students with basic understanding of scientific thinking. Students will be exposed to 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 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 Paperé)	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