Demonstration School of Suan Sunandha Rajabhat University English Program Semester 2 Course Curriculum - Academic Year 2017-2018 M.4/1 Biology 1 SCI 31241

Course Focus: Students are to have the basic understanding of each topic at the end of the course. An interactive student role is advised in order to enhance understanding and the ability to think outside of a box. Class discussion and interactive assignments will be carried out during class sessions to enhance comprehension of each topic covered.

	In Class Cumulative Score	Points	Total Points
1	Class Attendance	10	
2	 Class Manners Pay attention Inappropriate conduct such as playing on mobile phones, tablets, etc will result in point(s) deduction. Note: Mobile phones will be permitted for searches in accordance to specific assignment/class activities <u>once announced at specific timepoint(s)</u>. 	10	60
3	Presentation in groups (individual scores for each10student)Group Session – problem solving		
4	Class activity/assignment	10	
5	Test	20	
6	Midterm	20	
7	Final	20	40
8	Extra Credit will be considered based on quality of work	0-10	1
	Passing Score	60 %	

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Topics Covered		Details		
1	Methodologies in study Living Things	Characteristics of living things Importance and benefits of studying living things Research and research ethics in animal usage		
2	Cellular Unit	Cell structure and function of each components Microscope and structural components Microscopic usefulness Cellular communication Cell aging and cell death Cell division: mitosis and meiosis		
3	Taxonomy	Taxonomic Naming System Naming Systems (common names, scientific names) Kingdoms Animal and plants in Asian countries		
	Midterm Exam	Cover up to topics 1-3		
4	Macro and Micro Molecules	Components of macromolecules and essential micro molecules in the bodily system Carbohydrate, protein, lipids, and nucleic acids Water and biomolecules		
5	Food metabolism Gastrointestinal (GI) Tract	The use of energy in food metabolism Steps in food digestion and intestinal digestion		
6	Biomolecular Components within the Body	Circulatory system Human blood groups Blood donor and recipient		
7	Excretory System	Metabolic waste product Excretory systems in living organisms		
	Final Exam	Cover up to topics 4-7		

Reading and Study Material:

1. Power Point lecture notes or equivalent will be provided from Campbell textbook (equivalent textbook may also be used)

2. Reading assignments from Thai curriculum material will be used in conjunction with Campbell textbook.