

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: :

- | | |
|-----|--|
| 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: :

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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 :

| 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 |