

Non-Engineering Courses (NE)

Non-Engineering Courses Group

NE 266 – Creativity and Innovation

COURSE INFORMATION

Course Title: Construction Engineering Drawings

Code: NE 266

Hours: Lecture – 2 Hrs. Tutorial – 2 Hrs. Credit –3.

Prerequisite: None

GRADING

Class Performance/Attendance: 10%

Midterm # 1/Assignments – (7th Week): 30%

Midterm # 2/Assignments – (12th Week): 20%

Final Exam: 40%

COURSE DESCRIPTION

Definitions, theory, Approach, media, visualization, Applications working both individually and in collaborative groups, students explore their awareness of creativity & innovation

TEXT BOOK & REFERENCES

The Art of Systems Thinking : Essential Skills For creativity and problem solving by Joseph O'Conner, Publisher: Barnes & Noble 1998.

The art of innovation : lessons in creativity from DEO, America's leading Design firm by Tom Kelley, Publisher: 2001.

Creating Minds : an Anatomy of creativity seen through the lives of Freud, Einstein, Picasso, Stravinsky, Eliot and Graham Howard by E. Gardener Publisher: 1994.

Brainstorms: creative solving, by Thomas N. Turner, Publisher: Longman, 1991.

The future of creativity symposium, by , the school of the art institute of Chicago, Publisher: 2001.

Pop art by Tillman Osterworld, Publisher: Taschen 1999.

Art of the 20th century, painting, sculpture, new media and photography, by Ruhrberg & others Publisher: Taschen 2000.

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Contemporary world architecture, by Huge pearaman, Publisher: phaidon press, 1998.

Art at the turn of the millennium, by Lars Bang Larsen& others, Publisher: Taschen 1999.

Understanding the media : by Marshall McLuhan Publisher: 1980.

The complete buildings and projects by Zaha hadid Publisher: Thames & Hudson1983.

Structuralis and science from Levi Strauss To Derrida Publisher: Oxford university press 1979.

Hybrid space by peter zellner Publisher: Thames & Hudson – 1999.

Archilab by Frederic Migayrou Publisher: Thames & Hudson 2003

COURSE AIM

Increasing students' awareness of creativity, using application in 3D Archi-models.

SPECIFIC OUTCOMES OF INSTRUCTION

Methods to stimulate creativity and imagination.

COURSE OUTLINE

- Week Number 1:* Creativity & definitions – classical origins of creativity concepts- what is creativity
- Week Number 2:* Creativity & Design process
- Week Number 3:* 1-Map of design process – first insight – preparation – incubation- illumination – achievement.
- Week Number 4:* Creativity & Design creative process.
- Week Number 5:* Wallis model of creative process.
- Week Number 6:* CPS model of Alex Osborn.
- Week Number 7:* Creativity & the Brain.
- Week Number 8:* Models of the brain
- Week Number 9:* Four Quadrant model (Ned Herrmann)
- Week Number 10:* Creativity & association
- Week Number 11:* Association theory, association as incentive to stimulate a creative design process.
- Week Number 12:* Association and concept axes choice and creative conceptual structure.
- Week Number 13:* Brainstorming & creative problem solving
- Week Number 14:* Creativity & the masters of architecture.
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Week Number 15: The masters of Architecture.

Week Number 16: Final Exam.

COURSE COORDINATOR AND DEMAND

Course Coordinator:

Course Demand: *Elective*