

Course syllabus Semester 1

Learning Group: Chinese

Subject: Chinese Language9

Year Level: 12

Total: 1.0credit

Number	Topics	Contents	B.E. 2551 Grade Level indicators	Objectives	Assessment Scores
1	1. She looks very pretty. 2. How tall are you? 3. I like his character. 4. Loyal friends	5. Vocabulary 6. Dialogues 7. Conversation	Grade 12	Use available resources to support production of an original text, eg cue cards, notes, photos, multimedia • Appropriate ways to open, maintain and close a conversation • Use modelled language and formulaic expressions to initiate and maintain communication, eg 你上哪儿? (Where are you going?) 看一看 (Have a look!) 试一试! (Have a try!) • Present or request information in ways appropriate to the purpose, eg announcement, transaction, informal conversation, interview	20
	5. Review 6. I'm sick 7. Go to hospital 8. I'm recoving .	8. Grammar 9. Sentence stractures			30
Final Exam Semester 1					50
Total Score for Semester 1					100

Course syllabus Semester 2

Learning Group: Chinese

Subject: Chinese Language 6

Year Level: 12

Total: 1.0 credit

Number	Topics	Contents	B.E. 2551 Grade Level indicators	Objectives	Assessment Scores
1	1. Smoking is harmful to your health. 2. Review and Dictation 3. Greetings	8. Vocabulary 9. Dialogues 10. Conversation	Grade 12	The impact of purpose, context and audience on constructing text • Apply specific rules of grammar and access appropriate vocabulary to construct texts, 我朋友用我的笔。(My friend is using my pen.) • Principles of text organisation and structure in constructing own text • Convey information in a sequence of sentences, each containing one or two main points, eg subject + time + verb, subject + verb + object • Referring to models to express own ideas • Use available resources to support the construction of new texts, eg dictionaries, word lists, sentence models • Use information and communication technologies to support production of original texts, eg word processing, digital images.	20
	4. Introducing someone. 5. A phone call 6. Welcome to my home 7. Review and Dictation	11. Grammar 12. Sentence structures			30
Final Exam Semester 1					50
Total Score for Semester 1					100

Course Syllabus (Midterm-Semester 1/2017)

Learning Group: English

Subject Code:

Subject: English

Year Level: 12

Total: 2 periods / week

Credit: 1.0

Week	Period	Topic	Contents	Objectives: The students should be able to...
1	1-2	Class introduction.	Students write an imaginary adventure story to demonstrate their creativity and writing skill. General getting to know you, and class behavior expectations.	Students should be able to speak and write to describe their own feelings and opinions about various matters, activities, experiences and news/incidents with proper reasons.
2	3-4	Introduction of Oliver Twist	The novel Oliver Twist and its place in British Culture is introduced. The main themes of the novel and it's time in history	Students will be able to understanding and interpret what has been heard and read.
3	5-6	Oliver Twist Ch1-3	The societal changes due to the Industrial Revolution are explained alongside the moral outlook of Victorian England.	Students will be confronted with the harsh reality of the Industrial Revolution and the hell of child Labour and Work House life.
4	7-8	Oliver Twist Ch 4-6	Vocabulary introduced and explained. Chapters read and interpreted. Chapter questions explained and answered.	Students will begin to see how novels can be used to reflect on society, its morals, laws and inequalities.
5	9-10	Oliver Twist Ch 7-9	Vocabulary introduced and explained. Chapters read and interpreted. Chapter questions explained and answered.	Students will be made to confront their own sense of moral outlook and challenges within their own society.
6	11-12	Oliver Twist Ch 10	Vocabulary introduced and explained. Chapters read and interpreted. Chapter questions explained and answered.	Students will be able to reflect on different historical periods and track the evolution of the modern age.
7	13-14	Oliver Twist Ch 11-12	Vocabulary introduced and explained. Chapters read and interpreted. Chapter questions explained and answered.	Students should understand that challenges facing the world today are often not new and that we can learn from history, solutions for today's problems.

8	15-16	Oliver Twist Ch 13-14	Vocabulary introduced and explained. Chapters read and interpreted. Chapter questions explained and answered.	Students will be confronted with Victorian opinions about class, morality, crime and punishment, the law and the role of women in the world.
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Course Syllabus (Midterm-Semester 1/2017)

Learning Group: Math

Subject Code: MA

Subject: Math

Year Level: 12

Total: 2 periods / week

Credit: 1.0

Week	Period	Topic	Contents	Objectives: The students should be able to...
1	1-2	Derivatives	Introduction to basic calculus	Explain what calculus is all about
2	3-4	Derivatives	The introduction to derivative and its basic rules	Explain what derivative is and identify each basic rules
3	5-6	Derivatives	The chain rule	Recognize and understand how the chain rule works
4	7-8	Derivatives	Application of the chain rule in problem solving	Solve various problems regarding the chain rule
5	9-10	Derivatives	The product rule	Recognize and understand how the product rule works
6	11-12	Derivatives	Application of the product rule in problem solving	Solve different problems involving the product rule
7	13-14	Derivatives	The quotient rule	Recognize and understand how the quotient rule works
8	15-16	Derivatives	Application of the quotient rule in problem solving	Figure out how to solve problems using the quotient rule

Course Syllabus (Midterm-Semester 1/2017)

Learning Group: **Science**

Subject Code: SC21201

Subject: Science

Year Level: **12**

Total: 2 periods / week

Credit: 1.0

Week	Period	Topic	Contents	Objectives: The students should be able to...
1	1-2	Homeostasis: Thermoregulation	Thermoregulation is a process that allows your body to maintain its core internal temperature. All thermoregulation mechanisms are designed to return your body to homeostasis. This is a state of equilibrium.	1. Explain, define. Describe: thermoregulation, positive and negative feedback mechanisms 2. Use a diagram to explain negative-feedback mechanisms
2	3-4	Blood-Glucose Regulation	Insulin Basics: How Insulin Helps Control Blood Glucose Levels. Insulin and glucagon are hormones secreted by islet cells within the pancreas. They are both secreted in response to blood sugar levels , but in opposite fashion! Insulin is normally secreted by the beta cells (a type of islet cell) of the pancreas.	1. Describe, explain blood glucose regulation in humans 2. use a diagram to explain the negative feed-back mechanism
3	5-6	Mendelian Genetics, Heredity, variation	Mendel's Laws of Inheritance . Mendel's observations and conclusions are summarized in the following two principles, or laws. Law of Segregation. The Law of Segregation states that for any trait, each parent's pairing of genes (alleles) split and one gene passes from each parent to an offspring.	1. Explain, describe, the basic principles on Mendelian genetics
4	7-8	Monohybrid and dihybrid cross	MONOHYBRID CROSS	2. Analyse and solve a monohybrid and dihybrid cross

			<p>If only one pair of contrasting character is being studied the hybrids are called Monohybrids.</p> <p>DIHYBRID CROSS</p> <p>When two different pairs of contrasting characters are studied simultaneously, the hybrids are called Dihybrids.</p>	
5	9-10	Chromosomes Chromosomal abnormalities	In the nucleus of each cell, the DNA molecule is packaged into thread-like structures called chromosomes. Each chromosome is made up of DNA tightly coiled many times around proteins called histones that support its structure.	<ol style="list-style-type: none"> 1. Describe and explain the structure and function of a chromosome 2. Construct an accurate diagram of a chromosome
6	11-12	Biodiversity Taxonomy	<i>Biodiversity</i> is the variability among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems.	<ol style="list-style-type: none"> 1. Describe and explain biodiversity in plants and animals 2. Apply the rules of Taxonomy in naming, classifying organisms
7	13-14	Plant and animal classifications	Taxonomy is the science of naming, describing and classifying organisms and includes all plants, animals and microorganisms of the world. Using morphological, behavioural, genetic and biochemical observations, taxonomists identify, describe and arrange species into classifications, including those that are new to science.	<ol style="list-style-type: none"> 1. Describe and explain the basis of classifying plants and animals 2. Give the main characteristics in the different levels of classification
8	15-16	Non-Mendellian Genetics	Non-Mendelian inheritance is a general term that refers to any pattern of inheritance in which traits	<ol style="list-style-type: none"> 1. Explain the principles behind some selected non-Mendelian mode of inheritance

			do not segregate in accordance with Mendel's laws. These laws describe the inheritance of traits linked to single genes on chromosomes in the nucleus.	2. Solve some problems on non-Mendelian genetics
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Course Syllabus (Midterm-Semester 1/2017)

Learning Group: Science

Subject Code: SC21201

Subject: Social Science

Year Level: 12

Total: 2 periods / week

Credit: 1.0

Week	Period	Topic	Contents	Objectives: The students should be able to...
1	1-2	Introduction to Economics	<ul style="list-style-type: none"> - The Source of Economic Problems - What is Economics? - Wants, Resources, Scarcity 	<ul style="list-style-type: none"> • Understand the concept of scarcity • Demonstrate and explain the difference between needs and wants and how they are met.
2	3-4	Opportunity Cost	<ul style="list-style-type: none"> - Choice and Opportunity Cost - Unlimited wants vs. Limited Resources - What happens when opportunity cost changes - Free Goods and Economic Goods 	<ul style="list-style-type: none"> • Understand and can use the idea of opportunity cost • Explain how needs and wants when met involve costs • Explain how opportunity cost changes over time and circumstances. • Recognize what is a free good or service and which ones are economic
3	5-6	Types of Economic Systems	<ul style="list-style-type: none"> - Traditional Economy - Planned Economy - Market Economy 	<ul style="list-style-type: none"> • Gain perspective on historical development of Agriculture Economy. • Identify range of systems. • Understand why market economy is most prevalent

4	7-8	Law of Demand	<ul style="list-style-type: none"> - Want, Demand and quantity demanded - Individual and market Demand - Law of Demand 	<ul style="list-style-type: none"> • Explain and explain why the concept of demand is central to modern economic and, therefore, political life. • Identify the key basis to understand and predict the demand for goods and services • Recognize the ubiquity as well as the limitations of the Law of Demand
5	9-10	Law of Supply	<ul style="list-style-type: none"> - Supply and Quantity Supplied - Individual and Market Supply - Law of Supply 	<ul style="list-style-type: none"> • Explain and explain why the concept of supply is central to modern economic and, therefore, political life. • Identify the key basis to understand and predict the quantity supplied of goods and services
6	11-12	Market Equilibrium and Disequilibrium	<ul style="list-style-type: none"> - When markets are in equilibrium or balance - When markets are in disequilibrium or imbalance 	<ul style="list-style-type: none"> • Recognize the ubiquity as well as the limitations of the Law of Supply
7	13-14	Factors Affecting Demand	<ul style="list-style-type: none"> - What are prices of related goods and services (i.e. substitutes). - What are complementary goods and services - The effect of consumer income and price expectations - The effect of consumer preferences and taste 	<ul style="list-style-type: none"> • Understand substitution effect of goods and services demand. • Understand the linkage in demand for related goods and ability to predict results • Analysesine qua non of demand forecasting.
8	15-16	Factors affecting Supply	<ul style="list-style-type: none"> - Cost of production of good or service - Labor, Plant & Equipment and Capital - Technology 	<ul style="list-style-type: none"> • Discuss the most important factors in decision to supply goods and services.

			- Competition	<ul style="list-style-type: none">• Explain the factors of production by category.• Understand the aspects of process of production and profitability that have short and long-term effects on quantity supplied.
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