

Subject Description Form

Subject Code	ABCT1D07
Subject Title	The Environmental Impact of the Dietary Culture in China
Credit Value	3
Level	1
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	This subject aims to discuss how the traditional Chinese dietary culture impacts local, national, and/or global ecosystems (particularly those that involve inappropriate or morally questionable practices).
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ul style="list-style-type: none"> (a) understand the characteristics of Chinese dietary culture and its impact on ecosystems, (b) gain deeper knowledge of the basic properties of food constituents, (c) identify the problems of erosion, desertification, and extinction of species due to over-fishing or over-harvesting of some food stuffs, (d) understand the social and national responsibilities in building a future in which humans live harmoniously with nature, (e) demonstrate skills of analytical and critical thinking on the environmental impacts of our dietary culture. (f) appreciate the importance of lifelong learning, teamwork, and communication skills.
Subject Synopsis/ Indicative Syllabus	<ol style="list-style-type: none"> 1. The Traditional Chinese dietary culture (4 hours): <ul style="list-style-type: none"> - Past and present, customs and traditions - Categories of food items - Characteristics of food items 2. Essentials of food ingredients, including chemical composition, functional properties, and nutritional value (4 hours): <ul style="list-style-type: none"> - Energy producing nutrients: carbohydrates, lipids and proteins - Regulatory nutrients: vitamins, minerals and minor ingredients 3. Environmental impacts of Traditional Chinese food stuffs, particularly those inappropriate or morally questionable practices (10 hours): <ul style="list-style-type: none"> - Food species with important environmental function: Fat choy (black moss), black golgi berry - Precious food with environment impact associated with harvest method: aweto (<i>Cordyceps sinensis</i>), - Sustainability of live reef food fish trade - Wild life trade and zoonotic diseases (pangolin, bear paws and others)

	<ul style="list-style-type: none"> - Conspicuous consumption: kitchen waste and the exponentially growing problem of agricultural and food waste management in China <p>4. Environmental problems associated with food production practices in modern China (6 hours):</p> <ul style="list-style-type: none"> - Relationship between food production and the environment - China's performance on food production, related environmental and food safety issues - Chinese migration and invasive species <p>5. Future directions (4 hours):</p> <ul style="list-style-type: none"> - <u>Tools to measure impact of food practices on the environment, e.g. virtual water footprint, food miles</u> - Correct those inappropriate practices: education and advocacy, legislation and regulation - Develop substitutes: new food stuffs or processing improvement - Balance the consumption and ecosystem: sustainable development, moderate and reasonable exploration of food stuffs
<p>Teaching/Learning Methodology</p>	<p>Lectures: Traditional dietary culture in China will be introduced and its negative effects on ecosystems will be identified. Essential food ingredients will be discussed to equip students with basic knowledge of food-related chemistry and nutrition. The bulk of the lectures will specifically focus on a more in-depth discussion of how each traditional dietary practice impacts ecosystems, wrapping up with concluding lectures on future directions to curb the ecological impacts in China.</p> <p>Tutorials: Students are required to actively participate tutorials, discussing and debating the topics assigned. Students are encouraged to provide alternative food choices and food production practices to minimize the environmental impacts, in order to increase students' awareness of dietary habits and promote lifelong learning.</p> <p>Invited speeches: Guest speakers from NGO or related organization, such as world wildlife fund (WWF), will be invited to deliver two seminars on selected topics such as sustainable seafood.</p> <p>Individual report: Students are required to write an individual report discussing the environmental issues of our diets to develop their critical and analytical thinking skills.</p> <p>Group presentations: Groups of students will deliver a presentation on contemporary issues, investigating the potentially disastrous impact that the Chinese traditional food markets impose on ecosystems, and proposing feasible suggestion to modify inappropriate practices. This exercise will reinforce the concepts of teamwork and team effort, as well as strengthen the literacy and communication skills of each student.</p>

Assessment Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
			a	b	c	d	e	f
	Test	30%	✓	✓	✓			
	Individual report	30%		✓	✓	✓	✓	
	Tutorial participation	10%		✓	✓		✓	✓
	Group presentation	30%			✓	✓	✓	✓
	Total	100 %						
<p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>Test: Assess the basic knowledge of food-related chemistry and nutrition, the understanding of environmental impacts of inappropriate practices in Chinese diet. [Outcomes (a), (b) and (c)]</p> <p>Tutorial participation: Evaluate students performance in participating the discussion and debate on questions assigned. [Outcomes (b), (c), (e) and (f)]</p> <p>Individual report: Students are required to formalize and present rational justifications for their arguments based on scientific facts as opposed to some customs or traditions. The report should contain 1000 words at least, and the similarity will be checked using Turnitin. Students must be able to apply analytical and problem-solving skills, as well as critical and analytical thinking, to challenge the inappropriate practices in Chinese diet. [Outcomes (b), (c), (d) and (e)]</p> <p>Group presentation: Students will deliver a group presentation on contemporary issues, investigating the disastrous impact on ecosystems and proposing feasible solutions. Students will be differentiated in term of individual performance, e.g. content, presentation skills, response to questions by lecturer and peers. Moreover, they will also be evaluated by team member for their teamwork and contribution. This exercise aims to reinforce the concepts of teamwork and team effort, as well as strengthen the literacy and communication skills of each student. [Outcomes (c), (d), (e) and (f)]</p>								
Student Study Effort Required	Class contact:							
	▪	Lecture	26 Hrs.					
	▪	Tutorial	13 Hrs.					
	Other student study effort:							
	▪	Preparation of individual report	16 Hrs.					

	<ul style="list-style-type: none"> ▪ Preparation of presentation 	16 Hrs.
	<ul style="list-style-type: none"> ▪ Self study (reading on literature, reference books, textbooks and reports) 	40 Hrs.
	Total student study effort	111 Hrs.
Reading List and References	<p>Lecture notes and supplementary materials (selected news articles, journals and web content) will be given.</p> <p>Coulter, T.P. Food: the Chemistry of Its Components. RSC 2002.</p> <p>Chinese National Geography (Issues 1-4). Chinese National Geography Press, 2010</p> <p>Food, Inc. (Documentary), directed by Robert Kenner, distributed by Magnolia Pictures, USA.</p> <p>Zhao R.G. 中國飲食文化概論, 高等教育出版社 2003.</p> <p>Adelson G. Environment: an interdisciplinary anthology. New Haven, London, Yale University Press, 2008.</p> <p>Ci L.J. and Yang X.H. Desertification and Its Control in China. Higher Education Press, Beijing & Springer-Verlag Berlin Heidelberg, 2010</p> <p>An Inconvenient Truth (Documentary), directed by Davis Guggenheim, distributed by Paramount Classics, USA.</p>	