

4.1.1. Elective Courses

UNR1102 Creativity and Innovation

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Laboratory	
None	1	1	2	0	0	2

COURSE AIM

Creativity and innovation are integral to a student's ability to survive and thrive in professional environment. This course provides students with an understanding of how creativity, innovation and adaptability function in computing designs. Students will learn how to cultivate creativity, innovation and adaptability in themselves, others and the organizations in which they live and work. Students will also explore how and why innovations succeed or fail. Theoretical conceptualizations of creativity, innovation and adaptability, as well as practical applications involved in fostering creativity, innovation and adaptability will be explored. Students will be expected to play an active role in learning through class exercises, class discussions, and presentations about real creative projects.

COURSE WEEKLY CONTENTS

1. Theoretical elements
2. Different aspects of creativity
3. Development of cognitive abilities
4. Influential factors (environmental, social, personal, organizational)
5. Creativity approaches (methods, techniques, activities)
6. Metacognitive processes
7. 7th week assessment.
8. Mind-mapping, six hats, SCAMPER, bionics
9. Examples and projects
10. Marketing, improvisation and invention
11. Encoding information
12. 12th week assessment.
13. Concept map
14. Vee diagram
15. Final revision.

STUDENT GRADING & ASSESSMENT

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	←		30	MARKS		→	30
8 to 12	←		20	MARKS		→	20
1 to 15	←		10	MARKS		→	10
16 or 17	40	Final					40

REFERENCES

Textbook • David Cropley, "Creativity in Engineering"