Future Academy
Higher Future Institute for Specialized Technological Studies

Course Specification

1- Course information:	
Course Code:	HUM491
Course Title:	Creative Thinking
Year/level	4th
Academic Programs	Computer Science Program (B.Sc.)
Contact hours/ week	(Theoretical= 2hrs)

2- Course aims:

This course aims to provide students with an introduction to the modern practices of creative thinking, idea generation and innovation in all areas of the business and professional environments. Practice creative thinking techniques that will help in learning to think creatively; and apply these skills to a work environment. The student will gain knowledge of the creative process and use it to solve problems or fulfill opportunities in any area of study, personal life, or career path. The student will learn the theoretical applications of creative theories and techniques.

3- Intended learning outcomes of the course (ILOs):

a- Knowledge and understanding:

On successful completion of this course, the student should be able to:
al- Understand the characteristics of creative thinking.
a2- Recognize the importance of creative thinking and lateral thinking in problem solving.
a3- Comprehend the explore and generate phase of creative tools and techniques for generating and selecting ideas.
a4- Use creative thinking techniques in decision making.
a5- Demonstrate use of 'six thinking hats' in group discussions, and use of 'six action shoes'.

b- Intellectual skills:

On completing this course, the student should be able to:

b1- Use creative tools across multiple situations and fields through activities and exercises.
b2- Compare logical & critical & parallel thinking vs. Creative thinking.
b3- Compare thinking vs. action.
b4- Practice creative thinking techniques that will help in learning to think creatively.
b5- Discuss obstacles to good decision making.

c- Professional and practical skills:

At the end of this course, the student will be able to:
c1- Apply a creative thinking and creativity techniques to solve problems.
c2- Differentiates between critical thinking and creative thinking.
c3- Integrate and evaluate information and data from a variety of sources.

d- General and transferable skills:

On successful completion of this course, the student should be able to:
d1- Effectively communicates the presence of opportunities where others see problems, either orally or in writing.
d2- Being able to transform the idea into an integrated entrepreneurial project.
d3- Use creative thinking strategies for personal and professional growth.

4- Course contents

Topics/units	Number of hours		ILO's
	Lecture hours	Practical hours	
Introduction - What is thinking? – Thinking types & skills - what is creative thinking? - the nature of creative thinking – Basic principles of creativity - the need for creative thinking	2	-	a1, b1, b2, c2
The mechanism of the mind - neuroscience of creativity- creative methods – creative solutions creativity & innovation – types of creativity – convergent vs. Divergent thinking	2	-	a1, b1,
Creative process – creativity cycle	2	-	a1
Creative tools for defining problem	2	-	a2, b4, c1
Creative tools and techniques for generating ideas	2	-	a3, b4, c1, d1
Creative tools for selecting ideas	2	-	a3, b4, c1
Creativity and problem solving - psychology of problem solving	2	-	a3, b4, c1, c3, d1
Decision-making	2	-	a4, b5, c3
Lateral thinking	2	-	a2, b2,
Cort strategies - Six thinking hats	2	-	a5, d2, d3
Six action shoes	2	-	a5, b3

5- Teaching and learning methods

Methods	ILO's															
	a1	a2	a3	a4	a5	b1	b2	b3	b4	b5	c1	c2	c3	d1	d2	d3
Lectures	√	√	√	√	√		√	√		√	√	√		√		
Practical sections																
Self-learning		√														√
Assays and reviews																
Solving - problem						√		√				√		√		
Discussion groups						√		√								√
Brainstorming																
Blended-learning																
E-learning		√	√												√	√

6- Teaching and learning methods for Low-achieving students

- Extra teaching hours for those who need help
- More quizzes to assess their ability for understanding the course
- Encourage the team work for those students with other advanced ones to increase their participation and understanding

7- Student assessment

Assessment method	Time	Grade weight (%)	ILOs
Written exam	2 hrs	60%	a1, a2, a4, a5, b2, b3, b5, c1, c2, d1
Practical exam	-	-	-
Oral exam	-	-	-
Quiz 1	30 min	5%	a1, b2, c2, d1
Mid-term exam	1 hr	15 %	a1, a2, a3, b2, b3, c1, c2, d1
Quiz 2	30 min	5%	a4, b2, c1, d1
Others (assignments)		15%	a3, b1, b4, c3, d2, d3

8- List of references

8.1. Student notebooks:

- Course Notes - Slides delivered to students at the end of lectures on google classroom.

8.2. Essential textbooks:

1- John Fabian. "Creative Thinking & Problem Solving", London New York: Taylor & Francis Group. Reissued 2018 by CRC Press. 2018.

2- Sawyer, K. *Zig Zag: The Surprising Path to Greater Creativity*. San Francisco: Jossey-Bass. 2013

8.3. Recommended textbooks:

Nussbaum, B. *Creative Intelligence: Harnessing the Power to Create, Connect and Inspire*. New York: Harper. 2013

8.4. Journals, Periodical and Reports ……..etc.

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8.5. Websites

- **https://www.theforage.com/blog/skills/creative-thinking**
- **https://www.koozai.com/blog/content-marketing-seo/eight-awesome-creative-thinking-techniques-plus-tools/.**

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