

Subject Description Form

Subject Code	ABCT 3411
Subject Title	Principles of Nutrition
Credit Value	3.0
Level	3
Pre-requisite	ABCT2423 Organic Chemistry or ABCT2742 Organic Chemistry I or equivalent OR ABCT2133 / ABCT2326 Human Physiology OR ABCT2416 Introduction to Food Science
Objectives	This subject is aimed at introducing the basic concepts of human nutrition and the relationship of consumption of foods to health and well-being. Emphasis is focused in the common nutritional issues in Hong Kong, including the importance of using nutrition labels in planning healthy meal, weight management and proper use of dietary supplement.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a) Identify the scientific components of food and understand the functions of nutrients; b) Recognize the importance of the role of diet in health and diseases; c) Apply nutritional knowledge in daily life; d) Analyze critically various controversial nutrition-related issues in Hong Kong.
Subject Synopsis/ Indicative Syllabus	Carbohydrates, Lipids and Proteins Functions and food sources of each nutrient; Digestion and Absorption; Their roles in disease prevention The Vitamins Absorption, transport and storage of vitamins; Functions and food sources of : Fat Soluble vitamins & Water Soluble vitamins; Toxicity and Deficiency Water and Minerals Absorption, transport and excretion of minerals; Functions and food sources of: Major Mineral & Trace elements; Toxicity and Deficiency Nutritional Balance and Weight Control Energy intake and expenditure; Estimation of healthy weight; Guidelines for planning healthy meal; Nutritional labeling: Its use and regulation; Physiological control of food intake; Genetic basis and treatment of obesity, role of physical activity, eating disorders

	<p>Nutritional Requirement of Different Stages of Growth and Development Pregnancy and lactation; Infancy and childhood; Adolescent; Adult; Elderly</p>																																																												
<p>Teaching/Learning Methodology</p>	<p>The basic contents of this subject will be presented with the aid of lecture notes, video clips, Blackboard platform and other teaching tools. Lectures will be designed to provide the knowledge regarding the scientific components of food, the functions of nutrient as well as the importance of the role of diet in health and diseases. Tutorials will be designed to enable the students to apply nutritional knowledge in daily practice. A variety of assessment tools will be used, including quizzes, assignments, and reports to develop students' analytical skills, critical thinking and communication skills.</p>																																																												
<p>Assessment Methods in Alignment with Intended Learning Outcomes</p>	<table border="1" data-bbox="516 709 1451 1318"> <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. Test</td> <td>20%</td> <td>√</td> <td>√</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2. Class Attendance & Tutorial participation</td> <td>20%</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> <td></td> </tr> <tr> <td>3. Group Presentation</td> <td>10%</td> <td></td> <td>√</td> <td>√</td> <td>√</td> <td></td> <td></td> </tr> <tr> <td>4. Final examination</td> <td>50%</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>Tests and examination will be used to assess the ability of the students to identify the scientific components of food, the understandings of the functions of nutrients as well as the role of diet in health and diseases. The performance of the students in tutorials as well as in group presentation will be used to assess the ability of the students to apply nutritional knowledge in daily life as well as to analyze controversial nutrition-related issues in Hong Kong.</p> <p>Students are required to obtain Grade D or above in both continuous assessment and the examination.</p>							Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d			1. Test	20%	√	√					2. Class Attendance & Tutorial participation	20%	√	√	√	√			3. Group Presentation	10%		√	√	√			4. Final examination	50%	√	√	√	√			Total	100 %						
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<p>Student Study Effort Expected</p>	Lecture					26 Hrs																																																							
	Seminar					4 Hrs.																																																							

	Tutorial	9 Hrs.
	Other student study effort:	
	▪ Self Study	60 Hrs.
	▪ Assignment	10 Hrs
	Total student study effort	109 Hrs.
Reading List and References	Thompson JL, Manore MM, Vaughan LA The Science of Nutrition 2 nd edition Cummings 2010 Wardlaw GM, Hampl. JS, DiSilvestro RA Perspectives in Nutrition 8 th edition, McGraw-Hill, 2008	