

函館工業高等専門学校		開講年度	平成28年度 (2016年度)		授業科目	Engineering English I	
科目基礎情報							
科目番号	0581		科目区分	専門 / 必修			
授業形態	授業		単位の種別と単位数	履修単位: 2			
開設学科	社会基盤工学科		対象学年	4			
開設期	通年		週時間数	2			
教科書/教材	Gateway to science. Vocabulary and concepts.						
担当教員	デイヴィッド タケ						
到達目標							
1. Being able to understand basic concepts of science in English 2. Being able to analyze various scientific concepts 3. Being able to perform well on standardized tests							
ルーブリック							
	理想的な到達レベルの目安		標準的な到達レベルの目安		未到達レベルの目安		
評価項目1	Being able to understand basic concept of science in English		Being able to somewhat understand basic concept of science in English		Not being able to understand basic concept of science in English		
評価項目2	Being able to analyze various scientific concepts		Being able to analyze some scientific concepts		Not being able to analyze any various scientific concepts		
評価項目3	Being able to perform well on standardized tests		Being able to perform adequately on standardized tests		Not being able to perform well on standardized tests		
学科の到達目標項目との関係							
JABEE学習・教育到達目標 (D-1) JABEE学習・教育到達目標 (E-4) 函館高専教育目標 D 函館高専教育目標 E							
教育方法等							
概要	This course will be divided into two parts. In each class we will first study review basic science concepts in using all English textbook, for about 60 minutes. Then, students will be divided into smaller groups to study for standardized tests such as TOEIC, and TOEFL. The science class will first deal with science basics and then move on to life science (biology). Students are expected to participate actively and prepare in advance each lesson.						
授業の進め方・方法	1. Even if you feel shy, please try and speak as much as possible. 2. You must always bring the textbook and an electronic or paper dictionary. 3. Students cannot use their cellphones in class. 4. Feel free to come to my office to practice English conversation about anything you would 5. If students study well in class, there will be very little homework.						
注意点	JABEE教育到達目標評価: 定期試験80% (D-1: 50%, E-4: 50%) , 課題20% (D-1: 50%, E-4: 50%)						
授業計画							
		週	授業内容		週ごとの到達目標		
前期	1stQ	1週	Introduction : Lesson guidance		To be able to understand the objectives, evaluation methods, and flow of the course.		
		2週	Thinking like a scientist		To be able to understand the concepts of science and technology in society.		
		3週	Thinking like a scientist		To be able to understand the concepts of science and technology in society.		
		4週	Units and data analysis		To be able to understand the international standards of measurements and analysis. To understand the nature and history of scientific progress.		
		5週	Units and data analysis		To be able to understand the international standards of measurements and analysis. To understand the nature and history of scientific progress.		
		6週	Safety		To be able to understand how to perform experiments in a safe environment		
		7週	Test Review		To review for the first test		
		8週	前期中間試験				
	2ndQ	9週	Test correction		To be able to understand the mistakes made during the test.		
		10週	Cells and living organisms		To be able to understand the fundamental structures of all living things. To understand the way cells divide. To discuss ecological diversity and biological adaptation to environment.		
		11週	Cells and living organisms		To be able to understand the fundamental structures of all living things. To understand the way cells divide. To discuss ecological diversity and biological adaptation to environment.		
		12週	Cells and living organisms		To be able to understand the fundamental structures of all living things. To understand the way cells divide. To discuss ecological diversity and biological adaptation to environment.		

後期		13週	Cells and living organisms	To be able to understand the fundamental structures of all living things. To understand the way cells divide. To discuss ecological diversity and biological adaptation to environment.
		14週	Test Review	To be able to review for the test
		15週	前期期末試験	
		16週	Test correction	To be able to understand the mistakes made during the test.
	3rdQ	1週	Plants, trees, and photosynthesis	To be able to understand the different parts of plants and their roles. To understand the way plants acquire nutrition through chemical processes. To identify the large groups of plants and trees. To understand the process of photosynthesis, and its role in the Earth ecosystems.
		2週	Plants, trees, and photosynthesis	To be able to understand the different parts of plants and their roles. To understand the way plants acquire nutrition through chemical processes. To identify the large groups of plants and trees. To understand the process of photosynthesis, and its role in the Earth ecosystems.
		3週	Plants, trees, and photosynthesis	To be able to understand the different parts of plants and their roles. To understand the way plants acquire nutrition through chemical processes. To identify the large groups of plants and trees. To understand the process of photosynthesis, and its role in the Earth ecosystems.
		4週	Plants, trees, and photosynthesis	To be able to understand the different parts of plants and their roles. To understand the way plants acquire nutrition through chemical processes. To identify the large groups of plants and trees. To understand the process of photosynthesis, and its role in the Earth ecosystems.
		5週	Plants, trees, and photosynthesis	To be able to understand the different parts of plants and their roles. To understand the way plants acquire nutrition through chemical processes. To identify the large groups of plants and trees. To understand the process of photosynthesis, and its role in the Earth ecosystems.
		6週	Plants, trees, and photosynthesis	To be able to understand the different parts of plants and their roles. To understand the way plants acquire nutrition through chemical processes. To identify the large groups of plants and trees. To understand the process of photosynthesis, and its role in the Earth ecosystems.
		7週	Test Review	To be able to review for the test
		8週	後期中間試験	
	4thQ	9週	Test correction	To be able to understand the mistakes made during the test.
		10週	Animals and reproduction	To be able to understand the classification of animals. To understand the life cycles of invertebrates and vertebrates. To understand the various vegetative and animal ways of reproduction. To introduce the basic concepts of genetics
		11週	Animals and reproduction	To be able to understand the classification of animals. To understand the life cycles of invertebrates and vertebrates. To understand the various vegetative and animal ways of reproduction. To introduce the basic concepts of genetics
		12週	Animals and reproduction	To be able to understand the classification of animals. To understand the life cycles of invertebrates and vertebrates. To understand the various vegetative and animal ways of reproduction. To introduce the basic concepts of genetics
		13週	Animals and reproduction	To be able to understand the classification of animals. To understand the life cycles of invertebrates and vertebrates. To understand the various vegetative and animal ways of reproduction. To introduce the basic concepts of genetics
		14週	Final Test preparation	To get ready for the final test by reviewing the year-long class
		15週	学年末試験	

		16週	Summary of the lesson and advice		To be able to understand the progress students made, and how to keep on improving		
モデルコアカリキュラムの学習内容と到達目標							
分類		分野	学習内容	学習内容の到達目標		到達レベル	授業週
評価割合							
	試験	発表	相互評価	態度	ポートフォリオ	課題	合計
総合評価割合	80	0	0	0	0	20	100
基礎的能力	0	0	0	0	0	0	0
専門的能力	80	0	0	0	0	20	100
分野横断的能力	0	0	0	0	0	0	0