



UNIVERSIDAD DE QUINTANA ROO
UNIDAD ACADÉMICA PLAYA DEL CARMEN
CIENCIAS ECONÓMICO ADMINISTRATIVAS

OPTATIVA 4: BUSINESS INNOVATION

Business Engineering 16 Week Course Fall 2013

General Course Objective: Students will comprehend the general panorama of theories, practices, and processes of Innovation and Creativity, and their application in the design, engineering, and fabrication of innovative ecologically-sound products. Students will develop the capacity to analyze the different perspectives of creativity and innovation, critical thinking, divergent thinking, and meta-cognition in the production of new product or the modification of an existing product in order to increase the students' abilities in his or her professional and personal life.

16 Week Program

Week	Themes	Learning Strategies	Bibliography
1	INTRODUCTION TO THE COURSE Introductions, Approach to Teaching and Learning, Overview of the Course, Discussion of the Various Parts of the Course, Assigning of Work Groups HISTORY OF CREATIVITY Ancient Greece, Enlightenment, 20th Century to Today,	ACTIVITIES: Human Machine, Balancing Nails, SIX LECTURE ABOUT EDUCATION: Pedagogy, What does it mean to teach and learn, and what are the most effective and ethical ways of doing so? VIDEO: "Cambiando Los Paradigmas De La Educación" COURSE OVERVIEW: Syllabus, Expectations, Recommendations and Values, LECTURE: The History of Creativity	Alfie Kohn, "What Does It Mean To Be Well-Educated?" Creatividad: https://en.wikipedia.org/wiki/Creativity
2	THEORIES OF CREATIVITY Psychoanalytic, Mental Illness, Psychoticism, Addiction, Humanistic, Social	LECTURE: Theories of Creativity LECTURE: Comparing the differences and similarities of creativity and innovation	Ken Robinson, <i>Out Of Our Minds: Learning To Be Creative</i>

	CREATIVITY AND INNOVATION Differences, Commonalities, Psychology, Cognitive Science, Education, Philosophy, Technology, Theology, Sociology, Linguistics, Business Studies, Economy	ACTIVITIES: Paper Airplane Design, Square Hole In Paper Communcation	
3	CHARACTERISTICS OF CREATIVITY Fluidity, Flexibility, Originality Elaboration, Sensitivity, Re-definition, Abstraction, Synthesis, Critical Thinking, Divergent Thinking, Meta-Cognition CREATIVE PROCESSES Preparation, Incubation, Intuition, Insight, Verification, Analysis	LECTURE: Characteristics of Creativity LECTURE: Creative Processes ACTIVITY: Exploring and applying the processes and characteristics of creativity to the design of a toothbrush	James Kaufman, <i>International Handbook Of Creativity</i>
4	WORK TIME Time for students to work in groups on their Examples of Creativity and Innovation Presentations with support, guidance, and feedback	GROUP WORK: Preparation for the Examples of Creativity and Innovation presentations	-
5	PRESENTATIONS: EXAMPLES OF CREATIVITY AND INNOVATION	STUDENT PRESENTATIONS: Examples of Creativity and Innovation	-
6	ACTIVITIES AND CONCEPTS TO EXPAND CREATIVITY Psychological Distance, Combination/Synthesis, Association of Ideas, Forced Association, Design, Generalization, Analogies	MINI-LECTURES: Concepts and Activities to Expand Creativity ACTIVITIES: Whack On The Side Of The Head creativity cards, Adbusters Magazine, 2 Against 1	Roger Von Oech, <i>A Whack on the Side of the Head: How You Can Be More Creative</i>
7	GENERATING IDEAS FOR FINAL PROJECTS Critical Thinking, Divergent Thinking, Creativity, Innovation	ACTIVITIES: Brainstorming, Clustering, Freewriting, Bird-Pancake DISCUSSION: How can the ideas for the Final Projects be improved?	Edward de Bono, <i>Serious Creativity: Using the Power of Lateral Thinking to Create New Ideas</i>
8	PRESENTATIONS: PROPOSALS FOR FINAL PROJECTS Originality, Uniqueness, Importance, Utility,	PRESENTATION and EVALUATION of Proposals for Final Projects	-

	Feasibility, Interest		
9	RESEARCH Methods and Forms of Research, Location of Sources, Quality of Sources, Importance and Relevance of Sources, Organization of Elements, Bibliography and Documentation	LECTURE: Methods and Aspects of Research ACTIVITY: Library Day	Peter Theis, "The Research Paper"
10	SOCIAL, ECOLOGICAL, AND PERSONAL IMPACT Social Impact (Mental Ecology, Democracy, Equanimity, Access), Ecological Impact (Materials, Contamination, Sustainability), and Personal Impact (Need, Psychology, Ethics) of Commercial Products	LECTURE: Impact of Commercial Products DISCUSSION: The impact (social, ecological, personal) of the Final Projects	Paul Hawken, The Ecology of Commerce Lester Brown, <i>Eco-Ecology</i>
11	PRODUCT DESIGN Analysis, Concept, Synthesis, Trends, Expression, Demand, Considerations	LECTURE: Processes of Designing the Final Projects ACTIVITY / DISCUSSION: Analyzing the designs of the Final Projects	Product Design: https://en.wikipedia.org/wiki/Product_design
12	PROMOTING THE PRODUCT Sales, Consumers/Clients, Market, Workers, Value, Marketing, Distribution, Costs, Promotion, Services, Media	LECTURE: Promoting the Product ACTIVITY: Working in groups to explore and reflect on the elements discussed in the lecture	Promotion: https://en.wikipedia.org/wiki/Product_promotion
13	PLANNING THE PRODUCTION OF THE PRODUCT Job Production, Boutique Production, Batch Production, Flow Production, Costs, Materials, Time, Quantity, Quality, Organization	LECTURE: Planning the Production of the Product ACTIVITY: Reflections on and Adjustments to the various elements of the products for the Final Projects, considering the elements discussed in the lecture	Methods of Production: http://en.wikipedia.org/wiki/Methods_of_production
14	FINE TUNING DETAILS OF THE FINAL PROJECTS	WORK TIME: Addressing doubts, clarifying concepts, Adjusting Details	-
15	PRESENTATIONS: FINAL PROJECTS	PRESENTATION and EVALUATION of the Final Projects	-
16	FINALIZING DETAILS Reviewing Grades of Final Projects Registering Grades in portal SAE Turning in a printed copy of grades to Administración Escolar	DISCUSSION: General discussion and reflection on the course	-

Course Politics

- ✓ The door of the classroom is always open, even if you are late, but for each activity or homework not completed your Final Grade will be reduced 1%.
- ✓ Class will end 15 minutes before the end of the hour so you may go to the bathroom, eat, or relax between classes.
- ✓ It is prohibited to use cell phones in the classroom. Please keep them turned off or silent so as to avoid distractions.
- ✓ It is prohibited to eat, smoke, or drink in the classroom.
- ✓ It is the student's responsibility to keep up with the course and to be aware of any changes in how the class functions that your teacher has informed the class about.
- ✓ Be sure to make the work you produce look and feel professionally done.
- ✓ Work should be turned in by the assigned due dates.

Evaluation

Attendance	- 1% de calificación final por cada falta después 3
Participation, Activities, Homework	- 1% de calificación final por cada no cumplida
Presentation of Examples of Creativity and Innovation	Valor 25%
Presentation of the Proposal for the Final Project	Valor 25%
Final Project	Valor 50%