

Subject Description Form

Subject Code	ITC1001D/ ITC1A01
Subject Title	Introduction to Thinking Styles
Credit Value	3 credits
Level	1
Pre-requisite/ <Co-requisite> / (Exclusion)	Nil
Objectives	This course helps students to understand, study, integrate and apply various thinking styles to solve problem effectively and creatively. This is a foundation-training course which widens students' ways of thinking as well as decision making towards professional practices. The course aims to develop students' integrated thinking skills in solving ill-defined problems for their future development in the areas of technology, business and design.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <p>(a) acquire a holistic view of the principles and functions of various thinking styles;</p> <p>(b) develop an integrative and strategic thinking style for problem solving;</p> <p>(c) enhance the ability in innovative problem solving and decision making; and</p> <p>(d) apply the various thinking styles to solve problem effectively and creatively.</p> <p>The (a) is developing student's literacy through the study of a holistic view of various thinking styles. The (b) and (c) are developing student's higher order thinking through enhancing student's integrative and strategic thinking styles as well as their ability in problem solving and decision making. The (d) is developing student's skills for life-long learning through applying the thinking styles he/she has learnt to solve real-world's problems.</p>
Subject Synopsis/ Indicative Syllabus	<p><u>(1) Introduction to the principles of thinking styles</u></p> <ul style="list-style-type: none"> • Understanding thinking styles • Human intelligence and ways of thinking • The pattern making and self-maximizing systems • Forms of thinking styles <p><u>(2) Function of thinking styles</u></p> <ul style="list-style-type: none"> • The art of thinking • Working with thinking styles • Transforming culture by thinking styles • Society and creativity

	<p><u>(3) Integrating creative and logical thinking</u></p> <ul style="list-style-type: none"> • Creativity and intelligence • Motivation and personal properties • The principle of logic • The language of logic for argument • Blending creative and logical thinking <p><u>(4) Applying thinking styles to problem solving</u></p> <ul style="list-style-type: none"> • Problem identification • Managing thinking styles • Integrative thinking for problem solving • Strategic thinking and decision making 																														
<p>Teaching/Learning Methodology</p>	<p>The subject comprises of lectures and tutorials. Tutorials will be conducted in small groups. Assignment(s) will largely be problem based where students will be asked to critically study and analyze examples of diverse strategies and designs in practical situations in order to help students to integrate various thinking styles for generating strategic solutions.</p>																														
<p>Assessment Methods in Alignment with Intended Learning Outcomes</p>	<table border="1" data-bbox="516 1010 1511 1297"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">% weighting</th> <th colspan="6">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1. Writing Assignment</td> <td>100%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td>100%</td> <td colspan="6"></td> </tr> </tbody> </table> <p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>The writing assessment instrument about tackling a real world problem will be assigned to students in order to develop their abilities in applying various thinking styles, tackling research and problem solving skills, developing independent learning skills, and evaluating their own learning process by critical reflection. The assessment method of the assignment is divided into four categories in order to help students to achieve the intended learning outcomes, they are:</p> <p>(1) Understanding Thinking (25%) – assessing students’ ability to apply various thinking styles to tackle real world problems;</p> <p>(2) Problem Solving Skills (25%) – assessing students’ ability to solve problems by using research and analysis;</p>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d			1. Writing Assignment	100%	✓	✓	✓	✓			Total	100%						
Specific assessment methods/tasks	% weighting			Intended subject learning outcomes to be assessed (Please tick as appropriate)																											
		a	b	c	d																										
1. Writing Assignment	100%	✓	✓	✓	✓																										
Total	100%																														

	<p>(3) Independent Learning (25%) - assessing students' ability to self-motivation in furthering knowledge, skills and interests; and</p> <p>(4) Critical Reflection (25%) - assessing students' ability to evaluate own process of learning to make improvements. An Assessment Rubric is designed to assess students' coursework and assignment.</p>	
Student Study Effort Expected	Class contact:	
	▪ Lecture	26 Hrs.
	▪ Tutorial/ Studio	12 Hrs.
	Other student study effort:	
	▪ Assignments	18 Hrs.
	▪ Research/Experiment	52 Hrs.
	Total student study effort	108 Hrs.
Reading List and References	<p><u>Books</u> Brunas-Wagstaff, J. (1998). <i>Personality: a cognitive approach</i>. London: Routledge. Richards, R (2007), <i>Everyday creativity and new views of human nature</i>. Washington, D. C.: American Psychological Association. Hendry, J., Johnson, G., & Newton, J. (1993). <i>Strategic thinking: leadership, and the management of change</i>. Chichester ; New York: J. Wiley. Herrmann, N. (1996). <i>The whole brain business book</i>. New York: McGraw-Hill. Hicks, M. J. (2004). <i>Problem solving and decision making: hard, soft and creative approaches</i> (2nd ed.). London: Thomson. Sternberg, R. J. (1996). <i>Successful intelligence: how practical and creative intelligence determine success in life</i>. New York: Simon & Schuster. Sternberg, R. J. (1997). <i>Thinking styles</i>. Cambridge; New York: Cambridge University Press. Sternberg, R. J., & Wagner, R. K. (1994). <i>Mind in context: interactionist perspectives on human intelligence</i>. Cambridge; New York, N.Y Cambridge University Press. Watanabe, K. (2009). <i>Problem solving 101: a simple book for smart people</i>. New York: Portfolio.</p> <p><u>Journals</u> Creativity Research Journal High Ability Studies</p>	

