

Syllabus

Thai วทนว ๑๐๑ การคิดสร้างสรรค์และนวัตกรรม
English SCIN 101 Creative Thinking and Innovation

Number of credit

2 (2-0-4)

(Lecture 2 hours – Laboratory 0 hour/week - Self-Study 4 hours/ week)

2018 1st Semester

Monday (1:30-3:30 pm)

Course coordinator:

Assoc. Prof. Wannapong Triampo, Room R3/1 SC3-R3/1, (02) 441-9817 ext. 1131,
wannapong@mahidol.edu wtriampo@gmail.com

Instructors:

1. Assoc. Prof. Wannapong Triampo (WT)
2. Invited instructors

Office Hours: Monday 4:00-5:00 AM or by appointment.

Course Description:

กระบวนการคิด การคิดสร้างสรรค์ นวัตกรรม การแก้ปัญหา การประยุกต์ใช้การคิดสร้างสรรค์ และนวัตกรรม
สำหรับการเรียนรู้ การประยุกต์ใช้การคิดสร้างสรรค์ และนวัตกรรมสำหรับการดำรงชีวิต

Process thinking, creative thinking, innovation, problem solving, applications of creative thinking
and innovation to learning, applications of creative thinking and innovation to living.

Teaching Materials and Resources

1. Texts and main documents

1. Tim Brown. (2009) Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation, Harper Business

2. Rod Judkins. (2015) The Art of Creative Thinking, Hodder & Stoughton General Division ISBN: 9781444794489
3. Edward B. Roberts (2002) Innovation: Driving Product, Process and Market Change, John Wiley & Sons Inc ISBN: 9780787962135

2. Documents and important information

Wannapong Triampo, Creative thinking and innovation, handouts to be download from www.ilearnsci.com

3. Documents and recommended information

- Rod Judkins. (2015) The Art of Creative Thinking, Sceptre
- Creative Thinking Skills for Life and Education (teaching creativity)

<http://www.asa3.org/ASA/education/think/creative.htm>

- Creative thinking - how to get out of the box and generate ideas: Giovanni Corazza at TEDxRoma, <https://www.youtube.com/watch?v=bEusrD8g-dM>

HOMEWORK: Reading assignments will be made daily, and **homework exercises will be assigned every day in the classroom and/or on the course web site.** Collaboration on homework is encouraged, and questions are always welcome in class and outside of class. Although, if you work on the homework with other students, don't submit work that is not yours. Homework submissions that are absolutely identical will receive zero credit. Homework must be submitted at the beginning of the class. **Late homework will not be accepted, unless a justified excuse is validated.**

EXAMINATIONS & QUIZZES: There will be a midterm exam and a final exam. All exams are closed book without the aid of calculators. The midterms will be given during the regular class and will cover material incrementally through the semester, and the final exam will be materials over the second half of the course. **There will be no make-up exams or quizzes given for any tests in this course.** A missed exam probably will prevent you from passing unless you have approval from your professor before the exam because of an extreme emergency.

Attendance in the lectures and the quizzes are a factor in grading. They will not be announced in advance, and they will be given randomly. The quizzes will cover material discussed in the current and very recent lectures.

GRADING: Your grade will be determined according to the following distribution. (Part of the homework grade may be based on work done in class.):

Homework & Quizzes	- 10%,
Attendance	- 15%,
Project -	- 25%,
Midterm	- 20%,
Final Examination	- 30%.

Tentative grading criterion:

A	=	80-100	C	=	40-49
B+	=	70-79	D+	=	30-39
B	=	60-69	D	=	20-29
C+	=	50-59	F	=	Below 20

ACADEMIC INTEGRITY: The use of unauthorized material, communication with others during an examination or quiz, attempting to benefit from the work of another student, and similar behavior that defeats the intent of an examination quiz, or other class work is unacceptable to the University. It is often difficult to distinguish between a culpable act and inadvertent behavior resulting from nervous tensions accompanying examinations. Where a clear violation has occurred, however, the instructor may disqualify the student's work as unacceptable and assign a failing score on the paper. It is particularly important that you are aware of and avoid plagiarism, cheating on examinations and quizzes, fabricating data for a project assignment, submitting a paper to more than one professor, or submitting work authored by anyone but yourself. Violations will result in penalties, which may be severe such as resulting in a failing grade in the course, and will be reported to the Office of Student Conduct. If you have doubts about any of these policies, you must confer with the professor.

RETENTION OF PAPERWORK: Graded paperwork, if not distributed to a student in class, will be available, during regular university office hours, in room SC3-R3/1 the days following its availability in class.

IMPORTANT DATES

Classes begin Monday	Monday 20 August 2018
Mid-term examination	Monday 16 - Friday 22 October 2018
Classes end	Monday 7 December 2018
Final examination	Tuesday 11- Friday -21December 2018

In addition to modifications of the proposed schedule, it may be necessary to make some other adjustments in the syllabus during the semester. The syllabus posted on the course website is the updated syllabus.

PROPOSED SCHEDULE as of 20 August 2017

You should expect that there might be changes to the schedule as the needs of the students in this class evolve. You are expected to study the reading assignments carefully before the class meetings.

Week	Date	Topic	Teaching methods/ multimedia		Instructor
			Lecture		
1	20 Aug	Introduction of course discipline and class orientation. What is thinking? What is creative thinking?	2	Think-Pair-Share Game based learning Active lecture	Assoc. Prof. Wannapong Triampo
2	27Aug	What is innovation? Why is it important? How can we create it?	2	Brain storming Group discussion Active lecture	Assoc. Prof. Wannapong Triampo
3	3 Sep	Activities for promoting creative thinking skills.	2	Game based learning Group discussion	Assoc. Prof. Wannapong Triampo
4	10 Sep	Creative thinking and problem solving I.	2	Problem based learning Group discussion	Assoc. Prof. Wannapong Triampo
5	17 Sep	Creative thinking and problem solving II.	2	Problem based learning Group discussion	Assoc. Prof. Wannapong Triampo
6	24 Sep	Case studies for promoting creative thinking skills I.	2	Case based learning Group discussion	Assoc. Prof. Wannapong Triampo
7	1 Oct	Case studies for promoting creative thinking skills II.	2	Case based learning Group discussion	Assoc. Prof. Wannapong Triampo
8	8 Oct	Mini project on creative thinking I.	2	Project based learning	Assoc. Prof. Wannapong Triampo
9	16 Oct	Midterm examination		Written exam	
10	22Oct	Mini project on creative thinking II.	2	Project based learning	Assoc. Prof. Wannapong Triampo
11	29 Oct	From creative thinking to innovation I	2	Active Lecture, Game-based learning	Assoc. Prof. Wannapong Triampo
12	5 Nov.	From creative thinking to innovation II	2	Active Lecture, Game-based learning	Assoc. Prof. Wannapong Triampo
13	12 Nov	Innovation and entrepreneurship I	2	Active Lecture, Problem-based learning	Assoc. Prof. Wannapong Triampo
14	19 Nov	Innovation and entrepreneurship II	2	Active Lecture, Problem-based learning	Assoc. Prof. Wannapong Triampo
15	26 Nov	Innovation for changing world	2	Active Lecture, Project-based learning discussion	Assoc. Prof. Wannapong Triampo
16	3 Dec	Innovation for sustainable development	2	Active Lecture, Project-based learning	Assoc. Prof. Wannapong Triampo
17	11 Dec	Final examination			
		Total hours	30		